

VOLUME II - APPENDICES

Te Hiku o Te Ika-a-Māui

Conservation Management Strategy
2026



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Artwork commissioned from Richard Murray, graphic designer, by the Conservation Management Strategy Working Group.



Operative 31 July 2026

ISBN (print): 978-1-0671400-5-2

ISBN (digital): 978-1-0671400-6-9

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Appendix 1

Te Tiriti o Waitangi relationships in *Te Korowai*

IWI	DOCUMENTS
Ngāti Kuri	Ngāti Kuri Deed of Settlement documents: whakatau.govt.nz/te-tira-kurapounamu-treaty-settlements/find-a-treaty-settlement/ngati-kuri Ngāti Kuri Claims Settlement Act 2015: legislation.govt.nz/act/public/2015/76/en/latest/#DLM6055877 Ngāti Kuri Pou Taiao – Environmental Management Plan (2018): nrc.govt.nz/media/ehjdfj3f/ngati-kuri-environmental-management-plan-2018.pdf Statutory acknowledgements that interact with Te Korowai lands and waters include: • Motuopao Island; • Manawatāwhi/Three Kings Islands; and • Paxton Point Conservation Area (including Rarawa Beach campground). See: legislation.govt.nz/act/public/2015/0076/latest/DLM6058613.html
Te Aupōuri	Te Aupōuri Deed of Settlement documents: whakatau.govt.nz/te-tira-kurapounamu-treaty-settlements/find-a-treaty-settlement/te-aupouri Te Aupouri Claims Settlement Act 2015: legislation.govt.nz/act/public/2015/77/en/latest/#DLM6576303 Ngā Tai e Rua o Te Aupōuri Environmental Management Plan (2018) (copy available on request from Te Aupōuri). Statutory acknowledgements that interact with Te Korowai lands and waters include: • Manawatāwhi/Three Kings Islands; • Simmonds Islands; • Paxton Point Conservation Area (including Rarawa Beach campground¹);

Continued on next page

¹ Treaty settlements refer to the ‘Rarawa Beach campground’, but this is more commonly known as Rarawa Beach Campsite. Therefore, the latter name is used throughout Te Hiku o Te Ika-a-Māui Conservation Management Strategy.

Appendix 1 table continued

IWI	DOCUMENTS
	• Kohuronaki Pā; and • North Cape Scientific Reserve. See: legislation.govt.nz/act/public/2015/0077/latest/DLM6577071.html
NgāiTakoto	NgāiTakoto Deed of Settlement documents: whakatau.govt.nz/te-tira-kurapounamu-treaty-settlements/find-a-treaty-settlement/ngaitakoto NgāiTakoto Claims Settlement Act 2015: legislation.govt.nz/act/public/2015/0078/latest/DLM6578446.html Te Iwi o NgāiTakoto Environmental Plan (2017): nrc.govt.nz/media/s0ggf4nc/ngaitakoto-iwi-environmental-plan-r.pdf Statutory acknowledgements that interact with Te Korowai lands and waters include: • Lake Rotorua; • Wai Te Huahua/Lake Heather; • Lake Waikaramu; • Kowhai Beach; • Rarawa Beach campground; • Southern part of Waipapakauri Conservation Area; and • Lake Ngatu Recreation Reserve. See: legislation.govt.nz/act/public/2015/0078/latest/DLM6579010.html

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IWI	DOCUMENTS
Te Rarawa	Te Rarawa Deed of Settlement documents: whakatau.govt.nz/te-tira-kurapounamu-treaty-settlements/find-a-treaty-settlement/te-rarawa Te Rarawa Claims Settlement Act 2015: legislation.govt.nz/act/public/2015/79/en/latest/#DLM6577203 Ahipara Takiwā Environment Management Plan (2019): terarawa.iwi.nz/files/pou-environmental/ahipara-takiwa/ahipara-takiwa-management-plan-december-2023-rev-2.pdf Statutory acknowledgements that interact with Te Korowai lands and waters include: • Herekino Harbour; • Whangapē Harbour; • Awaroa River; • Te Tai Hauāuru coastal marine area; • Tauroa Peninsula; and • Wairoa Stream. See: legislation.govt.nz/act/public/2015/0079/latest/DLM6578217.html
General	Korowai for Enhanced Conservation Relationship Agreement: whakatau.govt.nz/assets/Treaty-Settlements/FIND_Treaty_Settlements/NgaiTakoto/DOS_SUPPORT/NgaiTakoto-Te-Hiku-Conservation-Relationship-Agreement-9-Dec-2015.pdf

Appendix 2

Work or activities of the Department of Conservation Te Papa Atawhai that may meet the requirements of section 4(3) of the Resource Management Act 1991 for exemptions from land-use consents

The table that follows is presented to meet the requirements for enabling exemptions under section 4(3) of the Resource Management Act 1991 (RMA).² It does not exclude the need to meet all Department of Conservation Te Papa Atawhai requirements for the assessment of effects or other responsibilities under the RMA or other legislation (e.g. Building Act 2004,³ Heritage New Zealand Pouhere Taonga Act 2014⁴). Section 4(3) of the RMA only applies to land-use activities that otherwise require a resource consent from a territorial authority, so resource consent may still be required from a regional council. All structures and tracks on Te Korowai lands and waters that are managed by Te Papa Atawhai are maintained, upgraded or built to the standards in SNZ HB 8630:2004.⁵ This table does not imply that the facilities included within it will be managed in perpetuity.

Where work is planned that will affect historic assets that are potentially exempt from resource consent, consultation with Heritage New Zealand Pouhere Taonga would generally be expected to occur prior to such work being carried out.

The following process will be followed when using a section 4(3) exemption:

1. Identify the district plan rules that are being breached and so would otherwise require land-use consent from the territorial authority.
2. Prepare a report for the relevant decision-maker (area manager) that sets out the rules that are being breached, provides an assessment of environmental effects to a similar scale as would be expected if an application was being made to the territorial authority, identifies any other consents required either from the regional council under the RMA or under other legislation and demonstrates how the proposal meets the two tests set out in section 4(3) of the RMA.
3. Receive confirmation from the relevant decision-maker (area manager) that they are satisfied that the tests set out in section 4(3) are met and that the proposal can proceed without land-use consent from the relevant territorial authority.
4. Send a letter to the relevant territorial authority advising them of the proposal and that the exemption provided for under section 4(3) of the RMA is being applied.

² Resource Management Act 1991, section 4(3): legislation.govt.nz/act/public/1991/0069/latest/DLM230265.html

³ Building Act 2004: legislation.govt.nz/act/public/2004/0072/latest/DLM306036.html

⁴ Heritage New Zealand Pouhere Taonga Act 2014: legislation.govt.nz/act/public/2014/0026/latest/DLM4005414.html

⁵ SNZ HB 8630:2004: standards.govt.nz/shop/snz-hb-86302004

ACTIVITY SCOPE	MANAGEMENT ACTIONS	ENVIRONMENTAL IMPACTS	LOCATION
Tracks, roads and car parking areas for visitor purposes			
1. Upgrade of existing tracks and roads to meet current Te Papa Atawhai service standards using current alignment. 2. Service standard upgrades of existing tracks and roads through partial or complete realignment to take advantage of better grades and terrain features, or to incorporate elements of the natural or historical landscape. 3. Construction of new tracks as agreed in consultation with the community. 4. Improvements to any existing track as considered necessary to mitigate any environmental impact, health and safety concern or visitor risk, or to provide improved access for any management purpose.	1. Construction of tracks and roads using cut and fill excavation, cut to waste excavation, and levelling with hand tools, motorised equipment and machinery. 2. Excavation of batter slopes to a maximum height of 1.5 m. 3. Removal of vegetation from the full width of the track corridor, and discretionary removal of any vegetation beyond the track and road corridor that is considered hazardous or that may adversely affect track components such as batter slopes, drainage or track surface materials. 4. Application of aggregate surfacing, including the placement and compaction of local and imported materials (from approved pest-plant-free sources). 5. Use of local materials in the vicinity of the asset corridor for filling/ surfacing where necessary. 6. Ground works of in-ground timber steps, including formation and levelling, drainage, and timber construction.	1. Soil disturbance, including disturbance of the duff layer and subsoil, and soil disturbance and compaction in fill areas. 2. Surface water runoff, including the modification of existing natural watercourses, and the control and redirection of surface water using various means, such as culvert pipes, drainage sumps, cut-outs and cross boards. 3. Alterations to land contours and slopes during track construction and upgrade. 4. Removal of vegetation from track corridors and areas immediately adjacent to asset corridors. 5. Disturbance of archaeological and historic features, including historic botanicals, on or in the immediate vicinity of the track or road.	<i>Existing tracks, roads and car parks</i> • Cape Reinga/Te Rerenga Wairua to Tapotupotu/Taputaputa track • Herekino Forest tracks (x2) • Hukatere walk • Kaitaia Walkway • Kaitaia Walkway to Diggers Valley Road • The area of the Kapowairua (Spirits Bay) Campsite on Te Korowai lands and waters • Lake Ngatu amenity area/ car park • Lake Ngatu Track • Mangamuka basic camp and amenity areas (x2) • Mangamuka Gorge Walkway/ Microwave Track • North Cape Road • Pandora access car park • Within Rarawa Beach Campsite • Rarawa Beach Walk • Spirits Bay Road • Sweetwaters access track • Within Tapotupotu/ Taputaputa Campsite

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ACTIVITY SCOPE	MANAGEMENT ACTIONS	ENVIRONMENTAL IMPACTS	LOCATION
	- Construction of drainage and redirection of surface water from the track surface to existing natural contours using various means, such as culvert pipes, drainage sumps, cut-outs and cross roads. - Re-formation and widening of roads to provide safe access for two vehicles and road stability to the required standards. - Improvement of drainage to prevent erosion and deterioration of the road surface and structure, and to provide safe vehicle access. - Maintenance of historic heritage features associated with the track or road to ensure that they are not adversely impacted.		• Tapotupotu/Taputaputa Road/amenity area • Tapotupotu/Taputaputa – Spirits Bay tracks • Te Paki Stream Road • Te Paki Stream Road State Highway 1 site • Te Paki Trig roads • The section of Te Werahi Beach Track on Te Korowai lands and waters • The section of the Twilight/Te Werahi Loop Track on Te Korowai lands and waters • Waitiki Information Shelter and amenity area • Warawara Track
Structures⁶ and buildings for visitor purposes			
- Upgrade of existing structures and buildings to meet Te Papa Atawhai service standards so that visitor group requirements, such as minimum access widths and safety barrier heights, are met. - Scheduled 'like for like' (substantially similar structures	- Preparatory site works such as vegetation removal, formation and levelling of structure and building footprints, and excavation of piles and footings. - Works associated with water reticulation and sewage containment/treatment.	- Soil disturbance, including disturbance of the duff layer and subsoil, and soil disturbance and compaction in fill areas. - Surface water runoff, including the modification of existing natural watercourses, and the control and redirection of surface water using various means, such as culvert	<i>Existing structures and buildings</i> • Kaitaia Walkway • The area of the Kapowairua (Spirits Bay) Campsite on Te Korowai lands and waters • Lake Ngatu amenity area/car park • Lake Ngatu Track

Continued on next page

⁶ Structures for visitor purposes include viewing platforms, steps/stairs, boardwalks, bridges, handrails, safety fences, stiles, signage, kauri disease cleaning stations, etc.

ACTIVITY SCOPE	MANAGEMENT ACTIONS	ENVIRONMENTAL IMPACTS	LOCATION
and buildings built on the same footprint or within the immediate vicinity) replacement of existing structures and buildings as they reach the end of their projected/ economic life.	3. Construction of drainage and redirection of surface water from the structure and building footprint to existing natural contours using various means, such as culvert pipes, drainage sumps and cut-outs.	pipes, drainage sumps, cut-outs and cross boards.	• Mangamuka basic camp and amenity areas (x2)
3. Construction of new structures and buildings that are required to meet service standards for existing tracks, roads, amenity areas and campsites.	4. Construction of structures and buildings such as bridges, boardwalks, stairs, handrails, safety barriers, viewing platforms, huts, shelters, toilets, kauri disease cleaning stations, signage and ladders.	3. Alterations to land contours and slopes during construction and upgrade.	• North Cape Road
4. Construction of new structures and buildings as a component of development work for new tracks, roads, amenity areas and campsites.	5. Maintenance of historic heritage features associated with the structure or building to ensure that their integrity is not adversely impacted.	4. Removal of vegetation from structure and building footprints and their immediate surroundings.	• Rarawa Beach Campsite
5. Improvements to any existing structure and building as considered necessary to mitigate any environmental impact or health and safety concern, or to provide improved access for any management purpose.		5. Aesthetic impacts and altered sight lines from artificial structures in natural areas.	• Rarawa Beach Walk
		6. Disturbance of archaeological and historic features, including historic botanicals, and aesthetic impacts on historical landscapes.	• Scott Point to Twilight Beach track
			• Spirits Bay Road
			• Sweetwaters access track
			• Tapotupotu/Taputaputa Campsite
			• Tapotupotu/Taputaputa Road/ amenity area
			• Tapotupotu/Taputaputa – Spirits Bay tracks
			• Te Paki Stream Road
			• The section of the Te Werahi Beach Track on Te Korowai lands and waters
			• The section of the Twilight/ Te Werahi Loop Track on Te Korowai lands and waters
			• Warawara Track

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ACTIVITY SCOPE	MANAGEMENT ACTIONS	ENVIRONMENTAL IMPACTS	LOCATION
Campsites and amenities for visitor purposes			
1. Upgrade of existing campsites and amenities to meet Te Papa Atawhai service standards so that visitor group requirements for campgrounds and amenity areas are met. 2. Scheduled 'like for like' (substantially similar campsites and amenities built on the same footprint or within the immediate vicinity) replacement of existing campground and amenity assets as they reach the end of their projected/economic life. 3. Construction of new campgrounds and amenities required to meet service standards for existing campgrounds and amenity areas. 4. Construction of new assets such as structures and buildings as a component of development work for new campgrounds and amenity areas. 5. Improvements to any existing asset or establishment of new assets as considered necessary to manage, meet regulatory	1. Preparatory site works such as vegetation removal, formation and levelling of the campground and amenity footprint, and excavation of piles and footings. 2. Works associated with water reticulation and sewage containment / treatment, including effluent dispersal fields and in-ground waste tanks. 3. Construction of drainage and redirection of surface water from building and structural campsites and amenity footprint to existing natural contours using various means, such as culvert pipes, drainage sumps and cut-outs. 4. Construction of campsites and amenities such as bridges, boardwalks, stairs, handrails, safety barriers, shelters, toilets, showers, signage and ladders, and maintenance of the historic heritage features, including historic botanicals, associated with these campsites and amenities to ensure that they are not adversely impacted.	1. Soil disturbance, including disturbance of the duff layer and subsoil, and soil disturbance and compaction in fill areas. 2. Surface water runoff, including the modification of existing natural watercourses, and the control and redirection of surface water using various means, such as culvert pipes, drainage sumps, cut-outs and cross boards. Fill materials not normally found on the site (e.g. scoria) may be imported. 3. Alterations to land contours and slopes during campsite/amenity construction. 4. Removal of vegetation from asset footprints and areas immediately around campsites and amenities. 5. Aesthetic impacts and altered sight lines from artificial structures in natural areas. 6. Noise from increased usage of campsites and amenities. 7. Increased water take for the operation of campsites and amenities.	<i>Existing campsites and amenities</i> • Herekino Forest tracks • Kaitaia Walkway • The area of the Kapowairua (Spirits Bay) Campsite on Te Korowai lands and waters • Lake Ngatu amenity area/car park • Lake Ngatu Track • Mangamuka basic camp and amenity areas • Pandora access car park • Rarawa Beach Campsite • Tapotupotu/Taputaputa Campsite • Tapotupotu/Taputaputa Road and amenity area • Tapotupotu/Taputaputa – Spirits Bay tracks • Te Pahi Stream Road • Te Pahi Stream Road State Highway 1 site • The section of the Twilight/Te Werahi Loop Track on Te Korowai lands and waters • Waitiki Information Site and amenity area

Continued on next page

ACTIVITY SCOPE	MANAGEMENT ACTIONS	ENVIRONMENTAL IMPACTS	LOCATION
requirements for and/or mitigate any environmental impact or health and safety concern, or to provide improved access for any management purpose.		8. Disturbance of archaeological and historic features, including historic botanicals, on or in the immediate vicinity of the campsite or amenity.	
Historic assets – remedial work and maintenance			
1. Maintenance of historic places to Te Papa Atawhai service standards and International Council on Monuments and Sites (ICOMOS) and Heritage New Zealand Pouhere Taonga standards and guidelines.	1. Management of vegetation around historic places, maintenance of drainage channels and management of safety issues, including barrier construction and the installation of interpretative panels.	1. Minor soil disturbance of the duff layer and subsoil, and soil disturbance and compaction in fill areas.	• Kohukohu Historic Reserve • Motuopao Island Nature Reserve • Muiata Pa Historic Reserve • Te Paki Recreation Reserve • Tauroa Point Historic Reserve
2. Stabilisation of the condition of historic assets through conservation treatments and land stabilisation (e.g. construction of retaining walls).	2. Repairs and conservation treatments to concrete, masonry, metal, timber and earthwork structures as scheduled.	2. Surface water runoff, including the modification of existing natural watercourses, and control and redirection of surface water using various means, such as culvert pipes and drainage sumps.	
	3. Maintenance of historic heritage features, including historic botanicals, associated with the historic asset to ensure that they are not adversely impacted.	3. Removal of vegetation from assets and their immediate vicinities.	

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ACTIVITY SCOPE	MANAGEMENT ACTIONS	ENVIRONMENTAL IMPACTS	LOCATION
Signs			
1. Erection of signage on or within close proximity to public conservation land to provide information and interpretation to the public.	1. Works associated with the erection of signage.	1. Aesthetic impacts from artificial structures in natural areas.	• All Te Korowai lands and waters
2. Erection of signage on and off public conservation lands and waters to inform people about fire lighting restrictions.		2. Removal of vegetation from sign footprints and their immediate vicinities.	• Other land within 1 km of Te Korowai lands and waters for fire purposes or where permission has been given by the landowner
Tracks, roads and facilities used for management purposes (including staff accommodation and wardens' quarters)			
1. Refer to activity scope for 'Tracks, roads and car parking areas for visitor purposes', 'Structures and buildings for visitor purposes' and 'Campsites and amenities for visitor purposes' above.	1. Refer to management actions for 'Tracks, roads and car parking areas for visitor purposes', 'Structures and buildings for visitor purposes' and 'Campsites and amenities for visitor purposes' above. Note: Not all visitor standards noted above will apply to tracks, roads and facilities used for management purposes – in some cases a lesser standard may apply.	1. Refer to environmental impacts for 'Tracks, roads and car parking areas for visitor purposes', 'Structures and buildings for visitor purposes' and 'Campsites and amenities for visitor purposes' above.	• All Te Korowai lands and waters where conservation management programmes are being undertaken

Continued on next page

ACTIVITY SCOPE	MANAGEMENT ACTIONS	ENVIRONMENTAL IMPACTS	LOCATION
Other management-related activities			
1. Erection of fences on and along the boundaries of public conservation lands and waters.	1. Removal of vegetation to provide clear lines for fences.	1. Vegetation removal.	• All Te Korowai lands and waters where conservation programmes are being undertaken • Other land not managed by Te Papa Atawhai where permission has been given by the landowner
2. Enhancement of habitat.	2. Some animal pest operations.	2. Soil disturbance, including disturbance of the duff layer and subsoil.	
3. Control and/or eradication of pests.	Note: Discharge permits will be required for operations utilising pesticides.	3. Death and likely eradication of target mammalian pests, and possible death of non-target species.	
4. Fire management, including construction of airstrips for fire-fighting purposes.			
Hazardous goods			
1. Use, transportation, storage and disposal of hazardous substances.	1. Use, storage and transportation of hazardous substances, including, but not limited to, flammable liquids, pesticides, herbicides and treated timbers.	1. Will comply with all relevant legislative requirements.	• All Te Korowai lands and waters in Te Hiku where conservation programmes are being undertaken • Other land not managed by Te Papa Atawhai where permission has been given by the landowner

Appendix 3

Important ecosystems and habitats within Te Korowai

The following information has been obtained from the Department of Conservation Te Papa Atawhai national list of around 1,000 terrestrial and freshwater ecosystem units, which represent the full range of terrestrial and freshwater ecosystems in Aotearoa New Zealand, including priority and non-priority units both on and off Te Korowai lands and waters.

The management of ecosystem units on Te Korowai lands and waters is addressed in section 10.1 Ngā Uara Rawa Taiao | Natural Values in Part Three and in the natural values table for each Place in Part Two of Volume I of Te Hiku o Te Ika-a-Māui Conservation Management Strategy (Te Hiku CMS). These sections discuss the work of Te Papa Atawhai to advocate for the protection and restoration of ecosystems and habitats that occur outside Te Korowai

lands and waters and to manage threats to them. Additional information on priority ecosystem units and the species and threats within them is provided in Appendix 5.

The information in this Appendix is correct at the time of publishing. Its contents may be amended or reviewed during the term of Te Hiku CMS, in accordance with section 171 of the Conservation Act 1987.⁷ It is likely to change as the threats and priorities for action are updated. Management responses may also change as new techniques and more effective methods are developed and new threats arise. For information on the specific management responses that are being used at the time of reading, please contact the relevant district office.

ECOSYSTEM / HABITAT TYPE	DESCRIPTION	SIGNIFICANT VALUES	PRESSURES / THREATS	ADMINISTRATIVE STATUS	MANAGEMENT RESPONSES
Communities on ultramafic substrates ⁸	- Pōhutukawa (<i>Metrosideros excelsa</i>), Surville Cliffs - tānekaha (<i>Phyllocladus</i> aff. <i>trichomanoides</i>), Surville Cliffs - houpara (<i>Pseudopanax lessonii</i>) forest and shrubland	Only found at Otou/ North Cape; a unique, nationally significant community supporting many site-dependent Threatened and At Risk plant and animal species	- Biosecurity of pest plants and animals - Fire⁹	Te Korowai lands and waters	- Plant and animal pest control - Biosecurity surveillance - Fire risk management

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⁷ Conservation Act 1987, section 171: legislation.govt.nz/act/public/1987/0065/latest/DLM104615.html

⁸ Not all habitat types listed as present within the Otou/ North Cape ultramafic substrates are officially recognised at the time of publication but are likely to be so recognised within the lifetime of this CMS.

⁹ Fire is a threat to all Te Korowai lands and waters, but the unique ultramafic substrate habitats present at Otou/ North Cape are particularly vulnerable.

Appendix 3 table continued

ECOSYSTEM / HABITAT TYPE	DESCRIPTION	SIGNIFICANT VALUES	PRESSURES / THREATS	ADMINISTRATIVE STATUS	MANAGEMENT RESPONSES
	- Kahikātoa/ mānuka (<i>Leptospermum hoipolloi</i>) and <i>Veronica punicea</i> shrubland - Fountain sedge (<i>Lepidosperma neozelandicum</i>) and stabber sedge (<i>Schoenus brevifolius</i>) sedgeland - Serpentine plateau shrubland - Badlands and lichenfield-rockland - Ultramafic coastal cliff				
Dunes	- Windform lakes - Submerged charophyte communities - Dunefields, including mobile sandfields, dune slacks/swales and ablation plains	Includes a chain of dune lakes at Aupōuri Peninsula that support many Threatened and At Risk species and some of the most outstanding lakes in Aotearoa	Biosecurity of pest plants and animals	Te Korowai lands and waters, land administered by local authorities, and private land	- Plant and animal pest control - Biosecurity surveillance - Advocacy and consultation

Continued on next page

Appendix 3 table continued

ECOSYSTEM / HABITAT TYPE	DESCRIPTION	SIGNIFICANT VALUES	PRESSURES / THREATS	ADMINISTRATIVE STATUS	MANAGEMENT RESPONSES
Dune vegetation	- Spinifex (<i>Spinifex</i> spp.), pīngao (<i>Ficinia spiralis</i>) grassland/sedgeland - Pīngao sedgeland - Oioi (<i>Apodasmia similis</i>), wīwī/knobby club rush (<i>Ficinia nodosa</i>) sedgeland	Some particularly outstanding examples occur on the Aupōuri Peninsula and at Te Paki; supports Threatened and At Risk species	- Biosecurity of pest plants and animals - Human impacts and pressures	Te Korowai lands and waters, land administered by local authorities, and private land	- Plant and animal pest control in some areas - Foredune rehabilitation in some areas - Biosecurity surveillance and management - Advocacy and consultation
Forest of warm climates	- Podocarp-broadleaved forests, including: - rimu (<i>Dacrydium cupressinum</i>), taraire (<i>Beilschmiedia tarairi</i>) and tawa - tōtara (<i>Podocarpus totara</i>), tanekaha (<i>Phyllocladus trichomanoides</i>), kahikatea (<i>Dacrycarpus dacrydioides</i>), miro (<i>Pectinopitys ferruginea</i>), taraire, kohekohe (<i>Didymocheton spectabilis</i>), pūriri (<i>Vitex lucens</i>), tawa (<i>Beilschmiedia tawa</i>), mangeao (<i>Litsea calicaris</i>) and tōwai	Includes widespread and relatively common secondary forest types, and nationally rare old-growth kauri, podocarp, broadleaved forest, dune forest, and coastal and riverine flood forest; supports Threatened and At Risk species	- Biosecurity of pest plants and animals - Human impacts and pressures, particularly in coastal and lowland environments	Te Korowai lands and waters, land administered by local authorities, and private land	- Plant and animal pest control - Biosecurity surveillance and management - Advocacy and consultation, including supporting the legal protection of highest priority sites on private land

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Appendix 3 table continued

ECOSYSTEM / HABITAT TYPE	DESCRIPTION	SIGNIFICANT VALUES	PRESSURES / THREATS	ADMINISTRATIVE STATUS	MANAGEMENT RESPONSES
	- Kauri (<i>Agathis australis</i>) forest - Kauri-podocarp–broadleaved forest, including kauri, tawa, kohekohe, mangeao and tōwai - Pōhutukawa, pūriri, karaka (<i>Corynocarpus laevigatus</i>) broadleaved, coastal forest - Totara, tōwai and tanekaha secondary forest - Maire tawake/swamp maire (<i>Syzygium maire</i>), kahikatea, pukatea (<i>Laurelia novae-zelandiae</i>) swamp forest				
Saline communities	- Mānawa/mangrove (<i>Avicennia marina</i> subsp. <i>australasica</i>) forest and shrubland - Ice plant (<i>Disphyma australe</i>), ureure/glasswort (<i>Salicornia quinqueflora</i>) herbfield/loamfield	Harbours, including Pārengarenga and Rangaunu, are habitats of international significance for many thousands of migratory wading birds, and also support many Threatened and At Risk shorebirds, as well as some Threatened plants	Biosecurity of pest plants and animals	Te Korowai lands and waters, land administered by local authorities, and private land	- Plant and animal pest control - Biosecurity surveillance - Advocacy and consultation

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Appendix 3 table continued

ECOSYSTEM / HABITAT TYPE	DESCRIPTION	SIGNIFICANT VALUES	PRESSURES / THREATS	ADMINISTRATIVE STATUS	MANAGEMENT RESPONSES
Wetlands	- Kahikātoa/mānuka, wire rush (<i>Empodisma minus</i>) restiad bog reedland - Kahikātoa/mānuka and waewae kākā/tanglefern (<i>Gleichenia</i> spp.) gumland and bog shrubland/fernland - Kahikātoa/mānuka, <i>Machaerina</i> and stabber sedge shrubland–sedgeland - Oioi coastal sedgeland <i>Machaerina</i> sedgeland - Kahikātoa/mānuka and waewae kākā/tanglefern shrubland/fernland - Lakeshore turf herbfield - Harakeke (<i>Phormium tenax</i>) flaxland - Raupō (<i>Typha orientalis</i>) reedland - Kahikātoa/mānuka, wire rush restiad reedland	Terrestrial freshwater wetlands have been greatly reduced, with flaxland, gumland and peat wetland being some of the rarest types; gumland is unique to northern Aotearoa, with nationally significant areas occurring at Kaimaumau and the Ahipara Gumfields; supports several Threatened and At Risk plants and birds	- Biosecurity of pest plants and animals - Fire¹⁰	Te Korowai lands and waters, and private land	- Plant and animal pest control - Biosecurity surveillance and management - Advocacy and consultation - Fire risk management

¹⁰ Fire is a complex environmental issue that is a concern to ecosystem management on all Te Korowai lands and waters. In some environments, such as gumlands, fire is a key natural process in the formation and maintenance of those ecosystems, but a change in the frequency and intensity of blazes threatens to upset that balance and create a system change. In general, however, wetland habitats are particularly vulnerable and require special attention from the threat of fires, as demonstrated by recent large blazes, and so fire is mentioned as a special pressure/threat here.

Appendix 4

Islands over 1 ha administered by the Department of Conservation Te Papa Atawhai in *Te Korowai*

ISLAND / ISLAND GROUP	ADMINISTRATIVE STATUS	DESIRED ISLAND CLASSIFICATION (10-YEAR GOAL) ¹¹	MAMMALIAN PESTS	ISSUES
Manawatāwhi/Three Kings Islands • Manawatāwhi/Great Island • Oromaki/North East Island • Princes Islands • Moekawa/South West Island • Ōhau/West Island	Nature Reserve	Minimum Impact	Nil	Unauthorised landings, weed control
Motuopao • Motuopao/Motupuruhi	Nature Reserve	Ecosystem Restoration	Nil	Unauthorised landings, weed control
Simmonds Islands • Motu Puruhi • Terakautuhaka/Te Rākautūhakahaka	Nature Reserve	Ecosystem Restoration	Nil	Unauthorised landings, weed control

¹¹ The island classification is aligned with the 10-year term of Te Hiku o Te Ika-a-Māui Conservation Management Strategy (Te Hiku CMS) and represents the desired future state of each island (see Department of Conservation 2010: The island strategy: guidelines for managing islands administered by the Department of Conservation). The island classification is intended for guidance only and needs to be read in conjunction with the outcomes and policies for Places in Part Two of Volume I of Te Hiku CMS.

Appendix 5

Priority ecosystem units on Te Korowai lands and waters

This list has been compiled from the Department of Conservation Te Papa Atawhai national list of around 1,000 ecosystem units, which were identified by Te Papa Atawhai using its natural heritage prioritising processes as at September 2013. The national list represents the full range of Aotearoa New Zealand terrestrial and freshwater ecosystems and excludes units

or parts of units on private land. Please note that the table below does not necessarily list all nationally significant ecosystems present in the *Te Korowai* region. The list is correct as at the date of publication of Te Hiku o Te Ika-a-Māui Conservation Management Strategy (Te Hiku CMS). Its contents may be amended or reviewed during the term of Te Hiku CMS.

NAME OF ECOSYSTEM UNIT	PREDOMINANT ECOSYSTEM HABITAT TYPES INCLUDED WITHIN THE UNIT	ADMINISTRATIVE STATUS	AREA (ha)
Ahipara	- Gumland - Kahikātoa/mānuka (<i>Leptospermum hoipolloi</i>), broad-leaved mingimingi (<i>Leucopogon fasciculatus</i>), prickly mingimingi (<i>Leptecophylla juniperina</i>) and <i>Machaerina</i> shrubland/sedgeland - Tōtara (<i>Podocarpus totara</i>), broadleaved forest	Historic Reserve and Conservation Area	3,566.6
Kokota Spit & Great Exhibition Bay	- Windform lakes - Dunefields, including mobile sandfields, dune slacks/swales and ablation plains - Gumland wetlands	Conservation Area	362.4
Lake Rotoroa	- Windform-A - Submerged charophyte communities	Conservation Area and Scenic Reserve	81.8
Manganuiowae–Raetia	Rimu (<i>Dacrydium cupressinum</i>), taraire (<i>Beilschmiedia tarairi</i>), tawa (<i>Beilschmiedia tawa</i>) forest	Conservation Park	1,752.6
Kaimaumau–Motutangi	- Kahikātoa/mānuka, tanglefern (<i>Gleichenia</i> spp.) shrubland/fernland - Gumland - Kahikātoa/mānuka, broad-leaved mingimingi (<i>Leucopogon fasciculatus</i>), prickly mingimingi, <i>Machaerina</i> shrubland/sedgeland	Conservation Area and Scientific Reserve	2,495.2

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Appendix 5 table continued

NAME OF ECOSYSTEM UNIT	PREDOMINANT ECOSYSTEM HABITAT TYPES INCLUDED WITHIN THE UNIT	ADMINISTRATIVE STATUS	AREA (ha)
Surville Cliffs ¹²	• Pōhutukawa (<i>Metrosideros excelsa</i>), Surville Cliffs tānekaha (<i>Phyllocladus</i> aff. <i>trichomanoides</i>), Surville Cliffs houpara (<i>Pseudopanax lessonii</i>) forest and shrubland • Kahikātoa/mānuka and <i>Veronica punicea</i> shrubland • Fountain sedge (<i>Lepidosperma neozelandicum</i>) and stabber sedge (<i>Schoenus brevifolius</i>) sedgeland • Serpentine plateau shrubland • Badlands and lichenfield-rockland • Ultramafic sea cliff	Scientific Reserve	686.3
Tapuwae	• Rimu, taraire, tawa forest	Scenic Reserve	208.6
Te Paki East	• Pōhutukawa, pūriri (<i>Vitex lucens</i>), karaka (<i>Corynocarpus laevigatus</i>), broadleaved forest • Gumland • Kahikātoa/mānuka, mingimingi, <i>Machaerina</i> shrubland/sedgeland • Spinifex (<i>Spinifex</i> spp.), pīngao (<i>Ficinia spiralis</i>) grassland/sedgeland	Scenic Reserve	1,904.2
Te Paki West	• Rimu, taraire, tawa forest • Kauri (<i>Agathis australis</i>), podocarp, broadleaved forest • Raupō (<i>Typha orientalis</i>) reedland • Spinifex, pīngao grassland/sedgeland • Oioi (<i>Apodasmia similis</i>), wīwī/knobby club rush (<i>Ficinia nodosa</i>) sedgeland	Recreation Reserve	14,488.4
Te Ramanuka/ Te Raumanuka	• Tōtara, broadleaved forest • Kahikātoa/mānuka shrubland • Lakes and wetlands	Conservation Area	228.1

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¹² Not all habitat types listed as present within the Surville Cliffs priority ecosystem unit are officially recognised at the time of publication but are likely to be so recognised within the lifetime of this CMS.

Appendix 5 table continued

NAME OF ECOSYSTEM UNIT	PREDOMINANT ECOSYSTEM HABITAT TYPES INCLUDED WITHIN THE UNIT	ADMINISTRATIVE STATUS	AREA (ha)
Manawatāwhi/ Three Kings Islands	- Pōhutukawa, Manawatāwhi/Three Kings kānuka (<i>Kunzea triregensis</i>), broadleaved forest with local Three Kings tītoki (<i>Alectryon excelsus</i> subsp. <i>grandis</i>), pukanui (<i>Meryta sinclairii</i>) and Manawatāwhi/Three Kings rangiora (<i>Brachyglottis arborescens</i>) - Harakeke (<i>Phormium tenax</i>) flaxland and kahikātoa/mānuka shrubland	Nature Reserve	486.8
Warawara	- Rimu, taraire, tawa forest - Kauri forest - Kauri, podocarp, broadleaved forest - Tōtara, pūriri forest - Kahikatea (<i>Dacrycarpus dacrydioides</i>), pukatea (<i>Laurelia novae-zelandiae</i>) forest	Conservation Park	6,884.5

Appendix 6

Threats, pests and wild animals within *Te Korowai*

The management of threats, pests and wild animals¹³ in *Te Korowai* is addressed in section 10.1 Ngā Uara Rawa Taiao | Natural Values in Part Three and in the natural values table for each Place in Part Two of Volume I of Te Hiku o Te Ika-a-Māui Conservation Management Strategy (Te Hiku CMS). The information provided in Tables A6.1–A6.3 below is correct at the time of publishing. However, due to the nature of conservation, this information is

likely to change, as many key datasets are being continually improved and updated within Department of Conservation Te Papa Atawhai systems. It is also likely that management responses will change as new techniques and more effective methods are developed. For up-to-date information on the management responses that are being used at the time of reading, please contact the relevant district office.

Table A6.1: Terrestrial and freshwater animal pests

COMMON AND SCIENTIFIC NAMES	DISTRIBUTION	PRESSURES / THREATS	MANAGEMENT RESPONSE	PRIORITY PLACES FOR ACTION
Birds				
Australian magpie <i>Gymnorhina tibicen</i>	Widespread	Competes with native species for food and nesting sites	Nil	No action
Canada goose <i>Branta canadensis</i>	Common	Competes with native species for food and nesting sites; fouls waterways	Nil	No action
eastern rosella <i>Platycercus eximius</i>	Widespread	Competes with native species for food and nesting sites	Nil	No action
Indian myna <i>Acridotheres tristis</i>	Widespread	Competes with native species for food and nesting sites	Nil	No action

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¹³ May also include game animals – see Glossary in Volume I for definition.

Table A6.1: Terrestrial and freshwater animal pests continued

COMMON AND SCIENTIFIC NAMES	DISTRIBUTION	PRESSURES / THREATS	MANAGEMENT RESPONSE	PRIORITY PLACES FOR ACTION
Freshwater fishes				
brown bullhead <i>Ameiurus nebulosus</i>	Limited	Predates on and competes with native species	Nil	No action
caudo <i>Phalloceros caudimaculatus</i>	Localised	Reportedly predates on and competes with native species	Nil	No action
gambusia <i>Gambusia affinis</i>	Widespread	Predates on and competes with native species	Nil	No action
goldfish <i>Carassius auratus</i>	Limited	Predates on and competes with native species	Nil	No action
koi carp <i>Cyprinus carpio</i>	Eradicated from known sites	Predates on and competes with native species	Eradication	Eradicate from any new sites
perch <i>Perca fluviatilis</i>	Known in a few localities	Predates on and competes with native species	Nil	No action; identified as a regional pest in the Northland Regional Pest and Marine Pathway Management Plan ¹⁴
rudd <i>Scardinius erythrophthalmus</i>	Widespread	Predates on and competes with native species	Nil	No action
Invertebrates				
Argentine ant <i>Linepithema humile</i>	Common around human habitation and expanding	Competes with native species for food resources (nectar/fruits/invertebrates) and predates on native species	Limited to scheduled surveillance and advice to public; very limited treatment areas	Continue surveillance at offices and key sites as per management and advocacy strategy; keep 'holding the line' at Te Pahi Recreation Reserve to minimise the chances of establishment in the forest remnants

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¹⁴ nrc.govt.nz/resource-library-summary/plans-and-policies/pest-management/northland-regional-pest-and-marine-pathway-management-plan

Table A6.1: Terrestrial and freshwater animal pests continued

COMMON AND SCIENTIFIC NAMES	DISTRIBUTION	PRESSURES / THREATS	MANAGEMENT RESPONSE	PRIORITY PLACES FOR ACTION
Darwin's ant <i>Doleromyrma darwiniana</i>	Common around human habitation and expanding	Competes with native species for food resources (nectar/fruits/invertebrates) and predates on native species	Limited to scheduled surveillance and advice to public; very limited treatment areas	Aupōuri Peninsula and Te Pahi Recreation Reserve plus outlying islands; surveillance only occurs during key site monitoring for invasive ants, as for Argentine ants
common wasp <i>Vespula vulgaris</i>	Widespread	Competes with native species for nectar and invertebrates	Poisoning of nests where a nuisance to humans (near tracks/huts) and use of Vespex® bait stations along tracks and at management sites up to 500 ha	Near huts, tracks and campgrounds; where wasp numbers are high, potentially control (Vespex) in forest remnants
German wasp <i>Vespula germanica</i>	Widespread	Competes with native species for nectar and invertebrates	Poisoning of nests where a nuisance to humans (near tracks/huts) and use of Vespex bait stations along tracks and at management sites up to 500 ha	Near huts, tracks and campgrounds; where wasp numbers are high, potentially control (Vespex) in forest remnants
paper wasp, including Asian paper wasp <i>Polistes chinensis</i> , Tasmanian paper wasp <i>P. humilis</i> and European paper wasp <i>P. dominula</i>	Widespread	Predates on spiders, caterpillars and other insects in coastal and non-forest environments	No control tools currently but team nest picking can work	Coastal sites, Ahipara gumlands and Te Pahi Recreation Reserve

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Table A6.1: Terrestrial and freshwater animal pests continued

COMMON AND SCIENTIFIC NAMES	DISTRIBUTION	PRESSURES / THREATS	MANAGEMENT RESPONSE	PRIORITY PLACES FOR ACTION
Mammals				
cat <i>Felis catus</i>	Widespread except for islands	Eats invertebrates, lizards, bird eggs and fledglings (as well as rodents, lagomorphs and mustelids)	Limited to specific areas, as for stoats	Preferably in areas where other animal pests are also controlled, else a lack of predators could lead to population explosions of other mammalian pest species
goat <i>Capra hircus</i>	Widespread except for Te Paki Recreation Reserve, North Cape Scientific Reserve and Mokaikai Scenic Reserve	Eats lower- and mid-tier vegetation and negatively affects natural regeneration; contributes to erosion, especially on steep slopes	Ongoing control in some areas of significant forests, similar to possum control programme	Maintain Herekino, Warawara and Raetea Forests (all Pt Northland Conservation Park) as goat-free areas
hare <i>Lepus europaeus occidentalis</i>	Widespread	Eats lower-tier vegetation; can have particularly large impacts where revegetation programmes occur	Nil	No action
hedgehog <i>Erinaceus europaeus occidentalis</i>	Widespread except for islands	Eats invertebrates, lizards, bird eggs and fledglings	Nil – sometimes captured as incidental bycatch (beneficial) from mustelid trapping; no budget available	No action
mouse <i>Mus musculus</i>	Widespread	Eats seeds, fruits and invertebrates	Nil	No action
mustelids, including ferret <i>Mustela furo</i> , stoat <i>M. erminea</i> and weasel <i>M. nivalis vulgaris</i>	Widespread except for islands	Eats birds and eggs (as well as rodents and lagomorphs)		Preferably in areas where other animal pests are also controlled, else a lack of predators could lead to population explosions of other mammalian pest species

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Table A6.1: Terrestrial and freshwater animal pests continued

COMMON AND SCIENTIFIC NAMES	DISTRIBUTION	PRESSURES / THREATS	MANAGEMENT RESPONSE	PRIORITY PLACES FOR ACTION
pig <i>Sus scrofa</i>	Widespread except for islands	Eats native plants/roots, seeds, fruits, eggs and invertebrates; causes widespread erosion at high population densities; spreads weeds	Limited to Regional Pest Management Strategy response only, as no operational budget available; essentially left to recreational hunters	Management in consultation with the community and pig hunters when required to limit the spread of <i>Phytophthora agathidicida</i> (PA; refer to Places policies on kauri disease in Part Two, Volume I); maintain pig-proof fences/enclosures at Otou/North Cape and Warawara Forest
possum <i>Trichosurus vulpecula</i>	Widespread except for islands	Eats leaves, seeds, seedlings, flowers, buds, fruits, invertebrates, lizards, eggs and birds; competes with native birds for nesting sites	Possum control programme in areas under sustained management (AUSMs)	AUSMs – portions of the Te Paki Recreation Reserve, North Cape Scientific Reserve, and Warawara and Raetea Forests (both Pt Northland Conservation Park)
rabbit <i>Oryctolagus cuniculus</i>	Widespread	Eats lower-tier vegetation, especially in dunelands where the greatest impact occurs	Limited to control around new plantings and at a few coastal sites	Coastal dunelands
rat, including Norway rat <i>Rattus norvegicus</i> and ship rat <i>R. rattus</i>	Widespread except for most islands	Eats seeds, seedlings, flowers, buds, fruits, invertebrates, lizards, eggs and birds; competes with native birds for nesting sites	Very limited control in specific areas (some coastal sites are protected for snails); rats are sometimes targeted when 1080 is used for multispecies pest control	Maintain rat-free islands; increase use of aerial 1080 for multispecies pest control
wild cattle <i>Bos taurus</i>	Te Paki, Mokaikai Scenic Reserve and Warawara Forest	Eats lower-tier vegetation; spreads weeds; damages stream banks and accelerates erosion	Removal encouraged through advocacy	Te Paki Recreation Reserve, Mokaikai Scenic Reserve and Warawara Forest (Pt Northland Conservation Park)

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Table A6.1: Terrestrial and freshwater animal pests continued

COMMON AND SCIENTIFIC NAMES	DISTRIBUTION	PRESSURES / THREATS	MANAGEMENT RESPONSE	PRIORITY PLACES FOR ACTION
wild dog <i>Canis lupus familiaris</i>	Occurs in some larger forests	Eats native species, especially ground-nesting birds such as kiwi; poses a threat to humans; kills stock	Advocacy; trapping or shooting where wild dogs are reported or suspected	Across <i>Te Korowai</i>
wild horse <i>Equus ferus caballus</i>	Te Paki Recreation Reserve and Mokaikai Scenic Reserve	Has negative impacts on dunelands; eats lower-tier vegetation; spreads weeds	Removal encouraged through advocacy and muster from affected areas	Te Paki Recreation Reserve and Mokaikai Scenic Reserve
Reptiles				
rainbow skink <i>Lampropholis delicata</i>	Limited but expanding	Competes for food and habitat of native lizard species	Raising awareness of Biosecurity Act 1993 provisions where rainbow skinks are an unwanted organism and it is illegal to knowingly move, release, cause to be released, spread, sell, offer for sale, exhibit or breed rainbow skinks without the explicit permission of a Ministry for Primary Industries Biosecurity New Zealand Technical Officer	Raise awareness to limit accidental spread into areas where not currently present
red-eared slider turtle <i>Trachemys scripta elegans</i>	Limited		Nil	No action

Table A6.2: Terrestrial and freshwater plant pests

COMMON AND SCIENTIFIC NAMES	DISTRIBUTION	PRESSURES / THREATS	MANAGEMENT RESPONSE	PRIORITY PLACES FOR ACTION
agapanthus <i>Agapanthus praecox</i>	Widespread	Dominates groundcover	Managed at sites with control programmes	Te Paki Recreation Reserve
alligator weed <i>Alternanthera philoxeroides</i>	Widespread	Dominates freshwater sites	Managed at sites with control programmes	Te Paki Recreation Reserve and Sweetwater Dune Lakes Conservation Area
American spartina <i>Spartina alterniflora</i>	Widespread	Dominates saltwater wetlands	Managed at sites with control programmes	All harbours and estuaries
apple of Sodom <i>Solanum linnaeanum</i>	Widespread	Dominates shrublands	Managed at sites with control programmes	Kaimaumau (East Beach Conservation Area, Kaimaumau Scientific Reserve and Waikaramu Lake Conservation Area), Mokaikai Scenic Reserve, Motuopao Island Nature Reserve, North Cape Scientific Reserve and Te Paki Recreation Reserve
aristea <i>Aristea ecklonii</i>	Widespread	Dominates groundcover	Managed at sites with control programmes	Kaimaumau (East Beach Conservation Area, Kaimaumau Scientific Reserve and Waikaramu Lake Conservation Area), Mokaikai Scenic Reserve and Te Paki Recreation Reserve
bat-wing passionflower <i>Passiflora apetala</i>	Limited	Very invasive and can smother, shade and strangle the vegetation it grows on	Managed at sites with control programmes	
bladderwort <i>Utricularia gibba</i>	Widespread	Dominates freshwater sites	Managed at sites with control programmes	Kaimaumau (East Beach Conservation Area, Kaimaumau Scientific Reserve and Waikaramu Lake Conservation Area) and Te Paki Recreation Reserve

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Table A6.2: Terrestrial and freshwater plant pests continued

COMMON AND SCIENTIFIC NAMES	DISTRIBUTION	PRESSURES / THREATS	MANAGEMENT RESPONSE	PRIORITY PLACES FOR ACTION
boneseed <i>Osteospermum moniliferum</i> subsp. <i>moniliferum</i>	Widespread	Dominates forest edges	Managed at sites with control programmes	Kaimaumau (East Beach Conservation Area, Kaimaumau Scientific Reserve and Waikaramu Lake Conservation Area) and Te Paki Recreation Reserve
brush wattle <i>Paraserianthes lophantha</i>	Widespread	Dominates shrublands	Managed at sites with control programmes	Kaimaumau (East Beach Conservation Area, Kaimaumau Scientific Reserve and Waikaramu Lake Conservation Area), North Cape Scientific Reserve and Te Paki Recreation Reserve
bulbil watsonia <i>Watsonia meriana</i> var. <i>bulbillifera</i>	Widespread	Dominates groundcover	Managed at sites with control programmes	Kaimaumau (East Beach Conservation Area, Kaimaumau Scientific Reserve and Waikaramu Lake Conservation Area)
cat's claw creeper <i>Macfadyena unguis-cati</i>	Limited sites	Vine capable of smothering forest canopy	Managed at sites with control programmes	
Chinese privet <i>Ligustrum sinense</i>	Widespread	Spreads dense carpets of seedlings that displace native shrubs and prevent native plant regeneration	Managed at sites with control programmes	
climbing asparagus <i>Asparagus scandens</i>	Widespread	Vine capable of smothering forest canopy	Managed at sites with control programmes	Kaimaumau (East Beach Conservation Area, Kaimaumau Scientific Reserve and Waikaramu Lake Conservation Area)
coastal banksia <i>Banksia integrifolia</i>	Widespread	Dominates open sites	Managed at sites with control programmes	Kaimaumau (East Beach Conservation Area, Kaimaumau Scientific Reserve and Waikaramu Lake Conservation Area)
coral tree <i>Erythrina</i> × <i>sykesii</i>	Widespread	Dominates forest canopy	Managed at sites with control programmes	Te Paki Recreation Reserve

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Table A6.2: Terrestrial and freshwater plant pests continued

COMMON AND SCIENTIFIC NAMES	DISTRIBUTION	PRESSURES / THREATS	MANAGEMENT RESPONSE	PRIORITY PLACES FOR ACTION
dally pine <i>Psoralea pinnata</i>	Widespread	Dominates shrubland	Managed at sites with control programmes	Te Paki Recreation Reserve
dusky coral pea <i>Kennedia rubicunda</i>	Limited sites	Vine capable of smothering forest canopy	Weed-led	Te Korowai lands and waters in the Kaitaia area
elaeagnus <i>Elaeagnus × reflexa</i>	Widespread	Vine capable of smothering forest canopy	Managed at sites with control programmes	Te Paki Recreation Reserve
green cestrum <i>Cestrum parqui</i>	Limited sites	Dominates subcanopy	Managed at sites with control programmes	Te Paki Recreation Reserve
heather <i>Calluna vulgaris</i>	Limited sites	Dominates shrublands	Managed at sites with control programmes	Kaimaumu (East Beach Conservation Area, Kaimaumu Scientific Reserve and Waikaramu Lake Conservation Area)
lantana <i>Lantana camara</i> var. <i>aculeata</i>	Widespread	Dominates shrublands	Managed at sites with control programmes	Houhora Harbour and Waipapakauri Scenic Reserve
Madeira vine <i>Anredera cordifolia</i>	Widespread	Vine capable of smothering forest canopy	Managed at sites with control programmes	Kaimaumu (East Beach Conservation Area, Kaimaumu Scientific Reserve and Waikaramu Lake Conservation Area) and Motuopao Island Nature Reserve
marram grass <i>Calamagrostis arenaria</i>	Widespread in dunelands	Dominates dunelands	Managed at sites with control programmes	Mokaikai Scenic Reserve, Motuopao Island Nature Reserve and Te Paki Recreation Reserve
montbretia <i>Crocasmia × crocosmiiflora</i>	Widespread	Dominates groundcover	Managed at sites with control programmes	Te Paki Recreation Reserve
Monterey pine <i>Pinus radiata</i>	Widespread	Dominates forest canopy	Managed at sites with control programmes	Kaimaumu (East Beach Conservation Area, Kaimaumu Scientific Reserve and Waikaramu Lake Conservation Area), Mokaikai Scenic Reserve and North Cape Scientific Reserve

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Table A6.2: Terrestrial and freshwater plant pests continued

COMMON AND SCIENTIFIC NAMES	DISTRIBUTION	PRESSURES / THREATS	MANAGEMENT RESPONSE	PRIORITY PLACES FOR ACTION
orange cestrum <i>Cestrum aurantiacum</i>	Limited sites	Dominates subcanopy	Managed at sites with control programmes	Te Paki Recreation Reserve
oxylobium <i>Callistachys lanceolata</i>	Widespread	Dominates shrublands	Managed at sites with control programmes	Kaimaumu (East Beach Conservation Area, Kaimaumu Scientific Reserve and Waikaramu Lake Conservation Area), Mokaikai Scenic Reserve, North Cape Scientific Reserve and Te Paki Recreation Reserve
pampas grass <i>Cortaderia selloana</i>	Widespread	Dominates disturbed sites, post-fire sites and heathlands/gumlands	Managed at sites with control programmes; liaison with production foresters and those administering tree planting programmes; forms part of post-fire responses	Mokaikai Scenic Reserve, North Cape Scientific Reserve and all of Te Paki Recreation Reserve
purple pampas grass <i>Cortaderia jubata</i>	Widespread and aggressively invading	Dominates disturbed sites, post-fire sites and heathlands/gumlands	Managed at sites with control programmes; liaison with production foresters and those administering tree planting programmes; forms part of post-fire responses	Mokaikai Scenic Reserve, North Cape Scientific Reserve and all of Te Paki Recreation Reserve
royal fern <i>Osmunda regalis</i>	Limited sites	Dominates freshwater sites	Managed at sites with control programmes	Kaimaumu (East Beach Conservation Area, Kaimaumu Scientific Reserve and Waikaramu Lake Conservation Area) and Lake Waiparera Marginal Strip
Spanish heath <i>Erica lusitanica</i>	Widespread	Dominates shrublands	Managed at sites with control programmes	Kaimaumu (East Beach Conservation Area, Kaimaumu Scientific Reserve and Waikaramu Lake Conservation Area)

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Table A6.2: Terrestrial and freshwater plant pests continued

COMMON AND SCIENTIFIC NAMES	DISTRIBUTION	PRESSURES / THREATS	MANAGEMENT RESPONSE	PRIORITY PLACES FOR ACTION
spartina <i>Spartina anglica</i>	Widespread	Dominates saltwater wetlands	Managed at sites with control programmes	All harbours and estuaries
spartina hybrid <i>Spartina</i> × <i>townsendii</i>	Limited sites	Dominates saltwater wetlands	Managed at sites with control programmes	Rangaunu Harbour
Sydney golden wattle <i>Acacia longifolia</i>	Widespread	Dominates forest canopy	Managed at sites with control programmes	Kaimaumau (East Beach Conservation Area, Kaimaumau Scientific Reserve and Waikaramu Lake Conservation Area), North Cape Scientific Reserve and Te Paki Recreation Reserve
Taiwan cherry <i>Prunus campanulata</i>	Widespread	Dominates shrublands	Managed at sites with control programmes	
tree mallow <i>Malva arborea</i>	Limited sites	Dominates shrublands	Managed at sites with control programmes	Motuopao Island Nature Reserve
upright bottlebrush <i>Melaleuca linearis</i>	Widespread	Dominates shrublands	Managed at sites with control programmes	Kaimaumau (East Beach Conservation Area, Kaimaumau Scientific Reserve and Waikaramu Lake Conservation Area)
wandering willie <i>Tradescantia fluminensis</i>	Widespread	Dominates groundcover	Managed at sites with control programmes	Kaimaumau (East Beach Conservation Area, Kaimaumau Scientific Reserve and Waikaramu Lake Conservation Area)
wild ginger/kahili ginger <i>Hedychium gardnerianum</i>	Widespread	Rhizomes form dense beds up to 1 m deep, excluding all other species	Managed at sites with control programmes	
woolly nightshade <i>Solanum mauritianum</i>	Widespread	Dominates shrublands	Managed at sites with control programmes	Te Paki Recreation Reserve

Table A6.3: Marine pests

COMMON AND SCIENTIFIC NAMES	DISTRIBUTION	PRESSURES / THREATS	MANAGEMENT RESPONSE	PRIORITY PLACES FOR ACTION
cunjevoi <i>Pyura praeputialis</i>	Northland east and west coasts	Forms deep mats that overgrow mussel beds and other indigenous intertidal species	Eradication attempt underway in the Far North; publicity aimed at prevention and containment	<i>Te Korowai</i> east and west coasts
Pacific oyster <i>Crassostrea gigas</i>	Widespread	Potential to reach high abundances and become a dominant zoning or habitat-modifying organism in estuarine marine reserves	Subject to community control programmes; pest-led suppression	All <i>Te Korowai</i> harbours and Waikaraka
saltwater paspallum <i>Paspalum vaginatum</i>	Widespread	Colonises mudflats; displaces wading birds	Eradication	All <i>Te Korowai</i> harbours
spartina <i>Spartina</i> spp.	Widespread	Colonises mudflats; displaces wading birds	Eradication attempt underway	All <i>Te Korowai</i> harbours
undaria <i>Undaria pinnatifida</i>	Localised – Scheigis Rock, Rangaunu Harbour	Competitive marine alga that is potentially able to reduce recolonisation of disturbed marine sites by native species	Local eradication attempt underway; publicity aimed at prevention and containment	All <i>Te Korowai</i> harbours

Appendix 7

Threatened and at-risk indigenous flora and fauna in *Te Korowai*

Hundreds of indigenous species are present in *Te Korowai*. This Appendix lists those species of vascular and non-vascular plants, freshwater fishes, marine animals, and land vertebrates and invertebrates that have been classified as Threatened or At Risk under the New Zealand Threat Classification System and in taxon status lists published between 2008 and June 2026.¹⁵

The management of threatened and at-risk species and of important ecosystems within *Te Korowai* is addressed in section 10.1 Ngā Uara Rawa Taiao | Natural Values in Part Three and in the natural values tables for each Place in Part Two of Volume I of Te Hiku o Te Ika-a-Māui Conservation Management Strategy (Te Hiku CMS), which outline Department of Conservation Te Papa Atawhai efforts to advocate for the protection of threatened and at-risk flora and fauna that occur outside public conservation lands and waters and to manage threats to them. Additional information on priority ecosystem units and the species and threats within these is provided in Appendix 5.¹⁶

The information provided within this Appendix was correct at the time of publishing. However, due to the nature of conservation, this information is likely to change. Many key datasets relating to the status of threatened species and the location and status of ecosystems are continually being improved and updated within Te Papa Atawhai systems on a rolling basis. It is also likely that management responses will change as new techniques and more effective methods are developed. The ongoing invasion of pests and the recognition of new threats to biodiversity are a reality in Aotearoa New Zealand. For information on the management responses that are being used at the time of reading, please contact the relevant Te Papa Atawhai district office.

If there are changes to key datasets (such as the New Zealand Threat Classification System status lists), the contents of this Appendix may be amended or reviewed during the term of Te Hiku CMS.

¹⁵ Townsend AJ et al. 2007. New Zealand Threat Classification System manual. Wellington: Department of Conservation. doc.govt.nz/nztcs-2008

¹⁶ For a list of the New Zealand Threat Classification System status assessment reports, visit doc.govt.nz/nztcs.

Lists and statuses of threatened and at-risk flora and fauna in *Te Korowai*

Abbreviations:

TK	Manawatāwhi/Three Kings Islands and other islands
TP	Te Paki ecological district
AUP	Aupōuri Ecological District (in part, not including areas outside <i>Te Korowai</i>)
AHP	Ahipara Ecological District
MTW	Maungataniwha (in part, not including areas outside <i>Te Korowai</i>)
HOK	Hokianga (in part, not including areas outside <i>Te Korowai</i>)

Legend:

	Potentially locally extinct
	Locally extinct
	Presence unknown
	Present
	Present, potentially endemic
	Endemic

Table A7.1: List and status of vascular and non-vascular plants

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Fern		<i>Alsophila</i> aff. <i>tricolor</i> (a) (WELT P027464; Te Paki)	At Risk – Naturally Uncommon	Te Hiku		Present		Present	Present	Presence unknown
Fern		<i>Austroblechnum norfolkianum</i>	At Risk – Naturally Uncommon		Present	Present				
Fern	pātōtara, parsley fern	<i>Botrychium australe</i>	At Risk – Declining			Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Fern	christella	<i>Christella dentata</i>	At Risk – Naturally Uncommon			Present	Present			
Fern		<i>Cyclosorus interruptus</i>	At Risk – Declining			Locally extinct	Present			
Fern	Three Kings davallia	<i>Davallia tasmanii</i> subsp. <i>tasmanii</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Fern	tūākura, stumpy tree fern	<i>Dicksonia lanata</i> subsp. <i>hispida</i>	At Risk – Naturally Uncommon	Northland				Present	Presence unknown	Presence unknown
Fern	prickly rasp fern	<i>Doodia aspera</i>	Non-resident Native – Vagrant			Present				
Fern		<i>Doodia mollis</i>	At Risk – Naturally Uncommon	Aotearoa				Present	Present	Present

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Fern	giant hypolepis	<i>Hypolepis dicksonioides</i>	At Risk – Naturally Uncommon			Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Fern		<i>Macrothelypteris torresiana</i>	At Risk – Naturally Uncommon			Present				
Fern	stalked adder's tongue fern	<i>Ophioglossum petiolatum</i>	Threatened – Nationally Vulnerable				Present			
Fern	para, king fern	<i>Ptisana salicina</i>	At Risk – Declining					Presence unknown	Present	Presence unknown
Fern	fan fern	<i>Schizaea dichotoma</i>	At Risk – Naturally Uncommon			Present		Present	Present	Presence unknown
Fern	marsh fern	<i>Thelypteris confluens</i>	At Risk – Declining			Locally extinct	Present			
Fern	royal fern	<i>Todea barbara</i>	Threatened – Nationally Vulnerable			Present	Present			
Fern ally	bog clubmoss	<i>Brownseya serpentina</i>	Threatened – Nationally Vulnerable			Locally extinct	Present	Present		
Fern ally		<i>Phylloglossum drummondii</i>	Threatened – Nationally Endangered			Present	Present	Present		

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Gymnosperm	kauri	<i>Agathis australis</i>	At Risk – Declining	Te Ika-a-Māui		Present	Present	Present	Present	Present
Gymnosperm		<i>Halocarpus kirkii</i>	At Risk – Naturally Uncommon	Te Ika-a-Māui		Present		Present	Presence unknown	Presence unknown
Gymnosperm		<i>Phyllocladus</i> aff. <i>trichomanoides</i> (a) (AK 138493; Surville Cliffs)	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Dicot – tree	Three Kings tītoki	<i>Alectryon excelsus</i> subsp. <i>grandis</i>	Threatened – Nationally Vulnerable	Three Kings	Endemic					
Dicot – herb	Holloway’s crystalwort	<i>Atriplex hollowayi</i>	Threatened – Nationally Critical	Aotearoa		Locally extinct	Endemic			
Dicot – tree	Three Kings rangiora	<i>Brachyglottis arborescens</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Dicot – vine	small-flowered white bindweed	<i>Calystegia marginata</i>	At Risk – Naturally Uncommon			Present	Potentially locally extinct	Presence unknown	Presence unknown	Presence unknown
Dicot – herb	sneezeweed	<i>Centipeda elatinoides</i>	Data Deficient			Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Dicot – herb	sneezeweed	<i>Centipeda minima</i> subsp. <i>minima</i>	At Risk – Naturally Uncommon		Presence unknown	Present	Present			

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Dicot – tree	parapara, birdcatcher tree	<i>Ceodes brunoniana</i>	At Risk – Relict		Present	Presence unknown	Present			
Dicot – shrub	large-seeded coprosma	<i>Coprosma macrocarpa</i> subsp. <i>macrocarpa</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Dicot – shrub		<i>Coprosma neglecta</i>	At Risk – Naturally Uncommon	Northland		Present				
Dicot – vine		<i>Coprosma spathulata</i> subsp. <i>hikuruana</i>	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Dicot – shrub		<i>Corokia</i> aff. <i>cotoneaster</i> (a) (AK 138427; Surville)	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Dicot – herb	New Zealand carrot	<i>Daucus glochidiatus</i>	Threatened – Nationally Vulnerable			Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Dicot – herb	sundew	<i>Drosera gunniana</i>	Non-resident Native – Coloniser			Present	Present			
Dicot – tree		<i>Elingamita johnsonii</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Dicot – vine	creeping fuchsia	<i>Fuchsia procumbens</i>	At Risk – Naturally Uncommon	Northland		Present				

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Dicot – shrub		<i>Geniostoma ligustrifolium</i> var. <i>crassum</i>	At Risk – Naturally Uncommon	Te Hiku	Endemic					
Dicot – shrub		<i>Geniostoma ligustrifolium</i> var. <i>majus</i>	At Risk – Naturally Uncommon	Three Kings		Endemic				
Dicot – tree		<i>Hedycarya</i> aff. <i>arborea</i> (a) (AK 183168; “northern offshore islands”)	At Risk – Naturally Uncommon	Northland	Present					
Dicot – vine	pōwhiwhi, coastal morning glory	<i>Ipomoea cairica</i>	At Risk – Naturally Uncommon			Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Dicot – vine	beach morning glory	<i>Ipomoea pes-caprae</i> subsp. <i>brasiliensis</i>	At Risk – Naturally Uncommon			Present				
Dicot – shrub	dwarf mistletoe	<i>Korthalsella salicornioides</i>	At Risk – Declining	Aotearoa		Present		Present		
Dicot – tree	rawiritoa, kānuka	<i>Kunzea amathicola</i>	At Risk – Declining	Aotearoa		Present	Present	Present		
Dicot – tree	rāwiri mānuka, kānuka	<i>Kunzea linearis</i>	At Risk – Declining	Te Hiku		Endemic	Endemic			
Dicot – tree	Three Kings kānuka	<i>Kunzea triregensis</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Dicot – herb		<i>Leptinella rotundata</i>	Threatened – Nationally Critical	Northland		Present		Present		
Dicot – shrub	kahikātoa, mānuka	<i>Leptospermum hoipolloi</i> f. <i>incanum</i>	At Risk – Declining	Northland		Endemic	Endemic	Endemic	Endemic	Endemic
Dicot – shrub	coastal silver prostrate mānuka	<i>Leptospermum hoipolloi</i> f. <i>procumbens</i>	At Risk – Declining	Aotearoa		Present				
Dicot – shrub	Surville Cliffs mingimingi	<i>Leucopogon xerampelinus</i>	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Dicot – herb	koru, oru, New Zealand hydrangea	<i>Lobelia physaloides</i>	Threatened – Nationally Vulnerable	Northland	Present	Present	Present	Present	Present	Present
Dicot – tree	ramarama	<i>Lophomyrtus bullata</i>	Threatened – Nationally Critical	Aotearoa		Present		Present	Present	Present
Dicot – tree	rōhutu	<i>Lophomyrtus obcordata</i>	At Risk – Declining	Aotearoa		Present				
Dicot – herb	dwarf musk	<i>Mazus novaezeelandiae</i> subsp. <i>impolitus</i> f. <i>hirtus</i>	Threatened – Nationally Critical	Aotearoa			Present	Present		
Dicot – herb		<i>Mazus novaezeelandiae</i> subsp. <i>impolitus</i> f. <i>impolitus</i>	Threatened – Nationally Vulnerable	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Dicot – herb	hīoi, New Zealand mint	<i>Mentha cunninghamii</i>	At Risk – Declining	Aotearoa		Locally extinct				
Dicot – tree	pukanui	<i>Meryta sinclairii</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Dicot – tree	rātā moehau, Bartlett's rātā	<i>Metrosideros bartlettii</i>	Threatened – Nationally Critical	Te Hiku		Endemic				
Dicot – vine	carmine rātā	<i>Metrosideros carminea</i>	At Risk – Declining	Aotearoa		Present	Present	Presence unknown	Present	Present
Dicot – tree	northern rātā	<i>Metrosideros robusta</i>	At Risk – Declining	Aotearoa	Present	Present	Presence unknown	Present	Present	Present
Dicot – tree	maire	<i>Mida salicifolia</i>	At Risk – Declining	Aotearoa		Present		Present	Present	Present
Dicot – herb	stout water milfoil	<i>Myriophyllum robustum</i>	At Risk – Naturally Uncommon	Aotearoa		Present	Present			
Dicot – tree	Poor Knights matipo	<i>Myrsine aquilonia</i>	At Risk – Relict	Northland			Present			
Dicot – tree	Three Kings matipo	<i>Myrsine oliveri</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Dicot – tree		<i>Nestegis apetala</i>	At Risk – Naturally Uncommon		Present	Presence unknown	Present			

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Dicot – tree		<i>Olearia albida</i>	At Risk – Declining	Aotearoa		Presence unknown	Present	Present	Presence unknown	Present
Dicot – tree		<i>Olearia angulata</i>	At Risk – Declining	Aotearoa		Present		Present	Presence unknown	Presence unknown
Dicot – herb		<i>Oxalis thompsoniae</i>	At Risk – Naturally Uncommon			Present				
Dicot – vine	New Zealand jasmine	<i>Parsonsia capsularis</i> var. <i>grandiflora</i>	At Risk – Declining	Northland	Present	Present		Presence unknown	Presence unknown	Presence unknown
Dicot – vine	Surville Cliffs jasmine	<i>Parsonsia praeruptis</i>	Threatened – Nationally Endangered	Te Hiku		Endemic				
Dicot – tree	Three Kings kaikōmako	<i>Pennantia baylisiana</i>	Threatened – Nationally Critical	Three Kings	Endemic					
Dicot – herb		<i>Picris burbridgeae</i>	Threatened – Nationally Vulnerable			Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Dicot – shrub	pimelea	<i>Pimelea orthia</i> subsp. <i>orthia</i>	Threatened – Nationally Critical	Aotearoa		Present	Present	Present		
Dicot – shrub		<i>Pimelea sporadica</i>	At Risk – Naturally Uncommon	Northland		Endemic				

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Dicot – shrub		<i>Pimelea tomentosa</i>	Threatened – Nationally Endangered	Aotearoa		Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Dicot – shrub	autetaranga, sand daphne	<i>Pimelea villosa</i>	At Risk – Declining	Aotearoa		Present	Present		Present	Present
Dicot – shrub		<i>Pimelea xenica</i>	Threatened – Nationally Vulnerable	Te Hiku		Endemic				
Dicot – shrub	de Lange’s kawakawa	<i>Piper excelsum</i> subsp. <i>delangei</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Dicot – shrub	Three Kings kawakawa	<i>Piper melchior</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Dicot – tree		<i>Pittosporum ellipticum</i>	At Risk – Naturally Uncommon	Aotearoa		Present		Present		
Dicot – tree	Fairchild’s kōhūhū	<i>Pittosporum fairchildii</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Dicot – tree	Kirk’s kōhūhū	<i>Pittosporum kirkii</i>	At Risk – Declining	Aotearoa				Present	Presence unknown	Presence unknown
Dicot – tree	heart-leaved kōhūhū	<i>Pittosporum obcordatum</i>	Threatened – Nationally Vulnerable	Aotearoa			Present			

Continued on next page

Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Dicot – shrub		<i>Pittosporum pimeleoides</i> subsp. <i>majus</i>	Threatened – Nationally Endangered	Te Hiku		Endemic				
Dicot – shrub	kōhūhū tangihua, Surville Cliffs kōhūhū	<i>Pittosporum serpentinum</i>	Threatened – Nationally Critical	Te Hiku		Endemic				
Dicot – tree		<i>Pittosporum virgatum</i>	Threatened – Nationally Vulnerable	Aotearoa				Present	Presence unknown	Presence unknown
Dicot – tree	pou, tawapau	<i>Planchonella costata</i>	At Risk – Naturally Uncommon			Present	Present			
Dicot – shrub		<i>Pomaderris edgerleyi</i>	At Risk – Declining	Northland		Present	Present			
Dicot – shrub		<i>Pomaderris paniculosa</i> subsp. <i>novaezelandiae</i>	Threatened – Nationally Endangered	Northland		Present				
Dicot – shrub		<i>Pomaderris phyllicifolia</i> subsp. <i>phyllicifolia</i>	Threatened – Nationally Critical			Present				
Dicot – tree		<i>Pseudopanax</i> aff. <i>lessonii</i> (AK 46066; Surville Cliffs)	At Risk – Declining	Te Hiku		Endemic	Endemic			

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Dicot – tree	fierce lancewood	<i>Pseudopanax ferox</i>	At Risk – Naturally Uncommon	Aotearoa			Present	Present		
Dicot – herb		<i>Ranunculus urvilleanus</i>	At Risk – Declining	Aotearoa		Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Dicot – vine		<i>Rhabdothamnus</i> aff. <i>solandri</i> (a) (AK 319367; Surville Cliffs)	Threatened – Nationally Critical	Te Hiku		Endemic				
Dicot – shrub		<i>Sabdariffa</i> aff. <i>diversifolia</i> (AK 347684; Surville)	Threatened – Nationally Critical	Te Hiku		Extinct in the wild				
Dicot – shrub	swamp hibiscus	<i>Sabdariffa diversifolia</i> subsp. <i>diversifolia</i>	Threatened – Nationally Critical			Present	Present			
Dicot – herb	fireweed	<i>Senecio scaberulus</i>	Threatened – Nationally Critical	Aotearoa	Present	Present	Presence unknown	Presence unknown		Presence unknown
Dicot – vine	māwhai, ambush vine	<i>Sicyos mawhai</i>	At Risk – Relict	Aotearoa	Present	Present	Present			
Dicot – shrub	poroporo	<i>Solanum aviculare</i> var. <i>aviculare</i>	Threatened – Nationally Endangered			Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Dicot – shrub	poroporo	<i>Solanum aviculare</i> var. <i>latifolium</i>	At Risk – Naturally Uncommon	Three Kings	Present					

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Dicot – tree	Three Kings milk tree	<i>Streblus smithii</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Dicot – tree	whāwhākou, maire tawake, swamp maire	<i>Syzygium maire</i>	Threatened – Nationally Vulnerable	Aotearoa		Present		Present	Present	Present
Dicot – vine	akapūkāea, tecomanthe	<i>Tecomanthe speciosa</i>	Threatened – Nationally Critical	Three Kings	Endemic					
Dicot – herb	hydatella	<i>Trithuria inconspicua</i>	Threatened – Nationally Critical	Northland		Present				
Dicot – shrub	Adams’s koromiko	<i>Veronica adamsii</i>	Threatened – Nationally Critical	Te Hiku		Endemic				
Dicot – shrub		<i>Veronica</i> aff. <i>diosmifolia</i> (a) (AK 215221; “summer flowering tetraploid”)	At Risk – Declining	Te Hiku		Endemic	Endemic	Endemic		
Dicot – shrub		<i>Veronica</i> aff. <i>ligustrifolia</i> (a) (AK 207101; Surville Cliffs)	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Dicot – shrub	Bartlett’s koromiko	<i>Veronica perbella</i>	Threatened – Nationally Endangered	Northland				Present	Presence unknown	Presence unknown

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Dicot – shrub	Surville Cliffs koromiko	<i>Veronica punicea</i>	At Risk – Naturally Uncommon	Northland		Endemic				
Dicot – shrub	napuka, tītīrangi, rawiri, purple hebe	<i>Veronica speciosa</i>	At Risk – Declining	Northland		Locally extinct				
Dicot – shrub		<i>Alseuosmia</i> aff. <i>banksii</i> (a) (AK 351926; “bullate”)	Data Deficient	Northland		Presence unknown		Presence unknown	Present	Present
Dicot – shrub		<i>Alseuosmia</i> aff. <i>banksii</i> (b) (AK 252824; “tāwheowheo”)	Data Deficient	Northland				Presence unknown		
Dicot – shrub		<i>Alseuosmia</i> aff. <i>banksii</i> (c) (AK 272552; “toro”)	At Risk – Naturally Uncommon	Northland				Present		
Dicot – shrub		<i>Alseuosmia</i> aff. <i>banksii</i> (e) (AK 279415; “horoeka”)	Data Deficient	Northland				Presence unknown		
Dicot – shrub		<i>Alseuosmia</i> aff. <i>banksii</i> (f) (AK 138943; “maire”)	Data Deficient	Northland				Presence unknown		

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Monocot – herb	Survile Cliffs rengarenga	<i>Arthropodium</i> aff. <i>cirratum</i> (AK 309832; Survile Cliffs)	At Risk – Declining	Te Hiku		Endemic				
Monocot – herb	rengarenga lily	<i>Arthropodium bifurcatum</i>	At Risk – Declining	Northland	Present	Present		Present		
Monocot – orchid		<i>Bulbophyllum tuberculatum</i>	At Risk – Naturally Uncommon	Aotearoa		Present	Present	Presence unknown	Present	Presence unknown
Monocot – orchid	fairy fingers	<i>Caladenia alata</i>	At Risk – Declining			Present				
Monocot – orchid		<i>Caladenia atradenia</i>	Threatened – Nationally Endangered	Aotearoa		Present				
Monocot – orchid		<i>Caladenia bartlettii</i>	At Risk – Naturally Uncommon	Te Hiku		Present				
Monocot – orchid	caladenia	<i>Caladenia minor</i>	Data Deficient				Locally extinct			
Monocot – orchid	flying duck orchid	<i>Caleana minor</i>	Threatened – Nationally Critical				Locally extinct			
Monocot – orchid	copper beard orchid	<i>Calochilus herbaceus</i>	Threatened – Nationally Critical	Aotearoa		Present	Present	Present		

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Monocot – orchid	bearded orchid	<i>Calochilus paludosus</i>	Threatened – Nationally Vulnerable	Aotearoa				Presence unknown		
Monocot – sedge	Three Kings sedge	<i>Carex elingamita</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Monocot – sedge	North Cape sedge	<i>Carex ophiolithica</i>	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Monocot – sedge	Surville Cliffs hook sedge	<i>Carex perplexa</i>	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Dicot – shrub		<i>Cassinia amoena</i>	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Monocot – orchid	ant orchid	<i>Chiloglottis formicifera</i>	Non-resident Native – Vagrant				Locally extinct			
Monocot – tree	coconut palm	<i>Cocos nucifera</i>	Non-resident Native – Vagrant				Locally extinct			
Dicot – shrub	tātaraheke, sand coprosma	<i>Coprosma acerosa</i>	At Risk – Declining	Aotearoa		Present	Present	Present		Present
Dicot – shrub		<i>Coprosma</i> aff. <i>macrocarpa</i> (AK 309497; Surville)	At Risk – Declining	Te Hiku		Endemic				

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Dicot – shrub		<i>Coprosma distantia</i>	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Monocot – tree	Three Kings cabbage tree	<i>Cordyline obtecta</i>	At Risk – Naturally Uncommon		Present	Present				
Monocot – orchid	yellow gumland leek orchid	<i>Corunastylis pumila</i>	At Risk – Declining			Present				
Monocot – orchid	swamp helmet orchid	<i>Corybas carsei</i>	Threatened – Nationally Critical	Aotearoa			Locally extinct			
Monocot – orchid	hidden spider orchid	<i>Corybas cryptanthus</i>	At Risk – Naturally Uncommon	Aotearoa	Present	Present		Presence unknown	Presence unknown	Presence unknown
Monocot – orchid	spider orchid	<i>Corybas rivularis</i>	At Risk – Naturally Uncommon	Aotearoa				Presence unknown	Presence unknown	Presence unknown
Monocot – orchid	duck bill orchid	<i>Cryptostylis subulata</i>	Non-resident Native – Coloniser				Present			
Monocot – sedge		<i>Cyperus insularis</i>	At Risk – Declining	Aotearoa	Present	Present	Present			
Monocot – orchid		<i>Danhatchia australis</i>	At Risk – Naturally Uncommon	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Dicot – herb	pygmy sundew	<i>Drosera pygmaea</i>	At Risk – Naturally Uncommon			Present	Present	Present		
Monocot – sedge	sand spike sedge	<i>Eleocharis neozelandica</i>	At Risk – Declining	Aotearoa		Present	Present			
Monocot – rush	wire rush	<i>Empodisma robustum</i>	At Risk – Declining	Aotearoa		Present	Present	Present	Present	Present
Dicot – herb	waiū atua, shore spurge	<i>Euphorbia glauca</i>	Threatened – Nationally Vulnerable	Aotearoa			Present	Present		
Monocot – sedge	pīngao, golden sand sedge	<i>Ficinia spiralis</i>	At Risk – Declining	Aotearoa		Present	Present	Present		Present
Monocot – sedge		<i>Fimbristylis velata</i>	At Risk – Naturally Uncommon			Presence unknown	Present			
Dicot – herb	matua-kūmara, Solander's geranium	<i>Geranium solanderi</i>	At Risk – Declining			Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Dicot – herb	Surville Cliffs haloragis	<i>Haloragis erecta</i> subsp. <i>cartilaginea</i>	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Dicot – herb		<i>Hibiscus</i> aff. <i>trionum</i> (AK 297935; “NZ diploid”)	At Risk – Naturally Uncommon	Northland			Present			Present

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Dicot – herb	puarangi, native hibiscus	<i>Hibiscus richardsonii</i>	Threatened – Nationally Critical			Present				
Dicot – herb		<i>Hydrocotyle</i> aff. <i>robusta</i> (c) (CHR 558642; Te Pahi)	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Monocot – sedge		<i>Isolepis lenticularis</i>	At Risk – Declining				Present			
Monocot – rush	leafless rush	<i>Juncus pauciflorus</i>	Threatened – Nationally Vulnerable		Present	Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Dicot – herb		<i>Lagenophora lanata</i>	At Risk – Naturally Uncommon	Aotearoa		Present		Presence unknown	Presence unknown	Presence unknown
Dicot – herb	nau, Cook's scurvy grass	<i>Lepidium oleraceum</i>	Threatened – Nationally Endangered	Aotearoa	Present		Present			
Monocot – sedge	fountain sedge	<i>Lepidosperma neozelandicum</i>	At Risk – Declining			Present	Present	Presence unknown	Presence unknown	Presence unknown
Monocot – sedge		<i>Machaerina complanata</i>	Threatened – Nationally Vulnerable	Aotearoa		Present				
Monocot – orchid	Matthews's forget-me-not	<i>Myosotis matthewsii</i>	Threatened – Nationally Critical	Te Hiku				Endemic	Locally extinct	

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Monocot – shrub	Northern islands flax	<i>Phormium</i> aff. <i>tenax</i> (a) (AK 226788; “Northern Islands”)	At Risk – Naturally Uncommon	Northland	Present		Present			
Monocot – shrub	Surville flax	<i>Phormium</i> aff. <i>tenax</i> (b) (AK 309500; Surville)	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Monocot – orchid	swamp leek orchid	<i>Prasophyllum hectorii</i>	Threatened – Nationally Vulnerable	Te Hiku		Present	Presence unknown			
Monocot – orchid	swamp greenhood	<i>Pterostylis micromega</i>	Threatened – Nationally Critical	Aotearoa			Locally extinct			
Monocot – orchid	nodding greenhood orchid	<i>Pterostylis nutans</i>	Non-resident Native – Vagrant						Locally extinct	
Monocot – orchid	dwarf greenhood	<i>Pterostylis puberula</i>	Threatened – Nationally Vulnerable	Aotearoa	Present	Present				
Monocot – orchid	plumed greenhood	<i>Pterostylis tasmanica</i>	Threatened – Nationally Vulnerable		Present	Present				
Monocot – sedge		<i>Schoenus carsei</i>	Threatened – Nationally Critical			Present	Present	Presence unknown		

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Monocot – orchid	lady's tresses	<i>Spiranthes australis</i>	Threatened – Nationally Vulnerable	Aotearoa		Present	Present			
Monocot – rush	bamboo rush	<i>Sporadanthus ferrugineus</i>	At Risk – Relict	Aotearoa		Locally extinct				
Monocot – herb	fennel-leaved pondweed	<i>Stuckenia pectinata</i>	At Risk – Naturally Uncommon	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Monocot – orchid	sun orchid	<i>Thelymitra</i> (a) (WELT SP79140; Ahipara)	Threatened – Nationally Critical	Te Hiku			Endemic	Endemic		
Monocot – orchid	sun orchid	<i>Thelymitra</i> (c) (AK 229531; “rough leaf”)	At Risk – Naturally Uncommon	Te Hiku	Endemic	Endemic	Endemic			
Monocot – orchid	sun orchid	<i>Thelymitra</i> aff. <i>brevifolia</i> (a) (AK 347116; Northland)	Data Deficient			Presence unknown	Presence unknown		Presence unknown	
Monocot – orchid	Colenso's sun orchid	<i>Thelymitra colensoi</i>	Data Deficient	Aotearoa	Present	Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Monocot – orchid	spotted sun orchid	<i>Thelymitra ixioides</i>	At Risk – Naturally Uncommon			Present	Potentially locally extinct	Present	Potentially locally extinct	
Monocot – orchid	mauve sun orchid	<i>Thelymitra malvina</i>	Non-resident Native – Coloniser			Present	Present			

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Monocot – orchid	spiral sun orchid	<i>Thelymitra matthewsii</i>	Threatened – Nationally Critical			Present				
Monocot – orchid	sun orchid	<i>Thelymitra sanscilia</i>	Threatened – Nationally Critical	Northland		Present				
Monocot – orchid	domed sun orchid	<i>Thelymitra tholiformis</i>	At Risk – Naturally Uncommon	Aotearoa		Present	Presence unknown	Presence unknown	Present	Presence unknown
Dicot – herb		<i>Thismia rodwayi</i>	At Risk – Naturally Uncommon			Present		Presence unknown	Presence unknown	Presence unknown
Dicot – herb	Māori musk	<i>Thyridia repens</i>	At Risk – Naturally Uncommon			Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Dicot – herb	yellow bladderwort	<i>Utricularia australis</i>	Threatened – Nationally Critical			Present	Present	Potentially locally extinct		
Dicot – herb	bladderwort	<i>Utricularia delicatula</i>	Threatened – Nationally Vulnerable	Aotearoa			Present	Present		
Monocot – herb	seagrass	<i>Zostera muelleri</i> subsp. <i>novazelandica</i>	At Risk – Declining				Presence unknown			Presence unknown
Monocot – grass	tūtae kurī, blue wheat grass	<i>Anthosachne kingiana</i> subsp. <i>multiflora</i>	At Risk – Declining			Present				

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Monocot – grass	toetoe	<i>Austroderia</i> aff. <i>fulvida</i> (a) (CHR 477325; Puketi)	At Risk – Naturally Uncommon	Northland				Presence unknown		
Monocot – grass	Northland toetoe	<i>Austroderia splendens</i>	At Risk – Declining	Northland	Present	Present		Present	Presence unknown	Present
Monocot – grass	sand brome	<i>Bromus arenarius</i>	At Risk – Naturally Uncommon			Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Monocot – grass	short-hair plume grass	<i>Pentapogon inaequiglumis</i>	At Risk – Declining			Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Monocot – grass	Pacific crab grass	<i>Digitaria setigera</i>	At Risk – Naturally Uncommon			Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Monocot – grass		<i>Microlaena carsei</i>	Threatened – Nationally Endangered	Aotearoa		Present	Presence unknown	Present	Present	Present
Monocot – grass	scrobic	<i>Paspalum orbiculare</i>	Threatened – Nationally Vulnerable			Present	Present	Presence unknown	Presence unknown	Presence unknown
Monocot – grass	purple plume grass	<i>Pentapogon micranthus</i>	Threatened – Nationally Critical			Present				
Monocot – grass		<i>Pentapogon quadrisetus</i>	At Risk – Declining			Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Monocot – grass	mātihetihe, sand tussock	<i>Poa billardierei</i>	At Risk – Declining			Present				

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Monocot – grass		<i>Koeleria serpentina</i>	At Risk – Naturally Uncommon	Aotearoa		Present				
Monocot – grass	prickly couch	<i>Zoysia minima</i>	At Risk – Declining	Aotearoa		Present				
Non-vascular – liverwort		<i>Cheilolejeunea</i> (h) (AK 284270; Unuwahao)	Data Deficient	Te Hiku		Endemic				
Marine alga – red alga		<i>Dictyota</i> sp. C (WELT A010418; Manawatāwhi)	Data Deficient	Three Kings	Endemic					
Non-vascular – liverwort		<i>Drepanolejeunea pentadactyla</i>	Data Deficient						Present	
Non-vascular – moss		<i>Fissidens oblongifolius</i>	At Risk – Uncommon			Present				
Non-vascular – moss		<i>Fissidens perangustus</i>	Data Deficient					Present		
Non-vascular – moss		<i>Fissidens rigidulus</i> var. <i>pseudostriatus</i>	Threatened – Nationally Vulnerable	Aotearoa		Present		Presence unknown	Presence unknown	Presence unknown
Non-vascular – liverwort		<i>Frullania toropuku</i>	Data Deficient	Aotearoa		Present				
Marine alga – red alga		<i>Herposiphonia</i> sp. A (WELT A014004; Manawatāwhi)	Data Deficient	Three Kings	Endemic					

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Table A7.1: List and status of vascular and non-vascular plants continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Marine alga – red alga		<i>Melanthalia</i> sp. B (WELT A032412; Northland sensu Nelson et al. 2013)	Data Deficient	Northland		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Marine alga – red alga		<i>Predaea</i> sp. A (WELT A013935; Manawatāwhi)	Data Deficient	Three Kings	Endemic					
Marine alga – red alga		<i>Psilosiphon scoparius</i>	Data Deficient		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Marine alga – red alga		<i>Pterocladia</i> sp. A (ASN672; Manawatāwhi)	Data Deficient	Three Kings	Endemic					
Marine alga – red alga		<i>Schizoseris</i> sp. C (WELT A013925; Manawatāwhi)	Data Deficient	Three Kings	Endemic					
Non-vascular – moss		<i>Erpodium glaucum</i>	Threatened – Nationally Critical			Present				
Non-vascular – liverwort	Radar Bush liverwort	<i>Frullania wairua</i>	Threatened – Nationally Critical	Te Hiku		Endemic				
Non-vascular – liverwort		<i>Goebelobryum unguiculatum</i>	Threatened – Nationally Endangered			Present	Present	Present	Presence unknown	Presence unknown

Table A7.2: List and status of invertebrates

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Beetle		<i>Aleochara watti</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Beetle		<i>Amychus manawatawhi</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Beetle		<i>Anagotus</i> sp. 1 “Three Kings” (Three Kings, NZAC04040213)	At Risk – Naturally Uncommon	Three Kings	Endemic					
Beetle	Turbott’s weevil	<i>Anagotus turbotti</i>	At Risk – Naturally Uncommon	Northland	Present					
Beetle		<i>Cerius triregius</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Beetle		<i>Chrysopeplus triregius</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Beetle		<i>Cyparium thorpei</i>	Data Deficient	Aotearoa					Present	
Beetle		<i>Dysnocryptus balthasar</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Beetle		<i>Dysnocryptus melchior</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Beetle		<i>Hadracalles fuliginosus</i>	At Risk – Relict	Aotearoa	Present					
Beetle		<i>Kiwiharpalus townsendi</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Beetle		<i>Kupeharpalus embersoni</i>	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Beetle		<i>Maoriharpalus sutherlandi</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Beetle		<i>Mecodema tenaki</i>	At Risk – Declining	Te Hiku		Endemic				
Beetle		<i>Menimus borealis</i>	At Risk – Naturally Uncommon	Aotearoa		Endemic				
Beetle		<i>Menimus brouni</i>	At Risk – Naturally Uncommon	Aotearoa		Endemic				
Beetle		<i>Menimus elongatus</i>	At Risk – Naturally Uncommon	Te Hiku					Endemic	
Beetle		<i>Microbrontes lineatus</i>	At Risk – Naturally Uncommon	Aotearoa	Present					

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Beetle		<i>Mimopeus turbotti</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Beetle		<i>Parabaris hoarei</i>	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Beetle		<i>Paralissotes oconnori</i>	Threatened – Nationally Endangered	Te Hiku		Endemic			Endemic	
Beetle		<i>Paralissotes triregius</i> (see Holloway 2007, p. 114) ¹⁷	Not assessed / Data Deficient	Three Kings	Endemic					
Beetle		<i>Partystona metallica</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Beetle		<i>Platysus zelandicus</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Beetle		<i>Praolepra</i> sp. 1 “Poor Knights” (Poor Knights, NZAC04039868)	At Risk – Naturally Uncommon	Aotearoa	Present					
Beetle		<i>Syrphetodes</i> sp. 5 (Te Pahi, NZAC04018963)	At Risk – Naturally Uncommon	Te Hiku		Endemic				

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¹⁷ Holloway BA. 2007. Lucanidae (Insecta: Coleoptera). Auckland: Landcare Research. Fauna of New Zealand 61.

Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Beetle		<i>Syrphetodes</i> sp. 6 (Three Kings, Great I, NZAC04018958)	At Risk – Naturally Uncommon	Three Kings	Endemic					
Beetle		<i>Tuiharpalus crosbyi</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Beetle		<i>Tuiharpalus gourlayi</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Beetle		<i>Tuiharpalus hallae</i>	At Risk – Naturally Uncommon	Aotearoa			Presence unknown	Presence unknown	Present	Presence unknown
Beetle		<i>Tuiharpalus moorei</i>	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Beetle		<i>Xylochus triregius</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Beetle		<i>Zomedes borealis</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Butterfly/ moth		<i>Chalastra</i> cf. <i>pellurgata</i>	At Risk – Declining	Aotearoa		Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Butterfly/ moth		<i>Clepsicosma</i> sp. A (NZAC04285473; Titirangi)	At Risk – Declining	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Butterfly / moth	forest ringlet butterfly	<i>Dodonidia helmsii</i>	Threatened – Nationally Vulnerable	Aotearoa				Presence unknown	Presence unknown	Potentially locally extinct
Butterfly / moth		<i>Ericodesma aerodana</i>	Threatened – Nationally Vulnerable	Aotearoa		Present	Present	Presence unknown	Presence unknown	Presence unknown
Butterfly / moth		<i>Hierodoris bilineata</i>	Data Deficient	Three Kings	Endemic					
Butterfly / moth		<i>Ipana perdita</i>	Threatened – Nationally Critical	Aotearoa		Endemic				
Butterfly / moth		<i>Izatha haumu</i>	At Risk – Uncommon	Te Hiku		Endemic	Endemic			
Butterfly / moth		<i>Izatha minimira</i>	At Risk – Uncommon	Aotearoa				Presence unknown	Presence unknown	Presence unknown
Butterfly / moth		<i>Izatha quinquejacula</i>	Data Deficient	Three Kings	Endemic					
Butterfly / moth		<i>Izatha taingo</i>	At Risk – Uncommon	Aotearoa		Present, potentially endemic	Present, potentially endemic			
Butterfly / moth		<i>Lepidopteryx</i> sp. 1 (TePaki, Spirits Bay, Tom Bowling NZAC04039534)	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Butterfly / moth		“Lysiphragma” <i>argentaria</i>	Data Deficient	Three Kings	Endemic					

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Butterfly/ moth		<i>Musotima</i> sp. (NZCAC04285479; Three Kings)	Data Deficient	Three Kings	Endemic					
Butterfly/ moth		<i>Trachypepla cyphonias</i>	At Risk – Uncommon	Aotearoa			Present	Presence unknown	Presence unknown	Presence unknown
Cricket	Northland tusked wētā	<i>Anisoura nicobarica</i>	At Risk – Declining	Aotearoa		Present		Presence unknown	Present	Present
Cricket		<i>Pachyrhamma unicolor</i>	Data Deficient	Three Kings	Endemic					
Cricket		<i>Paraneonetus multispinus</i>	Data Deficient	Three Kings	Endemic					
Earthworm		<i>Deinodrilus parvus</i>	Data Deficient	Aotearoa					Present	
Earthworm		<i>Hoplochaetina polycystis</i>	Data Deficient	Te Hiku			Presence unknown		Present	
Earthworm		<i>Hoplochaetina spirilla</i>	Data Deficient	Te Hiku			Endemic			
Earthworm		<i>Megascolex animae</i>	Data Deficient	Te Hiku		Endemic				
Earthworm		<i>Megascolides ruber</i>	At Risk – Naturally Uncommon	Three Kings	Present					
Earthworm		<i>Megascolides tasmani</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Earthworm		<i>Rhododrilus insularis</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Earthworm		<i>Rhododrilus ravus</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Earthworm		<i>Rhododrilus rosae</i>	Data Deficient	Aotearoa	Presence unknown					
Earthworm		<i>Rhododrilus tetratheca</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Freshwater mollusc		<i>Echydella menziesii</i>	At Risk – Declining	Aotearoa		Present	Present		Present	Present
Land snail		<i>Allodiscus basiliratus</i>	At Risk – Relict	Te Hiku		Endemic	Endemic			
Land snail		<i>Allodiscus brooki</i>	Data Deficient	Te Hiku			Endemic			
Land snail		<i>Allodiscus camelinus</i>	Threatened – Nationally Critical	Te Hiku			Endemic			
Land snail		<i>Allodiscus cassandra</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Allodiscus pumilus</i>	At Risk – Relict	Te Hiku		Endemic				
Land snail		<i>Allodiscus spiritus</i>	At Risk – Relict	Te Hiku		Endemic	Endemic			

Continued on next page

Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail		<i>Allodiscus turbotti</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Allodiscus wairua</i>	At Risk – Relict	Te Hiku		Endemic				
Land snail		<i>Amborhytida dunniae</i>	At Risk – Declining	Northland				Present	Present	Present
Land snail		<i>Amborhytida duplicata</i>	Threatened – Nationally Critical	Te Hiku		Endemic	Endemic			
Land snail		<i>Amborhytida forsythi</i>	At Risk – Declining	Northland			Present	Presence unknown	Presence unknown	Presence unknown
Land snail		<i>Amborhytida</i> sp. 1 “Aupōuri” (NMNZ M.173834)	Threatened – Nationally Endangered	Te Hiku			Endemic			
Land snail		<i>Athoracophoridae</i> sp. 7 (NMNZ M.151433) “Warawara 2”	At Risk – Naturally Uncommon	Northland				Present		
Land snail		<i>Athoracophorus</i> sp. 11 (NMNZ M.158288) “Warawara 1”	At Risk – Naturally Uncommon	Te Hiku				Endemic		
Land snail		<i>Athoracophorus</i> sp. 4 (NMNZ M.151430) “northern NZ”	At Risk – Naturally Uncommon	Te Hiku		Endemic				

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail		Charopidae sp. 27 (NMNZ M.058110) “Sinployea paucicostata”	Threatened – Nationally Endangered	Te Hiku		Endemic				
Land snail		Charopidae sp. 1 (NMNZ M.079608) <i>Therasiella</i> “narrow umbilicus”	Data Deficient	Te Hiku		Endemic				
Land snail		Charopidae sp. 105 (NMNZ M.077007) “Sinployea hazelwoodi”	At Risk – Relict	Aotearoa				Presence unknown	Presence unknown	Presence unknown
Land snail		Charopidae sp. 16 (NMNZ M.127828) <i>Cavellia</i> “parrishi”	At Risk – Naturally Uncommon	Aotearoa		Present				
Land snail		Charopidae sp. 169 (NMNZ M.160257) <i>Therasiella</i> sp.	Data Deficient	Te Hiku		Endemic				
Land snail		Charopidae sp. 35 (NMNZ M.103006) “Sinployea karangahake”	At Risk – Naturally Uncommon	Aotearoa					Present	
Land snail		Charopidae sp. 46 (NMNZ M.087828) “Tom Bowling Bay sunken spire”	Threatened – Nationally Critical	Te Hiku		Endemic				

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail		Charopidae sp. 52 (NMNZ M.151456) <i>Rotadiscus</i> “aff. urquharti Southland – group”	At Risk – Naturally Uncommon	Aotearoa					Present	
Land snail		Charopidae sp. 73 (NMNZ M.077056) <i>Therasiella</i> “tall tamora”	At Risk – Relict	Te Hiku		Endemic				
Land snail		<i>Climocella</i> <i>manawatawhia</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Climocella pukanui</i>	Threatened – Nationally Critical	Three Kings	Endemic					
Land snail		<i>Climocella reinga</i>	At Risk – Relict	Te Hiku		Endemic	Endemic			
Land snail		<i>Costallodiscus</i> <i>parrishi</i>	Threatened – Nationally Endangered	Te Hiku		Endemic	Endemic			
Land snail		<i>Cytora annectens</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Cytora brooki</i>	Threatened – Nationally Endangered	Te Hiku		Endemic				

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail		<i>Cytora filicosta</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Cytora gardneri</i>	Threatened – Nationally Endangered	Te Hiku		Endemic				
Land snail		<i>Cytora hirsutissima</i>	Threatened – Nationally Critical	Three Kings	Endemic					
Land snail		<i>Cytora hispida</i>	Threatened – Nationally Vulnerable	Te Hiku		Endemic	Endemic			
Land snail		<i>Cytora houhora</i>	Threatened – Nationally Critical	Te Hiku			Endemic			
Land snail		<i>Cytora kerrana</i>	Threatened – Nationally Vulnerable	Te Hiku		Endemic	Endemic			
Land snail		<i>Cytora lignaria</i>	Threatened – Nationally Vulnerable	Te Hiku		Endemic				
Land snail		<i>Cytora solitaria</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Cytora tepakiensis</i>	Threatened – Nationally Vulnerable	Te Hiku		Endemic				

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail		<i>Delos regia</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Delos</i> sp. 1 (NMNZ M.029346)	Threatened – Nationally Critical	Three Kings	Endemic					
Land snail		<i>Delos</i> sp. 12 (NMNZ M.154823)	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Delos</i> sp. 13 (NMNZ M.029345)	Threatened – Nationally Critical	Three Kings	Endemic					
Land snail		<i>Delos</i> sp. 2 (NMNZ M.038250)	At Risk – Relict	Te Hiku		Endemic				
Land snail		<i>Delos striata</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Delouagapia tasmani</i>	Threatened – Nationally Critical	Three Kings	Endemic					
Land snail		<i>Egestula bicolor</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Egestula gaza</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail		<i>Egestula microgaza</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Egestula pandora</i>	At Risk – Relict	Te Hiku		Endemic	Endemic			
Land snail		<i>Fectola melchior</i>	Threatened – Nationally Critical	Three Kings	Endemic					
Land snail		<i>Flammoconcha cornea</i>	Threatened – Nationally Endangered	Te Hiku		Endemic				
Land snail		<i>Flammulina tepakiensis</i>	At Risk – Relict	Te Hiku		Endemic		Endemic		Endemic
Land snail		<i>Laoma aupouria</i>	At Risk – Relict	Te Hiku		Endemic	Endemic			
Land snail		<i>Laoma labyrinthica</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Laomarex minuta</i>	At Risk – Relict	Te Hiku		Endemic				
Land snail		<i>Laomarex regia</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Laomarex sericea</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail		<i>Liarea aupouria aupouria</i>	Threatened – Nationally Vulnerable	Te Hiku		Endemic				
Land snail		<i>Paralaoma buddlei</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Paralaoma manawatawhia</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Paralaoma pagoda</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Paralaoma raki</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Paralaoma regia</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Paralaoma turbotti</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Paryphanta</i> sp. 1 “western clade” (NMNZ M.305039)	At Risk – Declining	Aotearoa				Present	Present	Present
Land snail		<i>Paryphanta watti</i>	Threatened – Nationally Critical	Te Hiku		Endemic				

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail		<i>Phrixgnathus blacki</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Phrixgnathus murdochi</i>	Data Deficient	Te Hiku						Potentially locally extinct
Land snail		<i>Phrixgnathus paralaomiformis</i>	At Risk – Naturally Uncommon	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Land snail		<i>Phrixgnathus subariel</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail	pūpū wha-karongotaua	<i>Placostylus ambagiosus</i>	Threatened – Nationally Critical	Te Hiku		Endemic				
Land snail		<i>Placostylus (Basileostylus) bollonsi</i>	Threatened – Nationally Endangered	Three Kings	Endemic					
Land snail		<i>Pseudaneitea pallida</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Pseudaneitea ramsayi</i>	Threatened – Nationally Critical	Three Kings	Endemic					

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail		Punctidae sp. 104 (NMNZ M.054260) “Paralaoma pararaki”	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Land snail		Punctidae sp. 130 (NMNZ M.062132) “poecilosticta-group oglei”	At Risk – Relict	Te Hiku		Endemic				
Land snail		Punctidae sp. 153 (NMNZ M.087994) “glabriuscula-group aupouria”	At Risk – Naturally Uncommon	Te Hiku		Endemic				Locally extinct
Land snail		Punctidae sp. 155 (NMNZ M.151445) “glabriuscula-group panguru”	Data Deficient	Te Hiku			Endemic			
Land snail		Punctidae sp. 156 (NMNZ M.079798) “glabriuscula-group parrishi”	Threatened – Nationally Critical	Te Hiku		Endemic				
Land snail		Punctidae sp. 167 (NMNZ M.088205) “moellendorffi-group cochranei”	At Risk – Naturally Uncommon	Te Hiku				Endemic		
Land snail		Punctidae sp. 170 (NMNZ M.099071) “glabriuscula-group nukutaunga”	Data Deficient	Te Hiku			Endemic			

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail		Punctidae sp. 208 (NMNZ M.084447) Paralaoma “roscoei”	Data Deficient	Te Hiku					Endemic	
Land snail		Punctidae sp. 223 (NMNZ M.151458) “ariel-group Bream Head”	Threatened – Nationally Critical	Aotearoa		Present				
Land snail		Punctidae sp. 225 (NMNZ M.098351) “hirsuta-group hazelwoodi”	At Risk – Naturally Uncommon	Aotearoa	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Land snail		Punctidae sp. 226 (NMNZ M.154908) <i>Laomarex</i> sp. “aff. <i>L. regia</i> (Gardner, 1968)”	Threatened – Nationally Critical	Three Kings	Endemic					
Land snail		Punctidae sp. 229 (NMNZ M.079639) “haasti-group tepakiensis”	At Risk – Relict	Te Hiku		Endemic				
Land snail		Punctidae sp. 250 (NMNZ M.055454) “Rengakora brunneum”	At Risk – Relict	Te Hiku		Endemic				

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail		Punctidae sp. 30 (NMNZ M.087982) “phrynia-group kohuronaki”	At Risk – Relict	Te Hiku		Endemic				
Land snail		Punctidae sp. 33 (NMNZ M.087987) “hirsuta-group gardneri”	At Risk – Relict	Te Hiku		Endemic				
Land snail		Punctidae sp. 58 (NMNZ M.083426) “moellendorffi- group minima”	At Risk – Naturally Uncommon	Te Hiku				Endemic		
Land snail		Punctidae sp. 63 (NMNZ M.068881) “moellendorffi- group compacta”	At Risk – Relict	Te Hiku		Endemic				
Land snail		Punctidae sp. 86 (NMNZ M.077256) <i>Punctum</i> “mayhillae”	At Risk – Naturally Uncommon	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Land snail		Punctidae sp. 9 (NMNZ M.151440) “Kokikora sp. Ahipara”	Data Deficient	Te Hiku			Endemic			
Land snail		Punctidae sp. 99 (NMNZ M.083503) <i>Obanella</i> “pandora”	At Risk – Relict	Te Hiku		Endemic				

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail		<i>Rhytidarex buddlei</i>	Threatened – Nationally Critical	Three Kings	Endemic					
Land snail		<i>Rhytidarex johnsoni</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Serpho matthewsi</i>	At Risk – Relict	Te Hiku		Endemic	Endemic			
Land snail		<i>Succinea archeyi</i>	Threatened – Nationally Critical	Aotearoa		Present	Present			
Land snail		<i>Therasiella pectinifera</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Land snail		<i>Therasiella</i> sp. aff. “elevata” (NMNZ M.096613; Charopidae sp. 75)	At Risk – Naturally Uncommon	Aotearoa		Present				
Mantis		<i>Orthodera novaezealandiae</i>	At Risk – Declining	Aotearoa	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Mantis		<i>Podagrion</i> sp. ex <i>Orthodera novaezealandiae</i>	At Risk – Declining	Aotearoa	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Mite		<i>Riccardoella</i> (<i>Prorriccardoella</i>) sp. 1	Threatened – Nationally Vulnerable	Aotearoa				Present		

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Spider		<i>Alistra reinga</i>	At Risk – Naturally Uncommon	Aotearoa		Present, potentially endemic				
Spider		<i>Cambridgea reinga</i>	At Risk – Naturally Uncommon	Aotearoa		Present, potentially endemic				
Spider		<i>Cambridgea turbotti</i>	Data Deficient	Three Kings	Endemic					
Spider		<i>Gasparia tepakia</i>	At Risk – Naturally Uncommon	Aotearoa		Present, potentially endemic				
Spider		<i>Hapona reinga</i>	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Spider		<i>Hypodrassodes insulanus</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Spider		<i>Kaitawa insulare</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Spider	katipō	<i>Latrodectus katipo</i>	At Risk – Declining	Aotearoa		Present	Present	Presence unknown	Presence unknown	Presence unknown
Spider		<i>Matachia marplesii</i>	Data Deficient	Three Kings	Endemic					
Spider		<i>Migas borealis</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Spider		<i>Paramamoea insulana</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Spider		<i>Paramamoea pandora</i>	At Risk – Relict	Aotearoa		Presence unknown				
Spider		<i>Paranapis isolata</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Spider		<i>Reinga grossa</i>	At Risk – Naturally Uncommon	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Spider		<i>Stanwellia houhora</i>	Data Deficient	Aotearoa			Presence unknown			
Spider		<i>Stanwellia regia</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Stick insect		<i>Clitarchus</i> nov. sp. 1 (NZAC03005448)	At Risk – Naturally Uncommon	Te Hiku		Endemic				
Stick insect		<i>Pseudoclitarchus sentus</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
Stick insect		<i>Tepakiphasma ngatikuri</i>	Threatened – Nationally Critical	Te Hiku		Endemic				
True bug		<i>Basileobius gilviceps</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
True bug		<i>Basilioterpa bullata</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
True bug		<i>Carystoterpa minima</i>	Data Deficient	Te Hiku		Endemic				
True bug		<i>Carystoterpa trimaculata</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
True bug		<i>Cermada triregia</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
True bug	Turbott's brown soldier bug	<i>Cermatulus nasalis turbotti</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
True bug		<i>Diomocoris woodwardi</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
True bug		<i>Millerocoris conus</i>	Data Deficient	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
True bug		<i>Millerocoris ductus</i>	At Risk – Naturally Uncommon	Aotearoa		Present			Present	
True bug		<i>Myerslophia triregia</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
True bug		<i>Novothybris extremitatis</i>	At Risk – Naturally Uncommon	Te Hiku		Endemic				

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
True bug		<i>Paratruncala insularis</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
True bug		<i>Pimeleocoris viridis</i>	Threatened – Nationally Critical	Aotearoa			Present			
True bug		<i>Tridiplous virens</i>	Data Deficient	Aotearoa						
True bug		<i>Xiphoides regis</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
True bug		<i>Zanchius totus</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
True bug		Zopheridae <i>incertae sedis</i> sp. 1 (Three Kings, NZAC04040271)	At Risk – Naturally Uncommon	Three Kings	Endemic					
True fly		<i>Anabarhynchus gibbsi</i>	At Risk – Naturally Uncommon	Aotearoa	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
True fly		<i>Anabarhynchus microphallus</i>	At Risk – Naturally Uncommon	Aotearoa		Present				
True fly		<i>Corynoptera dividospica</i>	Data Deficient	Aotearoa						Presence unknown
True fly		<i>Neoitamus</i> “tetatus”	At Risk – Naturally Uncommon	Three Kings	Endemic					

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Table A7.2: List and status of invertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
True fly		<i>Parentia argentifrons</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
True fly		<i>Parentia insularis</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
True fly		<i>Pollenia nigripalpis</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					
True fly		<i>Xenocalliphora vetusta</i>	At Risk – Naturally Uncommon	Three Kings	Endemic					

Table A7.3: List and status of vertebrates

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	tītīpounamu, North Island rifleman	<i>Acanthisitta chloris granti</i>	At Risk – Declining	Aotearoa				Present	Locally extinct	
Bird	pīhoihoi, New Zealand pipit	<i>Anthus novaeseelandiae novaeseelandiae</i>	At Risk – Declining	Aotearoa		Present	Present	Present	Present	Present
Bird	mātātā, North Island fernbird	<i>Poodytes punctatus vealeae</i>	At Risk – Declining	Aotearoa	Present	Present	Present	Present	Present	Present
Bird	kororā, northern little blue penguin	<i>Eudyptula minor iredalei</i>	At Risk – Declining	Aotearoa	Present	Present	Present	Present		Present
Bird	moho pererū, banded rail	<i>Hypotaenidia philippensis</i>	At Risk – Declining	Aotearoa		Present	Present	Present		Present
Bird	tōrea, New Zealand pied oystercatcher	<i>Haematopus finschi</i>	At Risk – Declining	Aotearoa		Present	Present			Present
Bird	tarāpunga, red-billed gull	<i>Chroicocephalus novaehollandiae scopulinus</i>	At Risk – Declining	Aotearoa		Present	Present	Present		Present
Bird	kuaka, eastern bar-tailed godwit	<i>Limosa lapponica baueri</i>	At Risk – Declining			Present	Present	Present		Present

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Table A7.3: List and status of vertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	toutouwai, North Island robin	<i>Petroica longipes</i>	At Risk – Declining	Aotearoa				Locally extinct		
Bird	koitareke, marsh crake	<i>Zapornia pusilla affinis</i>	At Risk – Declining	Aotearoa		Present	Present	Locally extinct	Locally extinct	Present
Bird	pūweto, spotless crake	<i>Zapornia tabuensis tabuensis</i>	At Risk – Declining			Present	Present	Locally extinct	Present	Present
Bird	tītī, sooty shearwater	<i>Ardena grisea</i>	At Risk – Declining			Present				
Bird	tara, white-fronted tern	<i>Sterna striata</i>	At Risk – Declining			Present	Present	Present		Present
Freshwater fish	longfin eel	<i>Anguilla dieffenbachii</i>	At Risk – Declining	Aotearoa		Present	Present	Present	Present	Present
Freshwater fish	torrentfish	<i>Cheimarrichthys fosteri</i>	At Risk – Naturally Uncommon	Aotearoa				Present	Present	Present
Freshwater fish	kōaro	<i>Galaxias brevipinnis</i>	At Risk – Declining	Aotearoa			Present	Present	Present	
Freshwater fish	bluegill bully	<i>Gobiomorphus hubbsi</i>	At Risk – Naturally Uncommon	Aotearoa					Present	
Freshwater fish	black mudfish	<i>Neochanna diversus</i>	At Risk – Declining	Northland		Present	Present			

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Table A7.3: List and status of vertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Lizard	Matapia gecko	<i>Dactylocnemis</i> “Matapia Island”	At Risk – Declining	Te Hiku		Endemic	Endemic			
Lizard	Te Paki gecko	<i>Dactylocnemis</i> “North Cape”	At Risk – Declining	Te Hiku		Endemic	Endemic			
Lizard	forest gecko	<i>Mokopirirakau granulatus</i>	At Risk – Declining	Aotearoa				Present	Present	Present
Lizard	Te Paki green gecko	<i>Naultinus flavirictus</i>	At Risk – Declining	Te Hiku		Endemic				
Lizard	elegant gecko	<i>Naultinus elegans</i>	At Risk – Declining	Aotearoa						Present
Lizard	Northland green gecko	<i>Naultinus grayii</i>	At Risk – Declining	Northland			Present	Presence unknown	Present	Present
Lizard	Tatahi skink	<i>Oligosoma</i> aff. <i>smithi</i> “Three Kings, Te Paki, Western Northland”	At Risk – Declining	Te Hiku		Endemic	Endemic			
Lizard	ornate skink	<i>Oligosoma ornatum</i>	At Risk – Declining	Aotearoa		Present	Present	Presence unknown	Present	Present
Bird	white-capped noddy	<i>Anous minutus</i>	Threatened – Nationally Vulnerable				Present			
Bird	kōmako, Three Kings bellbird	<i>Anthornis melanura obscura</i>	At Risk – Naturally Uncommon	Aotearoa	Endemic					

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Table A7.3: List and status of vertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	black-fronted dotterel	<i>Charadrius melanops</i>	At Risk – Naturally Uncommon				Present			
Bird	koekoeā, long-tailed cuckoo	<i>Eudynamys taitensis</i>	Threatened – Nationally Vulnerable			Present	Present	Present	Present	
Bird	Australian coot	<i>Fulica atra australis</i>	At Risk – Naturally Uncommon			Present	Present	Present	Present	
Bird	kawau, black shag	<i>Phalacrocorax carbo novaehollandiae</i>	At Risk – Relict			Present	Present	Present	Present	Present
Bird	kawau tūi, little black shag	<i>Phalacrocorax sulcirostris</i>	At Risk – Naturally Uncommon			Present	Present	Locally extinct		Present
Bird	kōtuku ngutupapa, royal spoonbill	<i>Platalea regia</i>	At Risk – Naturally Uncommon				Present	Present		Present
Bird	grey ternlet	<i>Anous albivittus</i>	At Risk – Relict					Locally extinct		
Bird	Buller's shearwater	<i>Ardenna bulleri</i>	At Risk – Declining	Aotearoa			Present			
Freshwater fish	giant bully	<i>Gobiomorphus gobioides</i>	At Risk – Naturally Uncommon	Aotearoa		Present	Present		Present	Present
Lizard	Three Kings gecko	<i>Dactylocnemis</i> “Three Kings”	At Risk – Uncommon	Three Kings	Endemic					

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Table A7.3: List and status of vertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Lizard	Falla's skink	<i>Oligosoma fallai</i>	At Risk – Uncommon	Three Kings	Endemic					
Lizard	shore skink	<i>Oligosoma smithi</i>	At Risk – Declining	Aotearoa			Present	Present		Present
Bird	pāteke, brown teal	<i>Anas chlorotis</i>	Threatened – Nationally Increasing	Aotearoa			Locally extinct	Locally extinct	Locally extinct	
Bird	kiwi pukupuku, little spotted kiwi	<i>Apteryx owenii</i>	Threatened – Nationally Increasing	Aotearoa					Locally extinct	
Bird	North Island kōkako	<i>Callaeas wilsoni</i>	Threatened – Nationally Increasing	Aotearoa				Locally extinct		
Bird	tūturiwhatu, northern New Zealand dotterel	<i>Anarhynchus obscurus aquilonius</i>	Threatened – Nationally Increasing	Aotearoa		Present	Present	Present		Present
Bird	kārearea, bush falcon	<i>Falco novaeseelandiae ferox</i>	Threatened – Nationally Increasing	Aotearoa					Locally extinct	
Bird	North Island weka	<i>Gallirallus australis greyi</i>	At Risk – Relict	Aotearoa			Locally extinct	Locally extinct	Locally extinct	
Bird	tōrea pango, variable oystercatcher	<i>Haematopus unicolor</i>	At Risk – Recovering	Aotearoa	Present	Present	Present	Present		Present

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Table A7.3: List and status of vertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	North Island kākā	<i>Nestor meridionalis septentrionalis</i>	At Risk – Recovering	Aotearoa				Locally extinct	Locally extinct	
Bird	amokura, red-tailed tropicbird	<i>Phaethon rubricauda</i>	Threatened – Nationally Increasing			Present	Present			
Bird	kāruhiruhi, pied shag	<i>Phalacrocorax varius varius</i>	At Risk – Recovering	Aotearoa	Present	Present	Present	Present	Present	Present
Bird	tīeke, North Island saddleback	<i>Philesturnus rufusater</i>	At Risk – Relict	Aotearoa					Locally extinct	
Bird	weweia, New Zealand dabchick	<i>Poliocephalus rufopectus</i>	Threatened – Nationally Increasing	Aotearoa			Present	Locally extinct	Locally extinct	Present
Bird	totorore, North Island little shearwater	<i>Puffinus assimilis haurakiensis</i>	At Risk – Recovering	Aotearoa			Present			
Lizard	robust skink	<i>Oligosoma alani</i>	At Risk – Recovering	Aotearoa		Present	Present			
Lizard	McGregor's skink	<i>Oligosoma macgregori</i>	At Risk – Recovering	Aotearoa		Locally extinct	Locally extinct			
Bird	kākā-wairiki, red-crowned parakeet	<i>Cyanoramphus novaezelandiae novaezelandiae</i>	At Risk – Relict	Aotearoa	Present			Locally extinct	Locally extinct	
Bird	tītī wainui, fairy prion	<i>Pachyptila turtur</i>	At Risk – Relict		Present	Present	Present			

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Table A7.3: List and status of vertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	takahikare-moana, New Zealand white-faced storm petrel	<i>Pelagodroma marina maoriana</i>	At Risk – Relict	Aotearoa		Present	Present			
Bird	kuaka, northern diving petrel	<i>Pelecanoides urinatrix urinatrix</i>	At Risk – Relict		Present	Present	Present			
Bird	pakahā, fluttering shearwater	<i>Puffinus gavia</i>	At Risk – Relict	Aotearoa		Present	Present			
Lizard	northern Duvaucel's gecko	<i>Hoplodactylus duvaucelii</i>	At Risk – Uncommon	Northland		Present				
Tuatara	tuatara	<i>Sphenodon punctatus</i>	At Risk – Uncommon	Aotearoa		Locally extinct	Locally extinct	Locally extinct	Locally extinct	Locally extinct
Lizard	moko skink	<i>Oligosoma moco</i>	At Risk – Uncommon	Aotearoa		Present	Present			
Lizard	egg-laying skink	<i>Oligosoma suteri</i>	At Risk – Uncommon	Aotearoa	Present	Present	Present			
Bird	glossy ibis	<i>Plegadis falcinellus</i>	Non-resident Native – Coloniser				Present			
Bird	Australasian little grebe	<i>Tachybaptus novaehollandiae novaehollandiae</i>	Non-resident Native – Coloniser				Present	Locally extinct	Locally extinct	

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Table A7.3: List and status of vertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	eastern cattle egret	<i>Bubulcus ibis coromanda</i>	Non-resident Native – Migrant			Present	Present		Present	Present
Bird	ruddy turnstone	<i>Arenaria interpres interpres</i>	Non-resident Native – Migrant			Present	Present	Locally extinct	Locally extinct	
Bird	sharp-tailed sandpiper	<i>Calidris acuminata</i>	Non-resident Native – Migrant				Present	Locally extinct		
Bird	red-necked stint	<i>Calidris ruficollis</i>	Non-resident Native – Migrant				Present	Locally extinct		
Bird	white-winged black tern	<i>Chlidonias leucopterus</i>	Non-resident Native – Migrant				Present			
Bird	pomarine skua	<i>Stercorarius pomarinus</i>	Non-resident Native – Migrant				Present	Locally extinct		
Bird	pāngurunguru, southern giant petrel	<i>Macronectes giganteus</i>	Non-resident Native – Migrant				Present			
Bird	far-eastern curlew	<i>Numenius madagascariensis</i>	Non-resident Native – Vagrant				Present	Locally extinct		
Bird	Asiatic whimbrel	<i>Numenius phaeopus variegatus</i>	Non-resident Native – Migrant				Present	Locally extinct		

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Table A7.3: List and status of vertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	kuriri, Pacific golden plover	<i>Pluvialis fulva</i>	Non-resident Native – Migrant			Present	Present	Present		
Bird	Arctic skua	<i>Stercorarius parasiticus</i>	Non-resident Native – Migrant				Present	Locally extinct		Present
Bird	eastern little tern	<i>Sternula albifrons sinensis</i>	Non-resident Native – Migrant				Present	Locally extinct		Present
Turtle	green turtle	<i>Chelonia mydas</i>	Non-resident Native – Migrant			Present	Present			
Turtle	leatherback turtle	<i>Dermochelys coriacea</i>	Non-resident Native – Migrant			Present	Present			
Bird	Australian darter	<i>Anhinga melanogaster novaehollandiae</i>	Non-resident Native – Vagrant				Present			
Bird	white-necked heron	<i>Ardea pacifica</i>	Non-resident Native – Vagrant				Present			
Bird	fan-tailed cuckoo	<i>Cacomantis flabelliformis flabelliformis</i>	Non-resident Native – Vagrant				Present			
Bird	sanderling	<i>Calidris alba</i>	Non-resident Native – Vagrant			Present	Present	Locally extinct		

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Table A7.3: List and status of vertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	curlew sandpiper	<i>Calidris ferruginea</i>	Non-resident Native – Vagrant				Present	Locally extinct		
Bird	white-rumped sandpiper	<i>Calidris fuscicollis</i>	Non-resident Native – Vagrant				Present			
Bird	western sandpiper	<i>Calidris mauri</i>	Non-resident Native – Vagrant				Present			
Bird	pectoral sandpiper	<i>Calidris melanotos</i>	Non-resident Native – Vagrant				Present	Locally extinct		
Bird	great knot	<i>Calidris tenuirostris</i>	Non-resident Native – Vagrant				Present			
Bird	large sand dotterel	<i>Anarhynchus leschenaultii leschenaultii</i>	Non-resident Native – Vagrant				Present			
Bird	Mongolian dotterel	<i>Anarhynchus mongolus</i>	Non-resident Native – Vagrant				Present			
Bird	oriental dotterel	<i>Anarhynchus veredus</i>	Non-resident Native – Vagrant				Present			
Bird	oriental cuckoo	<i>Cuculus optatus</i>	Non-resident Native – Vagrant				Present			

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Table A7.3: List and status of vertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	little egret	<i>Egretta garzetta immaculata</i>	Non-resident Native – Vagrant				Present			Present
Bird	dollarbird	<i>Eurystomus orientalis pacificus</i>	Non-resident Native – Vagrant				Present			
Bird	nankeen kestrel	<i>Falco cenchroides cenchroides</i>	Non-resident Native – Vagrant			Present	Present			
Bird	white-throated needletail	<i>Hirundapus caudacutus caudacutus</i>	Non-resident Native – Vagrant			Present				
Bird	eastern broad-billed sandpiper	<i>Calidris falcinellus sibirica</i>	Non-resident Native – Vagrant				Present			
Bird	American black-tailed (Hudsonian) godwit	<i>Limosa haemastica</i>	Non-resident Native – Vagrant				Present	Locally extinct		
Bird	Asiatic black-tailed godwit	<i>Limosa limosa melanuroides</i>	Non-resident Native – Vagrant				Present	Locally extinct		
Bird	little whimbrel	<i>Numenius minutus</i>	Non-resident Native – Vagrant				Present			
Bird	American whimbrel	<i>Numenius hudsonicus</i>	Non-resident Native – Vagrant				Present			

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Table A7.3: List and status of vertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	yellow-billed spoonbill	<i>Platalea flavipes</i>	Non-resident Native – Vagrant				Present			
Bird	American golden plover	<i>Pluvialis dominicus</i>	Non-resident Native – Vagrant				Present			
Bird	grey plover	<i>Pluvialis squatarola</i>	Non-resident Native – Vagrant				Present	Locally extinct		
Bird	hoary-headed grebe	<i>Polyocephalus polyocephalus</i>	Non-resident Native – Coloniser				Present			
Bird	channel-billed cuckoo	<i>Scythrops novaehollandiae</i>	Non-resident Native – Vagrant			Present	Present			
Bird	brown booby	<i>Sula leucogaster plotus</i>	Non-resident Native – Vagrant				Present			
Bird	chestnut-breasted shelduck	<i>Tadorna tadornoides</i>	Non-resident Native – Vagrant				Present			
Bird	greater crested tern	<i>Thalasseus bergii cristatus</i>	Non-resident Native – Vagrant							
Bird	Australian white ibis	<i>Threskiornis molucca molucca</i>	Non-resident Native – Vagrant				Present			Present

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Table A7.3: List and status of vertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	Siberian tattler	<i>Tringa brevipes</i>	Non-resident Native – Vagrant				Present	Locally extinct		
Bird	Terek sandpiper	<i>Xenus cinereus</i>	Non-resident Native – Vagrant				Present	Locally extinct		
Bird	common sandpiper	<i>Actitis hypoleucos</i>	Non-resident Native – Vagrant				Present			
Bird	wandering tattler	<i>Tringa incana</i>	Non-resident Native – Vagrant				Present	Locally extinct		
Bird	common greenshank	<i>Tringa nebularia</i>	Non-resident Native – Vagrant				Present	Locally extinct		
Bird	marsh sandpiper	<i>Tringa stagnatilis</i>	Non-resident Native – Vagrant				Present	Locally extinct		
Turtle	loggerhead turtle	<i>Caretta caretta</i>	Non-resident Native – Vagrant				Present			
Turtle	hawksbill turtle	<i>Eretmochelys imbricata</i>	Non-resident Native – Vagrant				Present			
Bird	pānera, grey duck	<i>Anas superciliosa</i>	Threatened – Nationally Vulnerable			Present	Present		Present	Present

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Table A7.3: List and status of vertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	kōtuku, white heron	<i>Ardea alba modesta</i>	Threatened – Nationally Critical				Present	Present	Present	Present
Bird	matuku-hūrepo, Australasian bittern	<i>Botaurus poiciloptilus</i>	Threatened – Nationally Critical			Present	Present	Present	Present	Present
Bird	tarāpuka, black-billed gull	<i>Chroicocephalus bulleri</i>	At Risk – Declining	Aotearoa		Present	Present			
Bird	tara iti, New Zealand fairy tern	<i>Sternula nereis davisae</i>	Threatened – Nationally Critical	Aotearoa				Locally extinct		
Bat	pekapeka, long-tailed bat	<i>Chalinolobus tuberculatus</i>	Threatened – Nationally Critical	Aotearoa		Locally extinct		Present	Present	Presence unknown
Bird	black-fronted tern	<i>Chlidonias albastriatus</i>	Threatened – Nationally Endangered	Aotearoa			Present			
Bird	matuku moana, reef heron	<i>Egretta sacra sacra</i>	Threatened – Nationally Endangered			Present	Present	Present		Present
Bird	ngutu parore, wrybill	<i>Anarhynchus frontalis</i>	Threatened – Nationally Increasing	Aotearoa			Present	Locally extinct		Present
Bird	huahou, lesser knot	<i>Calidris canutus rogersi</i>	At Risk – Declining			Present	Present	Locally extinct		Present

Continued on next page

Table A7.3: List and status of vertebrates continued

SPECIES TYPE	COMMON NAME	SCIENTIFIC NAME	THREAT STATUS	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	tūturiwhatu, banded dotterel	<i>Anarhynchus bicinctus bicinctus</i>	At Risk – Declining	Aotearoa		Present	Present	Present		Present
Bird	taranui, Caspian tern	<i>Hydroprogne caspia</i>	Threatened – Nationally Vulnerable	Aotearoa		Present	Present	Present		Present
Bird	tāiko, black petrel	<i>Procellaria parkinsoni</i>	Threatened – Nationally Vulnerable	Aotearoa						
Bird	toanui, flesh-footed shearwater	<i>Ardenna carneipes</i>	At Risk – Relict			Present				
Freshwater fish	shortjaw kōkopu	<i>Galaxias postvectis</i>	Threatened – Nationally Vulnerable	Aotearoa					Present	
Bat	northern short-tailed bat	<i>Mystacina tuberculata aupourica</i>	Threatened – Nationally Vulnerable	Northland				Locally extinct	Present	
Lizard	slight skink	<i>Oligosoma levidensum</i>	Threatened – Nationally Endangered	Te Hiku		Endemic				

Appendix 8

Marine habitats and ecosystems in *Te Korowai*

The Coastal Classification and Mapping Scheme depth zones are as follows: shallow, 0–30 m; deep, 30–200 m; upper slope, 200–500 m; mid-slope, 500–1,000 m; lower slope, 1,000–4,000 m.

ECOSYSTEM	HABITAT TYPE	SIGNIFICANT VALUES	PRESSURES / THREATS
Manawatāwhi/Three Kings Islands bioregion			
Full bioregion	- Exposed rocky shore - High-current shallow reef - High-current deep reef - High-current deep gravel - High-current deep sand - Water column - Upper slope - Mid-slope	Centre of endemism and biodiversity hotspot. Diverse and distinctive marine biota due to oceanographic setting, upwelling, very low levels of terrestrial sedimentation and isolation from the mainland. Reefs dominated by endemic species of large brown macroalgae to at least 60 m depth. Endemic species belonging to many other taxa, including reef fishes (e.g. blue-finned butterflyfish [<i>Odax cyanoallix</i>]). Gorgonians and cold-water corals (<i>Oculina virgosa</i>) abundant in caves in shallow water. Black corals, gorgonians, sponges, bryozoans and rhodoliths present in deeper water. Large seabird colonies and kekeno/New Zealand fur seal (<i>Arctocephalus forsteri</i>) haulout. Spotted black grouper (<i>Epinephelus daemeli</i>) and mangō taniwha/great white shark (<i>Carcharodon carcharias</i>) habitat. Possibly part of the wider Northland green turtle (<i>Chelonia mydas</i>) post-pelagic developmental ground.	Overfishing and bycatch of protected or threatened species, particularly spotted black grouper. Hāpuku (<i>Polyprion oxygeneios</i>) were abundant in shallow water around the islands until the early 1970s. Invasive non-indigenous marine species.

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ECOSYSTEM	HABITAT TYPE	SIGNIFICANT VALUES	PRESSURES / THREATS
West Coast North Island bioregion (Tauroa Peninsula to Kaipara Harbour)			
Exposed outer coast and adjoining shelf	- Exposed beach - Exposed rocky shore - Exposed shallow reef - Exposed shallow sand - Deep sand - Deep reef - Upper slope	Poorly known. In the north, intertidal and shallow subtidal reefs support dense beds of kuku/green-lipped mussels (<i>Perna canaliculus</i>), which are possibly the source of mussel spat collected on Te Oneroa-a-Tōhē/Ninety Mile Beach, as well as extensive beds of red algae, sponges and other encrusting invertebrates; further south, these appear to be replaced by assemblages dominated by large brown algae.	Overfishing and bycatch of protected and threatened species. Overharvesting of intertidal shellfish. Invasive non-indigenous marine species (e.g. the threat to indigenous intertidal assemblages and customary fisheries posed by the sea squirt <i>Pyura doppelgangera</i>).
Herekino and Whangapē Harbours	- Saltmarsh - Mānawa/mangrove (<i>Avicennia marina</i>) - Estuarine rocky shore - Estuarine beach - Intertidal mudflat - Estuarine sand - High-current shallow sand - Estuarine reef	Poorly known. Relatively low invertebrate diversity. Limited wading bird habitat.	Infilling due to historical catchment clearance.
Hokianga Harbour	- Saltmarsh - Mānawa/mangrove - Intertidal sand and mudflat - Estuarine rocky shore - Estuarine sand - High-current shallow sand - High-current shallow reef - Saltmarsh - Estuarine rocky shore	Marine species extend at least 12 km from the harbour entrance. Large brown algae, including stands of <i>Ecklonia radiata</i>, red algae, sponges and other encrusting invertebrates occur on subtidal reefs in the lower reaches of the harbour. Extensive subtidal horse mussel (<i>Atrina zelandica</i>) and kuku beds. Kōura papatea/southern rock lobster (<i>Jasus edwardsii</i>) settlement occurs in 'the narrows'.	Infilling due to historical catchment clearance. Habitat loss due to reclamation and impoundment. Point source and diffuse (non-point source) discharges of pathogens, nutrients and other contaminants. Invasive species (e.g. spartina [<i>Spartina</i> spp.]).

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Appendix 8 table continued

ECOSYSTEM	HABITAT TYPE	SIGNIFICANT VALUES	PRESSURES / THREATS
	• Estuarine beach • Intertidal sand and mudflat • Karepō/seagrass (<i>Zostera</i> spp.) • Estuarine sand • Shallow high-current sand • Estuarine reef	Upper reaches of the harbour contain important wading bird habitat. Productive customary fishery.	
Northeastern bioregion (Ahipara to Mangawhai)			
Te Oneroa-a-Tōhē/ Ninety Mile Beach and adjoining shelf	• Exposed beach • Moderate beach • Exposed rocky shore • Moderate shallow sand • Exposed shallow sand • Deep sand • Exposed shallow reef • Deep reef • High-current deep reef	Important feeding area for tōrea pango/variable oystercatcher (<i>Haematopus unicolor</i>) and taranui/ Caspian tern (<i>Hydroprogne caspia</i>). Primary spat collection area for the kuku aquaculture industry (spat attach to subtidal algae and hydroids are presumed to grow on nearshore reefs). Nationally significant toheroa (<i>Paphies ventricosa</i>) habitat – almost the entire beach was once considered good habitat for this species, but this population is now considered at risk. The natural values of the offshore habitats, including Ahipara Banks, are largely unknown.	Large declines in toheroa over the last 40 years have been associated with erratic recruitment followed by large-scale mortality that prevents increases in adult abundance. This could be due to anthropogenic impacts on their habitat (e.g. vehicles on the beach, overharvesting, changed land use) but the actual causes are unknown. Invasive non-indigenous marine species (e.g. threat to indigenous intertidal assemblages and customary fisheries posed by <i>Pyura doppelganger</i>). Vehicles driving in the intertidal zone.

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ECOSYSTEM	HABITAT TYPE	SIGNIFICANT VALUES	PRESSURES / THREATS
Tiriparepa/Scott Point to Otou/ North Cape and adjoining shelf	- Exposed beach - Moderate beach - Exposed rocky shore - Moderate rocky shore - Moderate shallow sand - High-current shallow sand - High-current gravel - Exposed shallow gravel - High-current deep sand - Deep sand - Exposed shallow reef - Moderate shallow reef - High-current shallow reef - High-current deep reef - Upper slope - Mid-slope - Water column	Global marine biodiversity hotspot. Carbonate-rich offshore sediments reflect a large marine biogenic component and support exceptionally diverse invertebrate communities. This includes at least 223 sponge species and 301 bryozoan species (the highest diversity in the world), as well as colonial hydroids, compound ascidians, soft corals, gorgonians and black corals. The true species richness of filter-feeding invertebrates is estimated to exceed 700 species. Highest diversities occur off Piwhane/Spirits Bay and Takapaukura/Tom Bowling Bay at a depth of 40–80 m. Very high numbers of nationally and regionally endemic fauna. The natural values of Pandora Bank are largely unknown. Mangō taniwha habitat. Seasonal influx of highly migratory pelagic fishes, including marlins, tunas, dolphinfish (<i>Coryphaena hippurus</i>), sunfishes, whale sharks, and manta and devil rays. Foraging area for endangered leatherback turtles (<i>Dermochelys coriacea</i>), a variety of cetaceans and seabirds.	Removal of epifauna and habitat homogenisation by mobile fishing gear (primarily commercial scallop dredging). Invasive non-indigenous marine species (e.g. threat to indigenous intertidal assemblages and customary fisheries posed by <i>Pyura doppelgangera</i>). Global climate change via effects on seasonal upwelling and ocean currents. Overfishing. Bycatch of protected species. Marine debris.
Pārengarenga Harbour	- Saltmarsh - Mānawa/mangrove - Karepō/seagrass bed - Intertidal sand and mudflat - Estuarine beach - Estuarine sand - Estuarine reef	Productive customary fishery. Clear water. Extensive karepō beds covering c. 50% of the intertidal area. An extremely diverse invertebrate fauna (at least 452 species), of which at least half are subtidal species.	Invasive species (e.g. spartina, <i>Theora lubrica</i>, <i>Limaria orientalis</i>, <i>Pyura doppelgangera</i>, <i>Eudistoma elongatum</i>, <i>Styela clava</i>). Point and non-point source discharges of fine sediments, excess nutrients, pathogens and other contaminants.

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Appendix 8 table continued

ECOSYSTEM	HABITAT TYPE	SIGNIFICANT VALUES	PRESSURES / THREATS
		Numerous subtropical species that are not typically found in estuaries elsewhere in Aotearoa New Zealand. Diverse fish fauna, including unusual estuarine populations of lancelets (<i>Epigonichthys hectori</i>), sand divers (<i>Limnichthys polyactis</i>) and shortfinned worm eels (<i>Scolecenchelys australis</i>). Abundant elasmobranchs, including eagle rays, stingrays, tope/school sharks (<i>Galeorhinus galeus</i>), ngengero/bronze whalers (<i>Carcharhinus brachyurus</i>) and juvenile mangō taniwha. Post-pelagic developmental ground for green turtles. Nationally important roosting, feeding and breeding area for waders and shorebirds.	Habitat loss, lowered productivity and hydrological changes due to reclamations and impoundments. Intertidal habitat loss due to aquaculture. Overfishing.
Houhora Harbour	• Saltmarsh • Mānawa/mangrove • Karepō/seagrass bed • Intertidal sand and mudflat • Estuarine sand	Extensive karepō beds. Subtropical invertebrates. Foraging area for green turtles. Important roosting, feeding and breeding area for waders and shorebirds.	Invasive species (e.g. spartina, <i>Undaria pinnatifida</i>). Point and non-point source discharges of fine sediments and other contaminants. Reclamations and impoundments. Intertidal habitat loss due to aquaculture. Overfishing.
Rangaunu Harbour	• Saltmarsh • Mānawa/mangrove • Karepō/seagrass bed • Intertidal sand and mudflat • Estuarine beach • Estuarine sand	Productive customary, commercial and recreational fishery. Extremely clear water due to low freshwater and sediment inflows.	Invasive species (e.g. spartina, <i>Pyura doppelganger</i>, <i>Styela clava</i>). Point and non-point source discharges of fine sediments, excess nutrients, pathogens and other contaminants.

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ECOSYSTEM	HABITAT TYPE	SIGNIFICANT VALUES	PRESSURES / THREATS
	• Estuarine reef • Sheltered rocky shore • Sheltered shallow sand • Sheltered shallow reef	One of the most pristine harbours in Northland, with very extensive karepō meadows intergrading into mānawa forests. The karepō beds support very high densities of juvenile (< 1-year-old) fish, including tāmure/snapper (<i>Chrysophrys auratus</i>). Abundant elasmobranchs, including eagle rays, stingrays, tope and ngengerō. Post-pelagic developmental ground for green turtles. Nationally important roosting, feeding and breeding area for waders and shorebirds. Diverse benthic invertebrate fauna on reefs in the harbour entrance.	Habitat loss, lowered productivity and hydrological changes due to reclamations and impoundments. Intertidal habitat loss due to aquaculture. Overfishing.
Great Exhibition Bay and Rangaunu Bay	• Moderate rocky shore • Sheltered rocky shore • Moderate beach • Sheltered beach • Moderate shallow reef • Sheltered shallow reef • Moderate shallow sand • Rhodolith bed • Deep reef • Deep sand • Upper slope	Diverse intertidal and shallow rocky reef assemblages around headlands, islands and rock stacks. Extensive deep reef complex supporting diverse benthic invertebrate fauna (mapped by Ocean Survey 20/20 in 2008–2009). Scallops. Shallow, clean, sand habitats also support abundant populations of lancelets and shortfinned worm eels. Productive intertidal and inshore fisheries. Mangō taniwha habitat. Post-pelagic developmental ground for green turtles.	Overfishing. Bycatch of protected species. Removal of epifauna and flora, and habitat homogenisation by mobile fishing gear. Coastal development, including aquaculture. Vehicles on beaches. Invasive marine species (e.g. <i>Undaria pinnatifida</i>, <i>Pyura doppelgangera</i>).

Sources

- Anderson OF et al. 1998. Atlas of New Zealand fish and squid distributions from research bottom trawls. Wellington: National Institute of Water & Atmospheric Research Ltd. NIWA Technical Report 42.
- Clark MR, King KJ. 1989. Deepwater fish resources off the North Island, New Zealand: results of a trawl survey, May 1985 to June 1986. Wellington: MAFFish. New Zealand Fisheries Technical Report No. 11.
- Cryer M et al. 2000. Distribution and structure of benthic invertebrate communities between North Cape and Cape Reinga. NIWA Final Research Report for Ministry of Fisheries Research Project ENV9805, Objectives 1–4. Wellington: Ministry of Fisheries (unpublished).
- Department of Conservation, Ministry of Fisheries. 2011. Coastal marine habitats and marine protected areas in the New Zealand Territorial Sea: a broad scale gap analysis. Vol. 1–3. Wellington: Department of Conservation.
- Hurst RJ et al. 2000. Atlas of juvenile and adult fish and squid distributions from bottom and midwater trawls and tuna longlines in New Zealand waters. Wellington: National Institute of Water & Atmospheric Research Ltd. NIWA Technical Report 84.
- Kerr V (Comp.). 2006. Northland Marine Library: resources for marine planning and conservation. Whangarei: Department of Conservation. (CD including maps and published and unpublished reports and scientific papers on Northland's marine environment.)
- Morrison M. 2005. An information review of the natural marine features and ecology of Northland. NIWA Client Report: AKL2005-30; NIWA Project: DOC05101. Auckland: National Institute of Water & Atmospheric Research Ltd.

Appendix 9

Significant geological features and landforms in *Te Korowai*

Note: While Northland Regional Council and the three district councils have undertaken landscape assessments that identify outstanding natural features, outstanding landscapes and significant amenity landscapes in *Te Korowai*, the mapping of these landscapes and natural features in regional and district plans

is not consistent across the region. The definitive identification of regionally, nationally and internationally significant landscapes and landforms requires further landscape work.

FEATURE	SIGNIFICANCE	PRESSURE / THREAT	PROTECTED AREA
International			
Hokianga sand dunes	One of the most spectacular examples of an active dune system in Aotearoa New Zealand		Part
Kōkota/The Sandspit	Largest unvegetated sandspit in Aotearoa	Potential sand extraction	No
Reserve Point volcanics	Only known nephelinite flow in Northland; adjacent to a garnet andesite intrusion		No
Runaruna mud volcano	Only active mud volcano in Northland Note: Formed as part of the Northland Allochthon, the rocks and old fault lines beneath the ground here provide a pathway for water and gases to flow upwards. Carbon dioxide, small amounts of methane (i.e. 'natural gas') and tiny amounts of a few other gases are able to reach the surface from deep underground, along with very salty water. Pressure built up beneath the ground forces the gas and salty water to the surface. Much of the rock immediately below the surface at Runaruna is made up of 'Punakitere Sandstone, which is more than 65 million years old (from the Cretaceous Period). This has good permeability, allowing the water and gas to move relatively easily between the individual sand grains that make up the rock. Old inactive fault lines and fractures and cracks in the rock assist this upwards movement.		No

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FEATURE	SIGNIFICANCE	PRESSURE / THREAT	PROTECTED AREA
	The salty water that bubbles to the surface is thought to have come from water that was trapped in the pores of the rock (i.e. between the sand grains) when it was deposited in an ancient ocean tens of millions of years ago. Since then, this ancient sea water has interacted with minerals like quartz, feldspar, mica and calcite in the surrounding rock, dissolving some of them and thus making the water even saltier. The mud that forms the ‘volcano’ at the surface is essentially dissolved rock. The minerals that make up the surrounding rocks have been broken down by the dissolved carbon dioxide and salty water into clays.		
Te Paki dunes	Best area of active dunes on the Aupōuri Peninsula		Yes
National			
Surville Serpentinite Formation	Only significant-sized exposure of the lower-most sequences (the Tangihua Complex) of an ophiolite formation (the Northland Allochthon) Note: The Tangihua Complex usually comprises areas of early Cretaceous basalt sea floor; however, at Otou/North Cape, c. 9,200 ha of mafic gabbro and c. 160 ha of ultramafic peridotite, harzburgite and wehrlite are also exposed. Weathered derivatives of these substrates, such as iron-rich ferricrete rockfields and aluminium-rich bauxite mounds, are also present. The presence of these ultramafic rocks is the reason that many of the Threatened and At Risk locally endemic species are found at Otou/North Cape.	Mining; mineral prospecting	Yes
Regional			
Hokianga ‘orbitolite’ bed	Fossiliferous unit containing large foraminifera of international biostratigraphic value		No

Appendix 10

Recreation destinations in *Te Korowai*

Recreation opportunities on Te Korowai lands and waters have been categorised into four different destination types to reflect known and potential demand and to capture people's outdoor leisure preferences. This is part of an approach that is known as 'destination management'. 'Icon destinations' are areas that the Department of Conservation Te Papa Atawhai has identified as high-profile, popular destinations that underpin national and international tourism and provide memorable visitor experiences in Aotearoa New Zealand. 'Gateway destinations' are places that introduce New Zealanders to the outdoors and allow them to learn about conservation; these destinations may provide for a diverse range of activities but include many traditional camping and tramping destinations. 'Local treasures' are vehicle-accessible, locally valued locations that provide recreation opportunities for, and growing connections with, nearby communities.

Icon destinations

Te Paki Coastal Track

Gateway destinations

Nil

Local treasures

Ahipara Gumfields car park

Hukatere walk

Kaitaia Walkway

Kaitaia Walkway to Diggers Valley Road

Lake Ngatu amenity area/car park

Lake Ngatu Track

Pukenui Forest tracks (x2)

Raetea North Side Campsite/Mangamuka amenity areas

Rarawa Beach Walk

Rarawa Beach Campsite

Sweetwaters access track

Taputaputa Road/amenity area

Appendix 11

Prescriptions for management of visitor management zones

SETTING	URBAN	RURAL	FRONT COUNTRY	BACKCOUNTRY – ACCESSIBLE AND WALK-IN	REMOTE	WILDERNESS
General description	• Areas inside or on the periphery of urban areas • Typically include historic or cultural sites	• Remnant native forests, wetlands, marine reserves and historic or cultural sites in areas dominated by farmland and plantation forest	• Areas where the majority of visitation occurs; typically small areas, scattered within or on the periphery of large, relatively natural areas • Include the vicinity of main ‘scenic’ roads passing through public conservation land • Often focused on a particular attraction	• Large-scale natural settings that are generally accessed through the front country • Include popular walks and tramps set within the body of large-scale natural settings and/or that provide access to other settings	• Catchments beyond the backcountry zone that form the wild lands in the interior of large, protected areas, with basic low-use tracks, marked routes and huts	• Gazetted wilderness

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Appendix 11 table continued

SETTING	URBAN	RURAL	FRONT COUNTRY	BACKCOUNTRY- ACCESSIBLE AND WALK-IN	REMOTE	WILDERNESS
Accessibility	Enabled for people of most ages and abilities	- Typically accessed via sealed and unsealed roads or, in some cases, by boat - Enabled for people of most ages and abilities	- Readily accessible areas, usually via sealed roads or scheduled ferry or air services - Mostly accessed by car, but tour buses and guided parties also visit some sites - Enabled for people of most ages and abilities	- People will have travelled some distance to reach these settings ‘Backcountry accessible’ focuses on gravel roads, four-wheel drive roads, navigable waters and aircraft landing sites - Motorised ground access generally restricted to roads and designated routes ‘Backcountry walk-in’ is focused beyond the influence of motorised access	- Typically 5 or more hours’ travel from the front country - Access supported by aircraft in some areas	Requires travel through backcountry and remote areas to reach the boundary

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Appendix 11 table continued

SETTING	URBAN	RURAL	FRONT COUNTRY	BACKCOUNTRY – ACCESSIBLE AND WALK-IN	REMOTE	WILDERNESS
Predominant visitor groups	• Short-stop travellers and day visitors	• Short-stop travellers, day visitors and over-night visitors	• Predominantly short-stop travellers, day visitors and over-night visitors • Other visitors in transition to backcountry and remote settings	• Predominantly ‘backcountry comfort seekers’ and ‘backcountry adventurers’	• ‘Backcountry adventurers’ and ‘remoteness seekers’	• ‘Remoteness seekers’
Facility setting	• High-standard footpaths, cycleways and modified landscapes • High degree of control via information and directional signs and barriers	• Short walks, campgrounds and picnic areas for a range of ages and abilities • High degree of control via information and directional signs and barriers	• Good-quality facilities and services and easy access • Sometimes the starting point for tramping tracks and routes, with signs and information to make this transition clear • High degree of control via information and directional signs and barriers	• A range of facility standards, including any designated vehicle routes and popular walks and tramping tracks • Evidence of control limited to essential directional signs and barriers on Great Walks and in places where there are significant hazards	• Basic huts, bridges, low-use tracks and marked routes • Evidence of control is limited to essential signs	• No facilities

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Appendix 11 table continued

SETTING	URBAN	RURAL	FRONT COUNTRY	BACKCOUNTRY-ACCESSIBLE AND WALK-IN	REMOTE	WILDERNESS
Desired visitor experience and interactions	Varied, from activities with large groups through to time with small groups/families, some time away from other groups and, in some cases, solitude			- Generally some time away from other groups and, in some cases, solitude - Occasional encounters with organised groups - Generally accepting of occasional intrusion of noise	- Reasonable expectation of isolation from sights, sounds and activities of other people - Interaction with few other groups - Considerable self-reliance on backcountry skills	- Complete isolation from sights, sounds and activities of other people - Maximum interaction with only one other group is generally acceptable
Preferred maximum party size	- Whatever is socially appropriate - Conforming concessions schedule: 15	50 - Conforming concessions schedule: 15	15 50 for periodic tour bus parties - Conforming concessions schedule: 15	15	8	6
Typical visitor interaction levels	Whatever is socially appropriate	20 or fewer people seen per hour	30 or fewer people seen per visit duration	15 or fewer people seen per day for 'backcountry adventurer' tracks or routes 40 or fewer people seen per day for 'backcountry comfort seeker' tracks or routes	10 or fewer people seen per day	6 or fewer people seen per visit duration

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Appendix 11 table continued

SETTING	URBAN	RURAL	FRONT COUNTRY	BACKCOUNTRY – ACCESSIBLE AND WALK-IN	REMOTE	WILDERNESS
Concessions operations	- Concessionaire activity may be permitted in all these visitor management zones, subject to conditions to avoid, remedy or mitigate adverse effects, including compliance with criteria within this table; the outcomes, objectives and policies for Part Two – Places in Volume I of Te Hiku Conservation Management Strategy (Te Hiku CMS) apply - Concessionaire client activities should not be advantaged or disadvantaged compared with those for non-concessionaire visitors, unless there is a specified reason for different management; the outcomes, objectives and policies for Part Two – Places apply					Concessions should not be granted for this setting
Concessions effects management	Avoid, remedy or mitigate effects by setting conditions		Avoid or mitigate effects	Concessions activities to be indistinguishable from other approved activities		No concessions
Aircraft management	Aircraft access for visitor use purpose should not be approved other than in accordance with Parts Two and Three of Te Hiku CMS					Aircraft access will not be granted

Appendix 12

Historic sites managed by the Department of Conservation Te Papa Atawhai on Te Korowai lands and waters

The ways in which the Department of Conservation Te Papa Atawhai manages cultural aspects of historic heritage are changing. Cultural heritage comes in many forms, which can be tangible (such as taonga, buildings, archaeological sites and written records), intangible (spiritual, knowledge, traditions and stories) and natural (flora, fauna, water and landscapes). Te Papa Atawhai aims to manage cultural heritage on Te Korowai lands and waters based on three core pou (pillars): Wāhi (Places), Kōrero (Stories) and Tāngata (People). When these pou are understood, valued, protected and managed, the heritage of Te Hiku is safe.

At the time of drafting Te Hiku o Te Ika-a-Māui Conservation Management Strategy (Te Hiku CMS), Te Papa Atawhai was in the process of re-designing its heritage management framework to better align with these pou at a national scale. Therefore, it is expected that the ‘destination management’ categories that are currently listed in this appendix – and the management principles associated with them – will no longer align with departmental practice within the lifetime of Te Hiku CMS. The new heritage categories that will be of particular importance to Te Hiku are ‘heritage areas’ (a group of heritage locations with a related geographical or cultural context) and ‘heritage focus’ (heritage locations or areas that are targeted for specific investment above

normal work). High densities of archaeological sites and wāhi tapu in some parts of Te Hiku require holistic, landscape-level protection (which will be enabled by heritage areas), and many sites that are not included in the list below and currently have no operational budget require more investment for their management and protection (which will be enabled by heritage focus).

The entire Te Hiku region is an important heritage landscape, particularly with regard to tangata whenua (whānau, hapū, iwi) cultural histories, but also with regard to the history of the wider nation – for example, this region features some of the earliest known archaeological evidence of landfall in Aotearoa New Zealand. However, at the time of drafting, the vast majority of known heritage sites on Te Korowai lands and waters are not monitored or managed, and it is suspected that many more remain undiscovered or unknown to Te Papa Atawhai. Only sites that are currently actively managed are included in the table below. This list of sites will be subject to change according to the policy programme set out in Volume I of Te Hiku CMS and the options provided by the new heritage management categories mentioned above, the combination of which will better enable Te Papa Atawhai to protect, enhance and tell the stories of the heritage of Te Hiku.

PLACE	LOCATION	HERITAGE TOPICS AND SIGNIFICANCE	PRESSURES / THREATS	DESTINATION MANAGEMENT CATEGORY / ACCESS
Kohukohu Historic Reserve	Kirkpatrick Street, Kohukohu, north Hokianga	Old school building; government; education	Damage to structure if not repiled	Local treasure
Motuopao Island Nature Reserve	Motuopao Island off Cape Maria van Diemen	The lighthouse tower is 7 m high and constructed of Australian ironbark (<i>Eucalyptus paniculata</i>) clad with kauri (<i>Agathis australis</i>) weatherboards; lighthouse relics	Natural deterioration/ climate change	n/a – currently no formal visitor access
Muiata Pa Historic Reserve	5 km south of Pukenui, Houhora Harbour	A roughly rectangular swamp pā on a low sand ridge; Māori	Erosion caused by overgrazing; effects from horticultural land use	n/a – currently no formal visitor access
Tauroa Point Historic Reserve	West coast, approximately 7 km south of Tauroa Point beach	Midden; Māori	Destruction caused by vehicles and stock; natural erosion caused by high winds and sea	n/a – currently no formal visitor access

Appendix 13

Aircraft use zones

To manage the effects of aircraft landings on public conservation lands and waters, four nationally consistent aircraft access zones are applied (refer Volume III – Maps of Te Hiku o Te Ika-a-Māui Conservation Management Strategy [Te Hiku CMS]).

These zones reflect the different management methodologies required, and the likelihood of granting concessions, for aircraft landings as follows:

- **Red Zone:** Areas where a concession application to land an aircraft should be declined. However, concessions may be granted for aircraft landings associated with the construction, operation or maintenance of equipment (e.g. meteorological, seismic) or utilities (e.g. communication systems, transmission lines) that have been authorised by the Department of Conservation Te Papa Atawhai or to support research authorised by Te Papa Atawhai. This zone may apply where:
 - legislation provides strong direction that concessions should not be granted for aircraft landings (e.g. gazetted wilderness areas);
 - an area is adjacent to (part of) a national park where there are no aircraft landings;
 - adverse effects on conservation, including recreational, values need to be avoided (e.g. nature and scientific reserves, threatened species habitat, high-use picnic and camping areas);
 - the area is readily accessible by other means; or
 - aircraft activity may interfere with management activities.
- **Yellow Zone:** Areas where a concession application to land an aircraft should be granted where it meets the nationally consistent limits for this zone. This zone may apply where there is a need to restrict aircraft use because either visitors expect a low level of encounters with aircraft or values of natural quiet predominate, particularly in backcountry and remote areas.
- **Green Zone:** Areas where a concession application to land an aircraft should be granted provided it complies with any relevant outcome and/or the criteria in the relevant policies. This zone may apply where:
 - conservation, including recreational, values are unlikely to be affected by landings;
 - there are natural limits on sites where landings can actually occur (e.g. forest cover, steep terrain); or
 - there is likely to be little demand for aircraft access over the life of Te Hiku CMS.
- **Orange Zone:** Areas where there are complex issues to be managed that require the use of limits and/or other criteria to guide whether concessions for aircraft landings can be granted. This zone may apply:
 - in situations that involve limited opportunities, in areas of intensive aircraft activity or where a precautionary approach is required;
 - where there are historical or legal reasons for an approach that does not fit within the other three zones;
 - to provide for a specific recreational activity (e.g. heli-skiing, heli-fishing, ground-based hunting);
 - to only allow specific types of aircraft (e.g. non-powered aircraft);
 - where there are variations in seasonal use;
 - to protect visitor experiences; or
 - where landings do not fit within the circumstances described in the other three zones.

A spectrum of aircraft landings and overflights (aircraft encounters) may be experienced by visitors to public conservation lands and waters, as described in Volume I of Te Hiku CMS and as shown in the maps in Volume III.

Outcomes and/or policies may specify numeric limits for aircraft landings (e.g. daily, monthly, annually), or may use the words ‘rare’, ‘occasional’, ‘regular’ or ‘frequent’ to describe the overall level of aircraft encounters and therefore the visitor experience expected in each aircraft access zone (or part thereof).

This spectrum does not consider aircraft landings associated with the construction, operation and/or maintenance of equipment or utilities authorised by Te Papa Atawhai, or wild animal control activities, and nor can Te Papa Atawhai directly manage overflights (while aircraft are in the airspace above public conservation lands and waters). A concession to land an aircraft does not include any other activities, such as vegetation removal or earthworks, associated with maintaining an airstrip or designated landing site.

The spectrum of aircraft encounters on public conservation lands and waters is outlined below.

	← Low High →			
Average percentage of time aircraft are likely to be encountered	1% or less	5%	25%	50% or more
Likely visitor management zone	Remote and/or backcountry zones		Backcountry and/or front-country zones	
Word used in outcomes/ policies to describe and achieve this	Rare	Occasional	Regular	Frequent

Appendix 14

Taonga species in *Te Korowai*

The list of taonga (treasured) species in *Te Korowai* provided in the table below was created using the following logic:

- The list was based on information collated from various hapū/iwi management plans, each outlining the species that are of importance to Te Hiku iwi. Supplementary species were then added by Te Hiku o Te Ika-a-Māui Conservation Management Strategy (Te Hiku CMS) working group.
- English common names and scientific taxonomic names have been incorporated where a taonga can be identified in the te ao Pākehā taxonomic naming system.

- Many taonga are recognised by Te Hiku iwi with te reo names that are unique to the region, sometimes separate to and sometimes alongside names that are used more widely across Aotearoa New Zealand. For the purpose of this list, only names that are recognised locally have been incorporated.
- Some taonga are known by different names between the different Te Hiku iwi themselves, in which case every name that has been made known to the Department of Conservation Te Papa Atawhai has been incorporated in the list.
- Similarly, any local English names that are recognised in Te Hiku, but not elsewhere, have been included where relevant.

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
Manu (birds)		
amokura	red-tailed tropicbird	<i>Phaethon rubricauda</i>
kāhu	harrier hawk	<i>Circus approximans</i>
karae	mollymawk (generic)	
karoro	black-backed gull	<i>Larus dominicanus</i>
katatē	red-billed gull	<i>Chroicocephalus novaehollandiae</i>
kawau	shag (generic)	
kawekaweā	long-tailed cuckoo	<i>Eudynamys taitensis</i>
kiwi-nui	North Island brown kiwi	<i>Apteryx mantelli</i>
komako, korimako	bellbird	<i>Anthornis melanura</i>
kororā	little blue penguin	<i>Eudyptula minor</i>

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Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
kōtare	sacred kingfisher	<i>Todiramphus sanctus</i>
kōtuku	white heron	<i>Ardea alba</i>
koukou	morepork	<i>Ninox novaeseelandiae</i>
kūaka, kakao, kura	bar-tailed godwit	<i>Limosa lapponica</i>
kūkuru, kūkuruatu	northern New Zealand dotterel	<i>Anarhynchus obscurus aquilonius</i>
kūkurutoki	fernbird	<i>Poodytes punctatus</i>
kuruwhengī	Australasian shoveler	<i>Spatula rhynchotis</i>
matapo	black teal, New Zealand scaup	<i>Aythya novaeseelandiae</i>
matuku, hūrepo	Australasian bittern	<i>Botaurus poiciloptilus</i>
matuku moana	reef heron	<i>Egretta sacra</i>
ōi	northern muttonbird, grey-faced petrel	<i>Pterodroma gouldi</i>
pārera	grey duck	<i>Anas superciliosa</i>
pārerarera	red knot	<i>Calidris canutus</i>
pāteke	brown teal	<i>Anas chlorotis</i>
pīpīwharaua	shining cuckoo	<i>Chrysococcyx lucidus</i>
pōwhaitere	parakeet (various)	<i>Cyanoramphus</i> spp.
pūkeko	purple swamphen	<i>Porphyrio melanotus</i>
pūtangi, pūtangitangi	paradise shelduck	<i>Tadorna variegata</i>
tāiko	petrel (generic)	
tākapu	Australasian gannet	<i>Morus serrator</i>
tara	tern (generic)	
taranui	Caspian tern	<i>Hydroprogne caspia</i>
tara nohinohi	white-fronted tern	<i>Sterna striata</i>
tētē	grey teal	<i>Anas gracilis</i>

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Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
tīrairaka	fantail	<i>Rhipidura fuliginosa</i>
tōrea	oystercatcher (generic)	<i>Haematopus</i> spp.
toroa	albatross (generic)	
turituri pourewa	pied stilt	<i>Himantopus himantopus</i>
tūtei	eastern curlew	<i>Numenius madagascariensis</i>
whēwhī	California quail	<i>Callipepla californica</i>
Ngārara (reptiles)		
honu	turtle (generic)	
kākāriki	Northland green gecko	<i>Naultinus grayii</i>
mokomoko	skink (generic)	
mokopāpā	brown gecko	
Ngārara (invertebrates)		
mokoroa	pūriri moth caterpillar	<i>Aenetus virescens</i>
ngaro puāwai, pī	native bee (generic)	
pūngāwerewere	spider (generic)	
pūpū	snail (generic)	
pūpū harakeke, pūpū whakarongotauā	flax snail (various)	<i>Placostylus</i> spp.
pūpū rangi	kauri snail (various)	<i>Paryphanta</i> spp.
toke	earthworm (generic)	
weri	centipede (generic)	
wētā	tusked wētā (generic)	Anostomatidae
Ngohi wai māori (freshwater invertebrates)		
kāeo	freshwater mussel	<i>Echyridella menziesii</i>
kēwai	freshwater crayfish	<i>Paranephrops planifrons</i>

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Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
tarawera	shrimp	<i>Paratya curvirostris</i>
torewai	freshwater mussel (various)	<i>Echyridella</i> spp.
Ngohi wai māori (freshwater fishes)		
heke	mudfish (various)	<i>Neochanna</i> spp.
īnanga	whitebait	<i>Galaxias maculatus</i>
kariwaka, paraki, ngaiore	common smelt	<i>Retropinna retropinna</i>
kōkopu	cockabully	<i>Galaxias fasciatus</i>
koropāpene, papane	triplefin (generic)	
pātiki	flounder (generic)	
pātiki mohoao	black flounder	<i>Rhombosolea retiaria</i>
raukura	grey mullet	<i>Mugil cephalus</i>
tuna	eel (various)	<i>Anguilla</i> spp.
tuna heke	longfin eel	<i>Anguilla dieffenbachii</i>
tuna roa	shortfin eel	<i>Anguilla australis</i>
Ngohi wai tai (saltwater fishes)		
araara	trevally	<i>Pseudocaranx dentex</i>
aua	yellow-eye mullet	<i>Aldrichetta forsteri</i>
hāpuku, whāpuku	groper	<i>Polyprion oxygeneios</i>
kahawai	sea trout	<i>Arripis trutta</i>
kanae	grey mullet	<i>Mugil cephalus</i>
kōheru	scad	<i>Decapterus koheru</i>
kōiro, ngōiro, totoke, hao, ngōio, ngoingoi, putu	southern conger	<i>Conger verreauxi</i>
kōpūwaitōtara	porcupine fish, southern burrfish	<i>Allomycterus pilatus</i>
koropāpene, papane	triplefin (generic)	

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Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
kumukumu	red gurnard	<i>Chelidonichthys kumu</i>
kuparu	John Dory	<i>Zeus faber</i>
mangā	barracouta	<i>Thyrsites atun</i>
maomao	blue maomao	<i>Scorpius violacea</i>
marari, rarī	butterfish	<i>Odax pullus</i>
maratea	red moki	<i>Cheilodactylus spectabilis</i>
mātā	pink maomao	<i>Caprodon longimanus</i>
matuawhāpuku, rarī	scorpionfish, rock cod, red rock cod, Cook's scorpionfish, granddaddy hapuka	<i>Scorpaena cardinalis</i>
moeone	bass	<i>Polyprion americanus</i>
moki	blue moki	<i>Latridopsis ciliaris</i>
ngākoikoi	kelpfish, rock cod	<i>Chironemus marmoratus</i>
ngōiro	southern conger	<i>Conger verreauxi</i>
ngorengore, kōkiri	leatherjacket	<i>Meuschenia scaber</i>
ngū	squid (generic)	
pākirikiri	spotty	<i>Notolabrus celidotus</i>
pākohikohi	trumpeter	<i>Latris lineata</i>
pākurakura	red pigfish	<i>Bodianus unimaculatus</i>
pāra	frostfish	<i>Lepidopus caudatus</i>
parore	black bream	<i>Girella tricuspidata</i>
pātiki	flounder (generic)	
pātiki	sand flounder	<i>Rhombosolea plebeia</i>
pātiki rore, tāpau	New Zealand sole, common sole	<i>Peltorhamphus novaezeelandiae</i>
pātiki tore	lemon sole	<i>Pelotretis flavilatus</i>

Continued on next page

Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
pātiki tōtara	yellowbelly flounder	<i>Rhombosolea leporina</i>
pātutuki, rānaru, rāwaru	rock cod, blue cod	<i>Parapercis colias</i>
pōrae	grey morwong	<i>Nemadactylus douglasii</i>
puhi	moray eel (generic)	
rāhiri	Māori chief	<i>Epinephelus daemeli</i>
reperere	elephant fish	<i>Callorhynchus milii</i>
takeke	piper	<i>Hyporhamphus ihi</i>
takeketonga	marlin (generic)	
tāmure	snapper	<i>Pagrus auratus</i>
tarakihi	ocean bream	<i>Nemadactylus macropterus</i>
tawatawa	blue mackerel	<i>Scomber australasicus</i>
warehenga	kingfish	<i>Seriola lalandi</i>
warehou	blue warehou	<i>Seriola lalandi</i>
Mangō and whai (sharks and rays)		
aupounamu	blue shark	<i>Prionace glauca</i>
kapetā, pīoke, tupere	school shark	<i>Galeorhinus galeus</i>
koinga, pioke	school shark, spiny dogfish, dog shark, rig shark	<i>Squalus acanthias</i>
makao, ngutukao	tiger shark	<i>Galeocerdo cuvier</i>
mangō	shark (generic)	
mangōpare, mangōripi, ripi	thresher shark	<i>Alopias vulpinus</i>
mangō taniwha	great white shark	<i>Carcharodon carcharias</i>
ngutukao, makō	shortfin mako	<i>Isurus oxyrinchus</i>
pākaurua, whaimanu	eagle ray (generic)	
repo, whairepo	black stingray	<i>Bathytoshia lata</i>

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Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
reremai	basking shark	<i>Cetorhinus maximus</i>
tōiki	bronze whaler	<i>Carcharhinus brachyurus</i>
tuatini	sevengill shark	<i>Notorynchus cepedianus</i>
ururoa	smooth hammerhead shark	<i>Sphyrna zygaena</i>
whai	stingray (generic)	
whai	short-tail stingray	<i>Bathytoshia brevicaudata</i>
Ngohi moana (marine mammals)		
aihe	common dolphin	<i>Delphinus delphis</i>
kākahi	orca	<i>Orcinus orca</i>
kekeno	New Zealand fur seal	<i>Arctocephalus forsteri</i>
kewa	southern right whale	<i>Eubalaena australis</i>
mimiha	small whale species (generic)	
parāoa	sperm whale	<i>Physeter macrocephalus</i>
tohoraha, paikea	humpback whale	<i>Megaptera novaeangliae</i>
tukuperu	long-finned pilot whale	<i>Globicephala melas</i>
waiaua	Māui dolphin	<i>Cephalorhynchus hectori maui</i>
Mātaitai (marine invertebrates)		
hūwai	New Zealand cockle	<i>Austrovenus stutchburyi</i>
kaeo	sea tulip	<i>Pyura pachydermatina</i>
karahū	mud-flat snail	<i>Amphibola crenata</i>
kāunga	New Zealand hermit crab	<i>Pagurus novizealandiae</i>
kāwiri	speckled whelk	<i>Cominella adspersa</i>
kina	common sea urchin	<i>Evechinus chloroticus</i>
koeke, tarawera	common shrimp	<i>Palaemon affinis</i>

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Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
kōkota	pipi	<i>Paphies australis</i>
kōpūpūtai	sponge (generic)	
kōtore moana, komi moana, hūmenga	sea anemone (various)	<i>Cnidaria</i> spp.
kōura	saltwater crayfish, southern rock lobster	<i>Jasus edwardsii</i>
kūtai	mussel (generic)	
ngākihi	limpet (generic)	
pāharu	packhorse rock lobster, packhorse crayfish	<i>Sagmariasus verreauxi</i>
pāpaka	crab (generic)	
pāpaka	paddle crab	<i>Ovalipes catharus</i>
pāpaka paruparu, pāpaka parupatu	mud crab (various)	<i>Helice</i> spp.
pātangatanga, pātangaroa, pekapeka	starfish (generic)	<i>Echniodermata</i> spp.
pāua	abalone (various)	<i>Haliotis</i> spp.
pūpū	winkle (generic)	
rore, rori	sea cucumber, sea snail	<i>Australostichopus mollis</i>
tio	rock oyster	<i>Saccostrea cucullata</i>
tīpa	scallop	<i>Pecten novaezelandiae</i>
toheroa		<i>Paphies ventricosa</i>
tuangi	surf clam, coarse dosinia	<i>Dosinia anus</i>
tuatua		<i>Paphies subtriangulata</i>
uraura	krill (generic)	
waharoa	horse mussel	<i>Atrina zelandica</i>
wheke	octopus (generic)	
wheke	Māori octopus	<i>Macroctopus maorum</i>

Continued on next page

Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
Rākau (trees)		
hangehange		<i>Geniostoma ligustrifolium</i> var. <i>ligustrifolium</i>
hīnau		<i>Elaeocarpus dentatus</i>
hoihere	lacebark (various)	<i>Hoheria</i> spp.
horoeka, horoweka	lancewood	<i>Pseudopanax crassifolius</i>
horopito		<i>Pseudowintera</i> spp.
hutu		<i>Ascarina lucida</i>
kahikātoa, mānuka	red tea tree	<i>Leptospermum scoparium</i>
kānuka	white tea tree	<i>Kunzea ericoides</i>
karaka		<i>Corynocarpus laevigatus</i>
karamū		<i>Coprosma robusta</i>
karo	pittosporum (various)	<i>Pittosporum</i> spp.
kauri		<i>Agathis australis</i>
kohekohe	New Zealand mahogany	<i>Didymocheton spectabilis</i>
kōrau	black tree fern	<i>Cyathea medullaris</i>
koroī	white pine	<i>Dacrycarpus dacrydioides</i>
kōwhai		<i>Sophora</i> spp.
māhoe	whiteywood	<i>Melicytus ramiflorus</i>
māi	black pine	<i>Prumnopitys taxifolia</i>
maire	sandalwood	<i>Mida salicifolia</i>
makomako	wineberry	<i>Aristotelia serrata</i>
māmāngi	tree coprosma	<i>Coprosma arborea</i>
mangeao	litsea	<i>Litsea calicaris</i>
manaoa	silver pine	<i>Manoao colensoi</i>

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Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
maukurangi	miniature tree fern	<i>Diploblechnum fraseri</i>
miro	brown pine	<i>Pectinopitys ferruginea</i>
neinei	spiderwood	<i>Dracophyllum latifolium</i>
ngaio		<i>Myoporum laetum</i>
nīkau		<i>Rhopalostylis sapida</i>
parapara	bird catcher tree	<i>Ceodes brunoniana</i>
patē	seven finger	<i>Schefflera digitata</i>
pōhutukawa	New Zealand Christmas tree	<i>Metrosideros excelsa</i>
ponga	silver tree fern	<i>Alsophila dealbata</i>
porokaiwhīria	pigeonwood	<i>Hedycarya arborea</i>
pou, tawapau		<i>Planchonella costata</i>
pukatea		<i>Laurelia novae-zelandiae</i>
pūnui	slender tree fern	<i>Alsophila cunninghamii</i>
pūriri	New Zealand oak	<i>Vitex lucens</i>
ramarama	New Zealand myrtle	<i>Lophomyrtus bullata</i>
rangiora	paper leaf, bushman's friend	<i>Brachyglottis repanda</i>
raukawa		<i>Raukawa edgerleyi</i>
raurēkau	large-leaved coprosma	<i>Coprosma grandifolia</i>
rāwiri	sand dune kānuka	<i>Kunzea amathicola</i>
rewarewa	New Zealand honeysuckle	<i>Knightia excelsa</i>
rimu	red pine	<i>Dacrydium cupressinum</i>
tānekaha	celery pine	<i>Phyllocladus trichomanoides</i>
taraire		<i>Beilschmiedia tarairi</i>
tawa		<i>Beilschmiedia tawa</i>

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Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
tāwhiri		<i>Pittosporum tenuifolium</i>
tī, tītī	cabbage tree	<i>Cordyline australis</i>
tīpau	red matipo	<i>Myrsine australis</i>
tītoki	New Zealand ash	<i>Alectryon excelsus</i>
toatoa		<i>Phyllocladus toatoa</i>
tōtara		<i>Podocarpus totara</i>
tōwai		<i>Pterophylla sylvicola</i>
tūākura	stumpy tree fern	<i>Dicksonia lanata</i>
tūpākihi	tree tutu	<i>Coriaria arborea</i> var. <i>arborea</i>
wharangi		<i>Melicope ternata</i>
whau	corkwood	<i>Entelea arborescens</i>
whauwhau	coastal five finger	<i>Pseudopanax lessonii</i>
whāwhākou	swamp maire	<i>Syzygium maire</i>
whekī	rough tree fern	<i>Dicksonia squarrosa</i>
Tuputupu whenua (ground plants)		
angiangi	lichen (generic)	
heruheru	crêpe fern (various)	<i>Leptopteris</i> spp.
huruhuru tapairu	maidenhair fern (various)	<i>Adiantum</i> spp.
huruhuru whenua	shining spleenwort	<i>Asplenium oblongifolium</i>
kaikaiatua	New Zealand gloxinia	<i>Rhabdothamnus solandri</i>
kārerarera	Pacific azolla	<i>Azolla rubra</i>
kawakawa	pepper tree	<i>Piper excelsum</i>
kiokio	palm-leaf fern	<i>Blechnum novae-zelandiae</i>
kiwikiwi	creek fern	<i>Cranfillia fluviatilis</i>

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Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
kohukohu	moss (generic)	
kōhutuhutu	tree fuchsia	<i>Fuchsia excorticata</i>
kōpuru	scented moss (generic)	
kōrari	New Zealand flax	<i>Phormium tenax</i>
korokio	wire-netting bush	<i>Corokia cotoneaster</i>
koromiko	hebe (various)	<i>Veronica</i> spp.
kūmarahōu	gum-digger's soap	<i>Pomaderris kumeraho</i>
kuta	tall spike sedge	<i>Eleocharis sphacelata</i>
māikaika	orchid (generic)	
māireire	aromatic phebalium	<i>Leionema nudum</i>
manakura	small-leaved māhoe, swamp māhoe	<i>Melicytus micranthus</i>
mārū	bur-reed	<i>Sparganium subglobosum</i>
mātātā	water fern	<i>Histiopteris incisa</i>
mātātā	lace fern	<i>Paesia scaberula</i>
matua-kūmara	turnip-rooted geranium	<i>Geranium solanderi</i>
matukuroimata	oak-leaved alseuosmia	<i>Alseuosmia macrophylla</i>
maukoro	common broom	<i>Carmichaelia australis</i>
mauku	hen and chicken fern	<i>Asplenium bulbiferum</i>
mauku	filmy fern (various)	<i>Hymenophyllum</i> spp.
mīkoikoi	iris (various)	<i>Libertia</i> spp.
mingi	broad-leaved mingimingi	<i>Leucopogon fasciculatus</i>
mingimingi, mingi nui, mingi nohinohi	prickly mingimingi	<i>Leptecophylla juniperina</i>
mingimingi	coprosma (various)	<i>Coprosma</i> spp.
mokimoki	fragrant fern	<i>Dendroconche scandens</i>

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Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
muka	swamp flax (generic)	
napuka		<i>Veronica speciosa</i>
naupata, taupata	mirror bush, looking glass plant	<i>Coprosma perpusilla</i> subsp. <i>subantarctica</i>
oioi	jointed wire rush	<i>Apodasmia similis</i>
oru	New Zealand hydrangea	<i>Lobelia physaloides</i>
pānako	thread fern	<i>Icarus filiformis</i>
pāpāuma	broadleaf	<i>Griselinia littoralis</i>
pārerarera	plantain	<i>Plantago spathulata</i>
paretao	common strap fern	<i>Notogrammitis billardiarei</i>
patē		<i>Schefflera digitata</i>
pātōtara	dwarf mingimingi	<i>Styphelia nesophila</i>
pātōtara	parsley fern	<i>Botrychium australe</i>
pikopiko	common shield fern	<i>Polystichum neozelandicum</i>
piripiri		<i>Acaena anserinifolia</i>
piripiriwhata	marbleleaf	<i>Carpodetus serratus</i>
piriwhetau	bidibid	<i>Acaena anserinifolia</i>
piu	crown fern	<i>Lomaria discolor</i>
piupiu	gully fern	<i>Pakau pennigera</i>
poataniwha		<i>Melicope simplex</i>
poroporo	nightshade (various)	<i>Solanum</i> spp.
rahurahu	bracken fern	<i>Pteridium esculentum</i>
raupō	bulrush	<i>Typha orientalis</i>
rengarenga	rock lily	<i>Arthropodium cirratum</i>
rōhutu	myrtle	<i>Neomyrtus pedunculata</i>
roimata karitehe	dwarf musk	<i>Mazus novaezeelandiae</i>

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Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
runa	saltmarsh ribbonwood	<i>Plagianthus divaricatus</i>
tauhinu	cottonwood	<i>Ozothamnus leptophyllus</i>
toetoe	sedge (various)	<i>Austroderia</i> spp.
toetoe kiwi	cutty grass	<i>Gahnia lacera</i>
tuarawhitu	bronze flax	
turawera	shaking brake	<i>Pteris tremula</i>
tūrutu	New Zealand blueberry	<i>Dianella nigra</i>
waewaekoukou	climbing clubmoss	<i>Pseudodiphasium volubile</i>
waewaematuku	umbrella fern, carrier tangle, parasol fern	<i>Gleichenia microphylla</i>
wahu	sundew (various)	<i>Drosera</i> spp.
waoriki	buttercup (various)	<i>Ranunculus</i> spp.
wharawhara	coastal astelia	<i>Astelia banksii</i>
wharengārara	lance fern	<i>Loxogramme dictyopteris</i>
wī	silver tussock	<i>Poa cita</i>
wīwī	knobby clubrush	<i>Ficinia nodosa</i>
Tuputupu māra (cultivated plants)		
hue	gourd	<i>Lagenaria siceraria</i>
kōwhitiwhiti	watercress, marsh yellow cress	<i>Rorippa palustris</i>
kūmara	sweet potato	<i>Ipomoea batatas</i>
peruperu	Māori potato	<i>Solanum tuberosum</i>
pūhā	sow thistle (various)	<i>Sonchus</i> spp.
rekamauroa	variety of sweet potato	
ruruhau	Chinese cabbage	<i>Brassica rapa</i>
taputini	white variety of sweet potato	
taro		<i>Colocasia esculenta</i>

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Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
uremangu	variety of Māori potato	
uwhi	yam (various)	<i>Dioscorea</i> spp.
wāina	variety of sweet potato	
Tuputupu rangi (vines and epiphytes)		
aka	rātā vine (various)	<i>Metrosideros</i> spp.
akapūkāea	tecomanthe	<i>Tecomanthe speciosa</i>
kahakaha	perching lily	<i>Astelia hastata</i>
kaikūkū	New Zealand jasmine	<i>Parsonsia capsularis</i>
kareao	supplejack	<i>Ripogonum scandens</i>
kiekie	screw pine	<i>Freycinetia banksii</i>
kohurangi	Kirk's tree daisy	<i>Brachyglottis kirkii</i>
kōnēnē, taihoa	tea tree vine	<i>Cassytha paniculata</i>
mangemange	bushman's mattress	<i>Lygodium articulatum</i>
māwhai	ambush vine	<i>Sicyos mawhai</i>
pōhue	pink bindweed	<i>Calystegia sepium</i>
pōhuehue	wire vine	<i>Muehlenbeckia complexa</i>
pōwhihi	New Zealand bindweed	<i>Calystegia tuguriorum</i>
puawānanga	clematis (various)	<i>Clematis</i> spp.
tātarāmoa	bush lawyer (various)	<i>Rubus</i> spp.
Tuputupu moana (coastal and marine plants)		
autetāranga	sand daphne	<i>Pimelea villosa</i>
hanapapi	spinifex	<i>Spinifex sericeus</i>
horokaka	New Zealand ice plant	<i>Disphyma australe</i>
karengo	southern laver	<i>Pyropia columbina</i>
karepō	seagrass (various)	<i>Zostera</i> spp.

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Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
kawariki	sea buttercup (various)	<i>Ranunculus</i> spp.
kōkihi	beach spinach	<i>Tetragonia tetragonoides</i>
kōwharawhara	coastal astelia	<i>Astelia banksii</i>
mānawa	mangrove	<i>Avicennia marina</i>
mātihetihe	sand tussock	<i>Poa billardierei</i>
naupatariki	sea primrose	<i>Samolus repens</i>
nihinihi	shore bindweed	<i>Calystegia soldanella</i>
panahi	coastal morning glory	<i>Ipomoea cairica</i>
pīngao	golden sand sedge	<i>Ficinia spiralis</i>
puarangi	native hibiscus	<i>Hibiscus richardsonii</i>
rimurapa	bull kelp	<i>Durvillaea antarctica</i>
rimurēhia	carrageen, red seaweed	
rimurimu	seaweed (generic)	
rimutarawai	Neptune's necklace	<i>Hormosira banksii</i>
rimuwhānui	bladder kelp	<i>Macrocystis pyrifera</i>
tātaraheke	sand coprosma	<i>Coprosma acerosa</i>
tūtae kurī	blue wheat grass	<i>Anthosachne kingiana</i> subsp. <i>multiflora</i>
ureure	glasswort	<i>Salicornia quinqueflora</i>
waiūatua	shore spurge	<i>Euphorbia glauca</i>
wana	a kind of seaweed	
Hōkeke (fungi)		
harori	mushroom (generic)	
hōkeke	fungi (generic)	
tūtae whatitiri	white basket fungus	<i>Ileodictyon cibarium</i>

Appendix 15

The Korowai redress features

The overall Te Tiriti o Waitangi settlement redress package contained a range of features that interact with Te Hiku o Te Ika-a-Māui Conservation Management Strategy (Te Hiku CMS). These specifically included Te Rautaki o Te Oneroa-a-Tōhē/Te Oneroa-a-Tōhē Beach Management Plan, the Warawara Whenua Ngāhere i te Taiao/Warawara Cultural Redress and Te Rerenga Wairua Reserve.

The interactions between Te Hiku CMS and these features are outlined below.

Te Rautaki o Te Oneroa-a-Tōhē/Te Oneroa-a-Tōhē Beach Management Plan

For generations, Te Oneroa-a-Tōhē has been a vital resource for food, transport, cultural and spiritual sustenance, and recreation for Te Hiku o Te Ika-a-Māui iwi. Te Oneroa-a-Tōhē is also part of Te Ara Wairua (the spirits' pathway), which leads to a spiritual portal spanning the world between the living and the dead and is revered as a taonga. All Te Hiku o Te Ika-a-Māui iwi have specific kaitiaki responsibilities associated with Te Oneroa-a-Tōhē. Te Hiku o Ika-a-Māui iwi have a vision for a healthy beach that is capable of sustaining their communities and expressing their cultural and historical significance.

Te Hiku CMS must have particular regard for the vision, objectives and desired outcomes identified in Te Rautaki o Te Oneroa-a-Tōhē as they relate to the conservation issues within the Te Oneroa-a-Tōhē Beach Management Area.

Te Rautaki o Te Oneroa-a-Tōhē covers the length of the beach, some narrow reserve areas on the land running alongside the beach and the sea out to 12 nautical miles. The management area is shown in Figure A15.1, and the Management Plan can be found at teoneroa-a-tohe.nz/beach-management-plan.



Figure A15.1: Te Rautaki o Te Oneroa-a-Tōhē Management Area

Warawara Whenua Ngāhere i Te Taiao / Warawara Cultural Redress

Warawara Forest (Pt Northland Conservation Park) (6,493 ha) includes the areas formally known as Warawara Forest Sanctuary Area (823 ha) and Te Hura Ecological Area (990 ha) and is considered a significant conservation site.

This large contiguous area of outstanding diversity comprises a virtual sequence from coastal through to high-altitude forest. The vegetation provides a water and soil protection function on very steep slopes, and several species of flora and fauna that are either threatened or of restricted distribution occur here, including a surviving population of tītīpounamu / North Island rifleman (*Acanthisitta chloris granti*), the only known population in Northland.

Many plant species that are associated with the kauri forest type are either absent or poorly represented elsewhere in the ecological district, including tāwari (*Ixerba brexioides*), *Dicksonia lanata*, neinei (*Dracophyllum latifolium*), akatea (*Metrosideros albiflora*) and fan fern (*Schizaea dichotoma*).

The agreement referred to as Warawara Whenua Ngāhere i te Taiao is one of the cornerstones of the settlement redress. It is intended to give effect to a new relationship between Te Rarawa and the Department of Conservation Te Papa Atawhai, acknowledging that hapū and iwi of Te Rarawa exercise mana whenua over the Warawara and providing for joint roles in relation to the governance and management of the Warawara.

Te Hiku CMS has been developed in accordance with the scope, requirements and obligations of the Warawara Whenua Ngāhere i te Taiao insofar as they relate to Te Hiku CMS. In particular, all concession activities will be decided upon under the requirements of the agreement once completed and finalised. The Warawara Whenua Ngāhere i te Taiao / Warawara Cultural Redress can be found at legislation.govt.nz/act/public/2015/0079/latest/DLM6577914.html.

Te Rerenga Wairua/Cape Reinga

Te Rerenga Wairua is a sacred place for Te Hiku o Te Ika-a-Māui iwi and of all Māori. It is an iconic site of significance historically, culturally and, most importantly, spiritually. The famous Polynesian explorer Kupe identified Te Rerenga Wairua as the ‘Departing place of the Spirits’ – the place from which Māori could return to the ancestral homeland of Hawaiki.

Te Rerenga Wairua is also an iconic place for all New Zealanders, with historical, geographical and environmental significance. Multitudes of visitors come to Te Rerenga Wairua, attracted by the wild beauty of its lands, seas and sky.

Under Te Tiriti settlement, the Te Rerenga Wairua redress was created to protect the spiritual and cultural integrity of Te Rerenga Wairua Reserve by providing for certain key decisions to be made jointly by Ngāti Kuri, Te Aupōuri, Ngāi Takoto and the Crown, taking into account the view of the other kaitiaki iwi of Te Hiku o Te Ika-a-Māui.

As Te Rerenga Wairua Historic Reserve is owned by Ngāti Kuri and sits outside Te Korowai lands and waters, Te Hiku CMS does not manage decisions in this area. Refer to Figure A15.2.

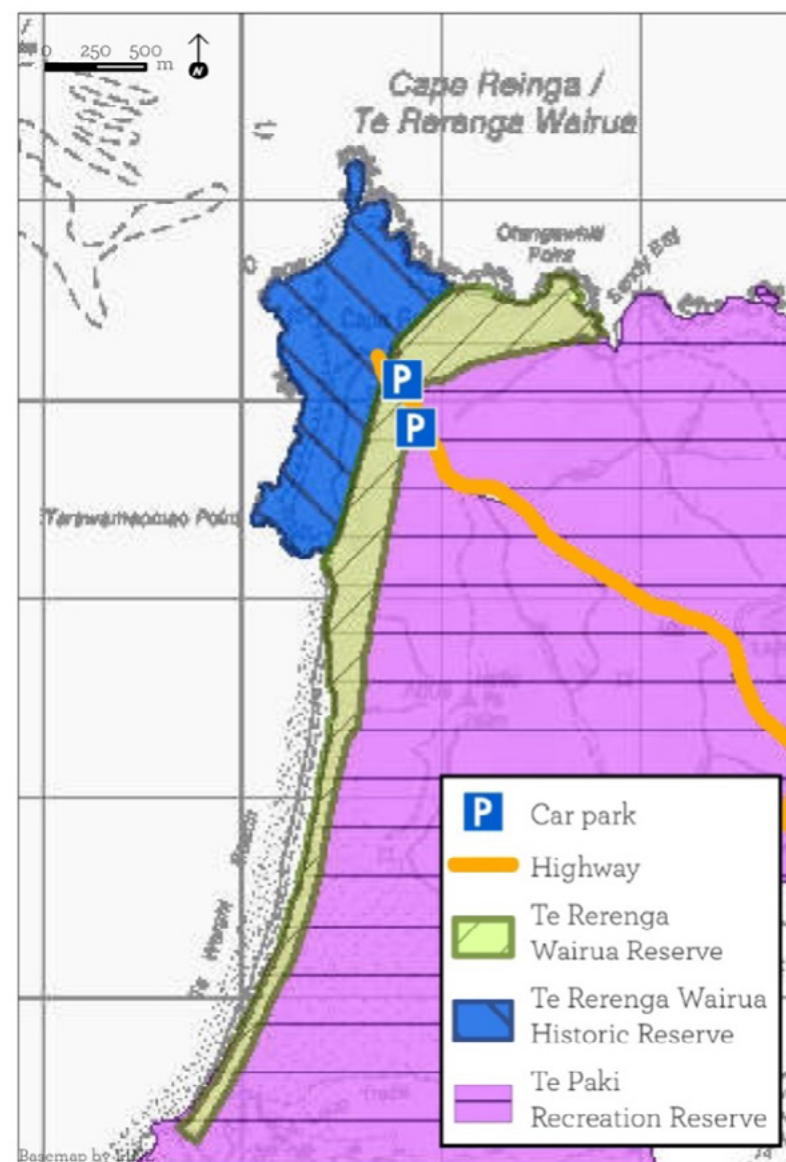


Figure A15.2: Relationship between Te Rerenga Wairua Historic Reserve, Te Rerenga Wairua Reserve and Te Paki Recreation Reserve

