

TE HIKU 2024, VOLUME II - APPENDICES

# Draft Te Hiku o Te Ika-a-Māui Conservation Management Strategy



Department of  
Conservation  
*Te Papa Atawhai*



TE RARAWA



TE AUPŌURI



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# Appendix 1

## Te Tiriti o Waitangi relationships in *Te Korowai*

IWI	DOCUMENTS
Ngāti Kuri	<p>Ngāti Kuri Deed of Settlement documents: <a href="http://www.tearawhiti.govt.nz/te-kahui-whakatau-treaty-settlements/find-a-treaty-settlement/ngati-kuri/">www.tearawhiti.govt.nz/te-kahui-whakatau-treaty-settlements/find-a-treaty-settlement/ngati-kuri/</a></p> <p>Ngāti Kuri Claims Settlement Act 2015: <a href="http://www.legislation.govt.nz/act/public/2015/0076/latest/DLM6055877.html">www.legislation.govt.nz/act/public/2015/0076/latest/DLM6055877.html</a></p> <p>Ngāti Kuri Pou Taiao – Environmental Management Plan (2018): <a href="http://www.nrc.govt.nz/media/ehjdfj3f/ngati-kuri-environmental-management-plan-2018.pdf">www.nrc.govt.nz/media/ehjdfj3f/ngati-kuri-environmental-management-plan-2018.pdf</a></p> <p>Statutory Acknowledgements that interact with Te Korowai lands and waters:</p> <ul style="list-style-type: none"><li>• Motuopao Island;</li><li>• Manawatāwhi/Three Kings Islands; and</li><li>• Paxton Point Conservation Area (including Rarawa Beach campground).</li></ul> <p>See: <a href="http://www.legislation.govt.nz/act/public/2015/0076/latest/DLM6058613.html">www.legislation.govt.nz/act/public/2015/0076/latest/DLM6058613.html</a></p>
Te Aupōuri	<p>Te Aupōuri Deed of Settlement documents: <a href="http://www.tearawhiti.govt.nz/te-kahui-whakatau-treaty-settlements/find-a-treaty-settlement/te-aupouri/">www.tearawhiti.govt.nz/te-kahui-whakatau-treaty-settlements/find-a-treaty-settlement/te-aupouri/</a></p> <p>Te Aupouri Claims Settlement Act 2015: <a href="http://www.legislation.govt.nz/act/public/2015/0077/latest/DLM6576303.html">www.legislation.govt.nz/act/public/2015/0077/latest/DLM6576303.html</a></p> <p>Ngā Tai e Rua o Te Aupōuri Environmental Management Plan (2018) (copy available on request from Te Aupōuri).</p> <p>Statutory Acknowledgements that interact with Te Korowai lands and waters include:</p> <ul style="list-style-type: none"><li>• Manawatāwhi/Three Kings Islands;</li><li>• Simmonds Islands;</li><li>• Paxton Point Conservation Area (including Rarawa Beach campground<sup>1</sup>);</li></ul>

<sup>1</sup> Treaty settlements refer to the ‘Rarawa Beach campground’, but it is more commonly known as Rarawa Beach Campsite. Therefore, the latter name is used throughout this CMS.

Appendix 1 table continued

IWI	DOCUMENTS
NgāiTakoto	<ul style="list-style-type: none"><li>• Kohuronaki Pā; and</li><li>• North Cape Scientific Reserve.</li><li>• See: <a href="http://www.legislation.govt.nz/act/public/2015/0077/latest/DLM6577071.html">www.legislation.govt.nz/act/public/2015/0077/latest/DLM6577071.html</a></li></ul> <p>NgāiTakoto Deed of Settlement documents: <a href="http://www.tearawhiti.govt.nz/te-kahui-whakatau-treaty-settlements/find-a-treaty-settlement/ngaitakoto/">www.tearawhiti.govt.nz/te-kahui-whakatau-treaty-settlements/find-a-treaty-settlement/ngaitakoto/</a></p> <p>NgāiTakoto Claims Settlement Act 2015: <a href="http://www.legislation.govt.nz/act/public/2015/0078/latest/DLM6578446.html">www.legislation.govt.nz/act/public/2015/0078/latest/DLM6578446.html</a></p> <p>Te Iwi o NgāiTakoto Environmental Plan (2017): <a href="http://www.nrc.govt.nz/media/s0ggf4nc/ngaitakoto-iwi-environmental-plan-r.pdf">www.nrc.govt.nz/media/s0ggf4nc/ngaitakoto-iwi-environmental-plan-r.pdf</a></p> <p>Statutory Acknowledgements that interact with Te Korowai lands and waters include:</p> <ul style="list-style-type: none"><li>• Lake Rotoroa;</li><li>• Wai Te Huahua/Lake Heather;</li><li>• Lake Waikaramu;</li><li>• Kowhai Beach;</li><li>• Rarawa Beach campground;</li><li>• Southern part of Waipapakauri Conservation Area; and</li><li>• Lake Ngatu Recreation Reserve.</li></ul> <p>See: <a href="http://www.legislation.govt.nz/act/public/2015/0078/latest/DLM6579010.html">www.legislation.govt.nz/act/public/2015/0078/latest/DLM6579010.html</a></p>

Continued on next page

IWI	DOCUMENTS
Te Rarawa	<p>Te Rarawa Deed of Settlement documents: <a href="http://www.tearawhiti.govt.nz/te-kahui-whakatau-treaty-settlements/find-a-treaty-settlement/te-rarawa/">www.tearawhiti.govt.nz/te-kahui-whakatau-treaty-settlements/find-a-treaty-settlement/te-rarawa/</a></p> <p>Te Rarawa Claims Settlement Act 2015: <a href="http://www.legislation.govt.nz/act/public/2015/0079/latest/DLM6577219.html/">www.legislation.govt.nz/act/public/2015/0079/latest/DLM6577219.html/</a></p> <p>Ahipara Takiwā Environmental Management Plan (2019): <a href="http://www.terarawa.iwi.nz/publications/Ahipara-Environmental-Management-Plan">www.terarawa.iwi.nz/publications/Ahipara-Environmental-Management-Plan</a></p>
General	<p>Statutory Acknowledgements that interact with Te Korowai lands and waters include:</p> <ul style="list-style-type: none"><li>• Herekino Harbour;</li><li>• Whangapē Harbour;</li><li>• Awaroa River;</li><li>• Te Tai Hauāuru coastal marine area;</li><li>• Tauroa Peninsula; and</li><li>• Wairoa Stream.</li></ul> <p>See: <a href="http://www.legislation.govt.nz/act/public/2015/0079/latest/DLM6578217.html">www.legislation.govt.nz/act/public/2015/0079/latest/DLM6578217.html</a></p> <p>Korowai for Enhanced Conservation Relationship Agreement: <a href="http://www.govt.nz/assets/Documents/OTS/NgaiTakoto/NgaiTakoto-Te-Hiku-Conservation-Relationship-Agreement-9-Dec-2015.pdf">www.govt.nz/assets/Documents/OTS/NgaiTakoto/NgaiTakoto-Te-Hiku-Conservation-Relationship-Agreement-9-Dec-2015.pdf</a></p>

## 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).<sup>2</sup> It does not exclude the need to meet all Department of Conservation Te Papa Atawhai (Te Papa Atawhai) requirements for the assessment of effects or other responsibilities under the RMA or other legislation (eg Building Act 2004,<sup>3</sup> Heritage New Zealand Pouhere Taonga Act 2014<sup>4</sup>). 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.<sup>5</sup> 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.

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

3 Building Act 2004: [www.legislation.govt.nz/act/public/2004/0072/latest/DLM306036.html](http://www.legislation.govt.nz/act/public/2004/0072/latest/DLM306036.html)

4 Heritage New Zealand Pouhere Taonga Act 2014: [www.legislation.govt.nz/act/public/2014/0026/latest/DLM4005414.html](http://www.legislation.govt.nz/act/public/2014/0026/latest/DLM4005414.html)

5 SNZ HB 8630:2004: [www.standards.govt.nz/shop/snz-hb-86302004](http://www.standards.govt.nz/shop/snz-hb-86302004)



ACTIVITY SCOPE	MANAGEMENT ACTIONS	ENVIRONMENTAL IMPACTS	LOCATION
<b>Tracks, roads and car parking areas for visitor purposes</b>			
<ol style="list-style-type: none"> <li>Upgrade of existing tracks and roads to meet current Te Papa Atawhai service standards using current alignment.</li> <li>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.</li> <li>Construction of new tracks as agreed in consultation with the community.</li> <li>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.</li> </ol>	<ol style="list-style-type: none"> <li>Construction of tracks and roads using cut and fill excavation, cut to waste excavation, and levelling with hand tools, motorised equipment and machinery.</li> <li>Excavation of batter slopes to a maximum height of 1.5 m.</li> <li>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.</li> <li>Application of aggregate surfacing, including the placement and compaction of local and imported materials (from approved pest-plant-free sources).</li> <li>Use of local materials in the vicinity of the asset corridor for filling/ surfacing where necessary.</li> <li>Ground works of in-ground timber steps, including formation and levelling, drainage, and timber construction.</li> </ol>	<ol style="list-style-type: none"> <li>Soil disturbance, including disturbance of the duff layer and subsoil, and soil disturbance and compaction in fill areas.</li> <li>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.</li> <li>Alterations to land contours and slopes during track construction and upgrade.</li> <li>Removal of vegetation from track corridors and areas immediately adjacent to asset corridors.</li> <li>Disturbance of archaeological and historic features, including historic botanicals, on or in the immediate vicinity of the track or road.</li> </ol>	<p><i>Existing tracks, roads and car parks</i></p> <ul style="list-style-type: none"> <li>• Cape Reinga/Te Rerenga Wairua to Tapotupotu/Taputaputa track</li> <li>• Herekino Forest tracks (x2)</li> <li>• Hukatere walk</li> <li>• Kaitaia Walkway</li> <li>• Kaitaia Walkway to Diggers Valley Road</li> <li>• The area of the Kapowairua (Spirits Bay) Campsite on Te Korowai lands and waters</li> <li>• Lake Ngatu amenity area/ car park</li> <li>• Lake Ngatu Track</li> <li>• Mangamuka basic camp and amenity areas (x2)</li> <li>• Mangamuka Gorge Walkway/ Microwave Track</li> <li>• North Cape Road</li> <li>• Pandora access car park</li> <li>• Rarawa Beach Walk</li> <li>• Within Rarawa Beach Campsite</li> <li>• Spirits Bay Road</li> <li>• Sweetwaters access track</li> <li>• Within Tapotupotu/ Taputaputa Campsite</li> </ul>



ACTIVITY SCOPE	MANAGEMENT ACTIONS	ENVIRONMENTAL IMPACTS	LOCATION
	<ol style="list-style-type: none"> <li>7. 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.</li> <li>8. Re-formation and widening of roads to provide safe access for two vehicles and road stability to the required standards.</li> <li>9. Improvement of drainage to prevent erosion and deterioration of the road surface and structure, and to provide safe vehicle access.</li> <li>10. Maintenance of historic heritage features associated with the track or road to ensure that they are not adversely impacted.</li> </ol>		<ul style="list-style-type: none"> <li>• Tapotupotu / Taputaputa Road / amenity area</li> <li>• Tapotupotu / Taputaputa – Spirits Bay tracks</li> <li>• Te Paki Stream Road</li> <li>• Te Paki Stream Road State Highway 1 site</li> <li>• Te Paki Trig roads</li> <li>• The section of Te Werahi Beach Track on Te Korowai lands and waters</li> <li>• The section of the Twilight / Te Werahi Loop Track on Te Korowai lands and waters</li> <li>• Waitiki Information Shelter and amenity area</li> <li>• Warawara Track</li> </ul>
<b>Structures<sup>6</sup> and buildings for visitor purposes</b>			
<ol style="list-style-type: none"> <li>1. 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.</li> </ol>	<ol style="list-style-type: none"> <li>1. Preparatory site works such as vegetation removal, formation and levelling of structure and building footprints, and excavation of piles and footings.</li> <li>2. Works associated with water reticulation and sewage containment/treatment.</li> </ol>	<ol style="list-style-type: none"> <li>1. Soil disturbance, including disturbance of the duff layer and subsoil, and soil disturbance and compaction in fill areas.</li> </ol>	<p><i>Existing structures and buildings</i></p> <ul style="list-style-type: none"> <li>• Kaitaia Walkway</li> <li>• The area of the Kapowairua (Spirits Bay) Campsite on Te Korowai lands and waters</li> <li>• Lake Ngatu amenity area / car park</li> <li>• Lake Ngatu Track</li> </ul>

<sup>6</sup> 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
<p>2. Scheduled 'like for like' (substantially similar structures 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.</p> <p>3. Construction of new structures and buildings that are required to meet service standards for existing tracks, roads, amenity areas and campsites.</p> <p>4. Construction of new structures and buildings as a component of development work for new tracks, roads, amenity areas and campsites.</p> <p>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.</p>	<p>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.</p> <p>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.</p> <p>5. Maintenance of historic heritage features associated with the structure or building to ensure that their integrity is not adversely impacted.</p>	<p>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.</p> <p>3. Alterations to land contours and slopes during construction and upgrade.</p> <p>4. Removal of vegetation from structure and building footprints and their immediate surroundings.</p> <p>5. Aesthetic impacts and altered sight lines from artificial structures in natural areas.</p> <p>6. Disturbance of archaeological and historic features, including historic botanicals, and aesthetic impacts on historical landscapes.</p>	<ul style="list-style-type: none"> <li>• Mangamuka basic camp and amenity areas (x2)</li> <li>• North Cape Road</li> <li>• Rarawa Beach Walk</li> <li>• Rarawa Beach Campsite</li> <li>• Scott Point to Twilight Beach track</li> <li>• Spirits Bay Road</li> <li>• Sweetwaters access track</li> <li>• Tapotupotu/Taputaputa – Spirits Bay tracks</li> <li>• Taputaputa Campground</li> <li>• Tapotupotu/Taputaputa Road/ amenity area</li> <li>• Te Paki Stream Road</li> <li>• The section of the Te Werahi Beach Track on Te Korowai lands and waters</li> <li>• The section of the Twilight/ Te Werahi Loop Track on Te Korowai lands and waters</li> <li>• Warawara Track</li> </ul>

ACTIVITY SCOPE	MANAGEMENT ACTIONS	ENVIRONMENTAL IMPACTS	LOCATION
<b>Campsites and amenities for visitor purposes</b>			
<ol style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>3. Construction of new campgrounds and amenities required to meet service standards for existing campgrounds and amenity areas.</li> <li>4. Construction of new assets such as structures and buildings as a component of development work for new campgrounds and amenity areas.</li> </ol>	<ol style="list-style-type: none"> <li>1. Preparatory site works such as vegetation removal, formation and levelling of the campground and amenity footprint, and excavation of piles and footings.</li> <li>2. Works associated with water reticulation and sewage containment/treatment, including effluent dispersal fields and in-ground waste tanks.</li> <li>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.</li> <li>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.</li> </ol>	<ol style="list-style-type: none"> <li>1. Soil disturbance, including disturbance of the duff layer and subsoil, and soil disturbance and compaction in fill areas.</li> <li>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 (eg scoria) may be imported.</li> <li>3. Alterations to land contours and slopes during campsite/amenity construction.</li> <li>4. Removal of vegetation from asset footprints and areas immediately around campsites and amenities.</li> <li>5. Aesthetic impacts and altered sight lines from artificial structures in natural areas.</li> <li>6. Noise from increased usage of campsites and amenities.</li> <li>7. Increased water take for the operation of campsites and amenities.</li> </ol>	<p><i>Existing campsites and amenities</i></p> <ul style="list-style-type: none"> <li>• Herekino Forest tracks</li> <li>• Kaitaia Walkway</li> <li>• The area of the Kapowairua (Spirits Bay) Campsite on Te Korowai lands and waters</li> <li>• Lake Ngatu amenity area/ car park</li> <li>• Lake Ngatu Track</li> <li>• Mangamuka basic camp and amenity areas</li> <li>• Pandora access car park</li> <li>• Rarawa Beach Campsite</li> <li>• Tapotupotu/Taputaputa – Spirits Bay tracks</li> <li>• Tapotupotu/Taputaputa Campsite</li> <li>• Tapotupotu/Taputaputa Road and amenity area</li> <li>• Te Paki Stream Road</li> <li>• Te Paki Stream Road State Highway 1 site</li> <li>• The section of the Twilight/ Te Werahi Loop Track on Te Korowai lands and waters</li> <li>• Waitiki Information Site and amenity area</li> </ul>

Continued on next page

ACTIVITY SCOPE	MANAGEMENT ACTIONS	ENVIRONMENTAL IMPACTS	LOCATION
<p>5. Improvements to any existing asset or establishment of new assets as considered necessary to manage, meet regulatory requirements for, and/or mitigate, any environmental impact or health and safety concern, or to provide improved access for any management purpose.</p>		<p>8. Disturbance of archaeological and historic features, including historic botanicals, on or in the immediate vicinity of the campsite or amenity.</p>	
<p><b>Historic assets – remedial work and maintenance</b></p>			
<p>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</p> <p>2. Stabilisation of the condition of historic assets through conservation treatments and land stabilisation (eg construction of retaining walls).</p>	<p>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.</p> <p>2. Repairs and conservation treatments to concrete, masonry, metal, timber and earthwork structures as scheduled.</p> <p>3. Maintenance of historic heritage features, including historic botanicals, associated with the historic asset to ensure that they are not adversely impacted.</p>	<p>1. Minor soil disturbance of the duff layer and subsoil, and soil disturbance and compaction in fill areas.</p> <p>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.</p> <p>3. Removal of vegetation from assets and their immediate vicinities.</p>	<ul style="list-style-type: none"> <li>• Kohukohu Historic Reserve</li> <li>• Motuopao Island Nature Reserve</li> <li>• Muiata Pa Historic Reserve</li> <li>• Te Paki Recreation Reserve</li> <li>• Tauroa Point Stewardship Area</li> </ul>

ACTIVITY SCOPE	MANAGEMENT ACTIONS	ENVIRONMENTAL IMPACTS	LOCATION
<b>Signs</b>			
<ol style="list-style-type: none"> <li>Erection of signage on or within close proximity to public conservation land to provide information and interpretation to the public.</li> <li>Erection of signage on and off public conservation lands and waters to inform people about fire lighting restrictions.</li> </ol>	<ol style="list-style-type: none"> <li>Works associated with the erection of signage.</li> </ol>	<ol style="list-style-type: none"> <li>Aesthetic impacts from artificial structures in natural areas.</li> <li>Removal of vegetation from sign footprints and their immediate vicinities.</li> </ol>	<ul style="list-style-type: none"> <li>All Te Korowai lands and waters</li> <li>Other land within 1 km of Te Korowai lands and waters for fire purposes or where permission has been given by the landowner</li> </ul>
<b>Tracks, roads and facilities used for management purposes (including staff accommodation and wardens' quarters)</b>			
<ol style="list-style-type: none"> <li>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.</li> </ol>	<ol style="list-style-type: none"> <li>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.</li> <li>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.</li> </ol>	<ol style="list-style-type: none"> <li>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.</li> </ol>	<ul style="list-style-type: none"> <li>All Te Korowai lands and waters where conservation management programmes are being undertaken</li> </ul>

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ACTIVITY SCOPE	MANAGEMENT ACTIONS	ENVIRONMENTAL IMPACTS	LOCATION
<b>Other management-related activities</b>			
<ol style="list-style-type: none"> <li>1. Erection of fences on and along the boundaries of public conservation lands and waters.</li> <li>2. Enhancement of habitat.</li> <li>3. Control and/or eradication of pests.</li> <li>4. Fire management, including construction of airstrips for fire-fighting purposes.</li> </ol>	<ol style="list-style-type: none"> <li>1. Removal of vegetation to provide clear lines for fences.</li> <li>2. Some animal pest operations. (Note: Discharge permits will be required for operations utilising pesticides.)</li> </ol>	<ol style="list-style-type: none"> <li>1. Vegetation removal.</li> <li>2. Soil disturbance, including disturbance of the duff layer and subsoil.</li> <li>3. Death and likely eradication of target mammalian pests, and possible death of non-target species.</li> </ol>	<ul style="list-style-type: none"> <li>• All Te Korowai land where conservation programmes are being undertaken</li> <li>• Other land not managed by Te Papa Atawhai where permission has been given by the landowner</li> </ul>
<b>Hazardous goods</b>			
<ol style="list-style-type: none"> <li>1. Use, transportation, storage and disposal of hazardous substances.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use, storage and transportation of hazardous substances including, but not limited to, flammable liquids, pesticides, herbicides and treated timbers.</li> </ol>	<ol style="list-style-type: none"> <li>1. Will comply with all relevant legislative requirements.</li> </ol>	<ul style="list-style-type: none"> <li>• All Te Korowai lands and waters in Te Hiku where conservation programmes are being undertaken</li> <li>• Other land not managed by Te Papa Atawhai where permission has been given by the landowner</li> </ul>

# Appendix 3

## Important ecosystems and habitats within Te Korowai

The following information has been obtained from the Department of Conservation Te Papa Atawhai (Te Papa Atawhai) national list of around 1000 terrestrial and freshwater ecosystem units, which represent the full range of terrestrial and freshwater ecosystems in Aotearoa New Zealand (Aotearoa), 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 the Te Hiku o Te Ika-a-Māui Conservation Management Strategy (Te Hiku CMS). They 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 the Te Hiku CMS, in accordance with section 171 of the Conservation Act 1987.<sup>7</sup> 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 <sup>8</sup>	<ul style="list-style-type: none"> <li>Pōhutukawa (<i>Metrosideros excelsa</i>), Surville Cliffs</li> <li>tānekaha (<i>Phyllocladus</i> aff. <i>trichomanoides</i>), Surville Cliffs houpara (<i>Pseudopanax lessonii</i>) forest and shrubland</li> </ul>	Only found at Otou/ North Cape. A unique, nationally significant community supporting many site-dependent Threatened and At Risk plant and animal species	<ul style="list-style-type: none"> <li>Biosecurity of pest plants and animals</li> <li>Fire<sup>9</sup></li> </ul>	Te Korowai lands and waters	<ul style="list-style-type: none"> <li>Plant and animal pest control</li> <li>Biosecurity surveillance</li> <li>Fire risk management</li> </ul>

*Continued on next page*

<sup>7</sup> Conservation Act 1987, section 171: [www.legislation.govt.nz/act/public/1987/0065/latest/DLM104615.html](http://www.legislation.govt.nz/act/public/1987/0065/latest/DLM104615.html)

<sup>8</sup> 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.

<sup>9</sup> 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.



ECOSYSTEM / HABITAT TYPE	DESCRIPTION	SIGNIFICANT VALUES	PRESSURES / THREATS	ADMINISTRATIVE STATUS	MANAGEMENT RESPONSES
	<ul style="list-style-type: none"> <li>• Mānuka/kahikātoa (<i>Leptospermum scoparium</i> var. <i>incanum</i>, <i>L. scoparium</i> aff. var. <i>incanum</i> and <i>L. aff. scoparium</i>) and <i>Veronica punicea</i> shrubland</li> <li>• Fountain sedge (<i>Lepidosperma neozelandicum</i>) and stabber sedge (<i>Schoenus brevifolius</i>) sedgeland</li> <li>• Serpentine plateau shrubland</li> <li>• Badlands and lichenfield-rockland</li> <li>• Ultramafic sea cliff</li> </ul>				
Dunes	<ul style="list-style-type: none"> <li>• Windform lakes</li> <li>• Submerged charophyte communities</li> <li>• Dunefields, including mobile sandfields, dune slacks/swales and ablation plains</li> </ul>	Includes a chain of dune lakes at Aupouri which 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	<ul style="list-style-type: none"> <li>• Plant and animal pest control</li> <li>• Biosecurity surveillance</li> <li>• Advocacy and consultation</li> </ul>

Appendix 3 table continued

ECOSYSTEM / HABITAT TYPE	DESCRIPTION	SIGNIFICANT VALUES	PRESSURES / THREATS	ADMINISTRATIVE STATUS	MANAGEMENT RESPONSES
Dune vegetation	<ul style="list-style-type: none"> <li>Spinifex (<i>Spinifex</i> spp.), pīngao (<i>Ficinia spiralis</i>) grassland/sedgeland</li> <li>Pīngao sedgeland</li> <li>Oioi (<i>Apodasmia similis</i>), wīwī/knobby clubrush (<i>Ficinia nodosa</i>) sedgeland</li> <li>Tawa (<i>Beilschmiedia tawa</i>) and tōwai (<i>Weinmannia silvicola</i>) podocarp forest</li> </ul>	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, and human impacts and pressures	Te Korowai lands and waters, land administered by local authorities, and private land	<ul style="list-style-type: none"> <li>Plant and animal pest control in some areas</li> <li>Foredune rehabilitation in some areas</li> <li>Biosecurity surveillance and management</li> <li>Advocacy and consultation</li> </ul>
Forest of warm climates	<ul style="list-style-type: none"> <li>Rimu (<i>Dacrydium cupressinum</i>), taraire (<i>Beilschmiedia tarairi</i>), tawa forest</li> <li>Kauri (<i>Agathis australis</i>) forest</li> <li>Kauri, podocarp, broadleaved forest</li> <li>Kauri-tawa, kohekohe (<i>Didymocheton spectabilis</i>), mangeao (<i>Litsea calicaris</i>), podocarp, broadleaved forest</li> </ul>	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, and human impacts and pressures, particularly in coastal and lowland environments	Te Korowai lands and waters, land administered by local authorities, and private land	<ul style="list-style-type: none"> <li>Plant and animal pest control</li> <li>Biosecurity surveillance and management</li> <li>Advocacy and consultation, including supporting the legal protection of highest priority sites on private land</li> </ul>

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ECOSYSTEM / HABITAT TYPE	DESCRIPTION	SIGNIFICANT VALUES	PRESSURES / THREATS	ADMINISTRATIVE STATUS	MANAGEMENT RESPONSES
	<ul style="list-style-type: none"> <li>• Pōhutukawa, pūriri (<i>Vitex lucens</i>), karaka (<i>Corynocarpus laevigatus</i>), broadleaved forest</li> <li>• Tōtara (<i>Podocarpus totara</i>), broadleaved forest</li> <li>• Towai (<i>Pterophylla silvicola</i>), maire tawake/swamp maire (<i>Syzygium maire</i>), kahikatea (<i>Dacrycarpus dacrydioides</i>), pukatea (<i>Laurelia novae-zelandiae</i>) forest</li> </ul>				
Saline communities	<ul style="list-style-type: none"> <li>• Mānawa/mangrove (<i>Avicennia marina</i> subsp. <i>australasica</i>) forest and shrubland</li> <li>• Ice plant (<i>Disphyma australe</i>), ureure/glasswort (<i>Salicornia quinqueflora</i>) herbfield/loamfield</li> </ul>	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	<ul style="list-style-type: none"> <li>• Plant and animal pest control</li> <li>• Biosecurity surveillance</li> <li>• Advocacy and consultation</li> </ul>

ECOSYSTEM / HABITAT TYPE	DESCRIPTION	SIGNIFICANT VALUES	PRESSURES / THREATS	ADMINISTRATIVE STATUS	MANAGEMENT RESPONSES
Wetlands	<ul style="list-style-type: none"> <li>• Gumland</li> <li>• Mānuka/kahikātoa (<i>Leptospermum scoparium</i> var. <i>scoparium</i>, <i>L. scoparium</i> var. <i>incanum</i> and <i>L. aff. scoparium</i> (a) (Auckland)) and <i>Machaerina</i> shrubland/sedgeland</li> <li>• Oioi sedgeland</li> <li>• <i>Machaerina</i> sedgeland</li> <li>• Mānuka/kahikātoa and waewae kākā/tanglefern (<i>Gleichenia</i> spp.) shrubland/fernland</li> <li>• Lakeshore turf herbfield.</li> <li>• Harakeke (<i>Phormium tenax</i>) flaxland</li> <li>• Raupō (<i>Typha orientalis</i>) reedland</li> <li>• Mānuka/kahikātoa, wire rush (<i>Empodisma minus</i>) restiad reedland</li> </ul>	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 Kaimaumu and the Ahipara Gumfields. Supports several Threatened and At Risk plants and birds	<ul style="list-style-type: none"> <li>• Biosecurity of pest plants and animals</li> <li>• Fire<sup>10</sup></li> </ul>	Te Korowai lands and waters, and private land	<ul style="list-style-type: none"> <li>• Plant and animal pest control</li> <li>• Biosecurity surveillance and management</li> <li>• Advocacy and consultation</li> <li>• Fire risk management</li> </ul>

<sup>10</sup> 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, fires are 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) <sup>11</sup>	MAMMALIAN PESTS	ISSUES
<b>Manawatāwhi/Three Kings Islands</b> <ul style="list-style-type: none"> <li>• Manawatāwhi/Great Island</li> <li>• Oromaki/North East Island</li> <li>• Princes Islands</li> <li>• Moekawa/South West Island</li> <li>• Ōhau/West Island</li> </ul>	Nature Reserve	Minimum Impact	Nil	Unauthorised landings, weed control
<b>Motuopao Island</b> <ul style="list-style-type: none"> <li>• Motuopao Island</li> </ul>	Nature Reserve	Ecosystem Restoration	Nil	Unauthorised landings, weed control
<b>Simmonds Islands</b> <ul style="list-style-type: none"> <li>• Motu Puruhi Island</li> <li>• Terakautuhaka Island</li> </ul>	Nature Reserve	Ecosystem Restoration	Nil	Unauthorised landings, weed control

<sup>11</sup> 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 (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 the 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 (Te Papa Atawhai) national list of around 1000 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 (Aotearoa) 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 the Te Hiku o Te Ika-a-Māui Conservation Management Strategy (Te Hiku CMS). Its contents may be amended or reviewed during the term of the Te Hiku CMS.

NAME OF ECOSYSTEM UNIT	PREDOMINANT ECOSYSTEM HABITAT TYPES INCLUDED WITHIN THE UNIT	ADMINISTRATIVE STATUS	AREA (ha)
Ahipara	<ul style="list-style-type: none"> <li>Gumland</li> <li>Mānuka/kahikātoa (<i>Leptospermum scoparium</i>), broad-leaved mingimingi (<i>Leucopogon fasciculatus</i>), prickly mingimingi (<i>Leptecophylla juniperina</i>) and <i>Machaerina</i> shrubland/sedgeland</li> <li>Tōtara (<i>Podocarpus totara</i>), broadleaved forest</li> </ul>	Historic Reserve and Conservation Area	3566.6
Kokota Spit & Great Exhibition Bay	<ul style="list-style-type: none"> <li>Windform lakes</li> <li>Dunefields, including mobile sandfields, dune slacks/swales and ablation plains</li> <li>Gumland wetlands</li> </ul>	Conservation Area	362.4
Lake Rotoroa	<ul style="list-style-type: none"> <li>Windform-A</li> <li>Submerged charophyte communities</li> </ul>	Conservation Area and Scenic Reserve	81.8
Manganuiowae–Raetia	<ul style="list-style-type: none"> <li>Rimu (<i>Dacrydium cupressinum</i>), taraire (<i>Beilschmiedia tarairi</i>), tawa (<i>Beilschmiedia tawa</i>) forest</li> </ul>	Conservation Park	1752.6
Kaimaumau–Motutangi	<ul style="list-style-type: none"> <li>Mānuka/kahikātoa, tanglefern (<i>Gleichenia</i> spp.) shrubland/fermland</li> <li>Gumland</li> <li>Mānuka/kahikātoa, broad-leaved mingimingi (<i>Leucopogon fasciculatus</i>), prickly mingimingi (<i>Leptecophylla juniperina</i>), <i>Machaerina</i> shrubland/sedgeland</li> </ul>	Conservation Area and Scientific Reserve	2495.2

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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 <sup>12</sup>	<ul style="list-style-type: none"> <li>• 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</li> <li>• Mānuka/kahikātoa (<i>Leptospermum scoparium</i> var. <i>incanum</i>, <i>L. scoparium</i> aff. var. <i>incanum</i> and <i>L.</i> aff. <i>scoparium</i>) and <i>Veronica punicea</i> shrubland</li> <li>• Fountain sedge (<i>Lepidosperma neozelandicum</i>) and stabber sedge (<i>Schoenus brevifolius</i>) sedgeland</li> <li>• Serpentine plateau shrubland</li> <li>• Badlands and lichenfield-rockland</li> <li>• Ultramafic sea cliff</li> </ul>	Scientific Reserve	686.3
Tapuwae	<ul style="list-style-type: none"> <li>• Rimu, taraire, tawa forest</li> </ul>	Scenic Reserve	208.6
Te Paki East	<ul style="list-style-type: none"> <li>• Pōhutukawa, pūriri (<i>Vitex lucens</i>), karaka (<i>Corynocarpus laevigatus</i>), broadleaved forest</li> <li>• Gumland</li> <li>• Mānuka/kahikātoa, mingimingi, <i>Machaerina</i> shrubland/sedgeland</li> <li>• Spinifex (<i>Spinifex</i> spp.), pīngao (<i>Ficinia spiralis</i>) grassland/sedgeland</li> </ul>	Scenic Reserve	1904.2
Te Paki West	<ul style="list-style-type: none"> <li>• Rimu, taraire, tawa forest</li> <li>• Kauri (<i>Agathis australis</i>), podocarp, broadleaved forest</li> <li>• Raupō (<i>Typha orientalis</i>) reedland</li> <li>• Spinifex (<i>Spinifex</i> spp.), pīngao (<i>Ficinia spiralis</i>) grassland/sedgeland</li> <li>• Oioi (<i>Apodasmia similis</i>), wīwī/knobby clubrush (<i>Ficinia nodosa</i>) sedgeland</li> </ul>	Recreation Reserve	14,488.4
Te Ramanuka/ Te Raumanuka	<ul style="list-style-type: none"> <li>• Tōtara, broadleaved forest</li> <li>• Mānuka/kahikātoa shrubland</li> <li>• Lakes and wetlands</li> </ul>	Conservation Area	228.1

<sup>12</sup> 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	<ul style="list-style-type: none"> <li>• Pōhutukawa, Manawatāwhi/Three Kings kānuka (<i>Kunzea triregensis</i>), broadleaved forest with local Three Kings tītoki (<i>Alectryon excelsus</i> subsp. <i>grandis</i>), pukānui (<i>Meryta sinclairii</i>) and Manawatāwhi/Three Kings rangiora (<i>Brachyglottis arborescens</i>)</li> <li>• Harakeke (<i>Phormium tenax</i>) flaxland and mānuka/kahikātoa (<i>Leptospermum</i> aff. <i>scoparium</i>) shrubland</li> </ul>	Nature Reserve	486.8
Warawara	<ul style="list-style-type: none"> <li>• Rimu, taraire, tawa forest</li> <li>• Kauri forest</li> <li>• Kauri, podocarp, broadleaved forest</li> <li>• Tōtara, pūriri forest</li> <li>• Kahikatea (<i>Dacrycarpus dacrydioides</i>), pukatea (<i>Laurelia novae-zelandiae</i>) forest</li> </ul>	Conservation Park	6884.5

## Appendix 6

### Threats, pests and wild animals within *Te Korowai*

The management of threats, pests and wild animals<sup>13</sup> 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 the 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
<b>Birds</b>				
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
Australian magpie <i>Gymnorhina tibicen</i>	Widespread	Competes with native species for food and nesting sites	Nil	No action

<sup>13</sup> 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
<b>Freshwater fishes</b>				
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
Rudd <i>Scardinius erythrophthalmus</i>	Widespread	Predates on and competes with native species	Nil	No action
<b>Invertebrates</b>				
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	<ul style="list-style-type: none"> <li>• Continue surveillance at offices and key sites as per management and advocacy strategy</li> <li>• Keep 'holding the line' at Te Paki Recreation Reserve to minimise the chances of establishment in the forest remnants</li> </ul>

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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
Darwin's ant <i>Doleromyrma darwiniana</i>	Common around human habitation and expanding	Competes with native species for food resources (nectar/fruits/invertebrates) and predated on native species	Limited to scheduled surveillance and advice to public; very limited treatment areas	<ul style="list-style-type: none"> <li>• Aupōuri Peninsula and Te Paki Recreation Reserve plus outlying islands</li> <li>• Surveillance only occurs during key site monitoring for invasive ants, as for Argentine ants</li> </ul>
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	<ul style="list-style-type: none"> <li>• Near huts, tracks and campgrounds</li> <li>• Where wasp numbers are high, potentially control (Vespex®) in forest remnants</li> </ul>
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	<ul style="list-style-type: none"> <li>• Near huts, tracks and campgrounds</li> <li>• Where wasp numbers are high, potentially control (Vespex®) in forest remnants</li> </ul>
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 Paki Recreation Reserve

Table A6.1 Terrestrial and freshwater animal pests continued

COMMON AND SCIENTIFIC NAMES	DISTRIBUTION	PRESSURES / THREATS	MANAGEMENT RESPONSE	PRIORITY PLACES FOR ACTION
<b>Mammalian pests</b>				
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, Otou/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	<ul style="list-style-type: none"> <li>• 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)</li> <li>• Maintain pig-proof fences/enclosures at Otou/North Cape and Warawara Forest</li> </ul>
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, Otou/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)

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 Recreational 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
<b>Reptiles</b>				
Rainbow skink <i>Lampropholis delicata</i>	Limited but expanding	Competes for food and niches 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 (MPI) 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, Otou/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
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
Boneseed <i>Chrysanthemoides monilifera</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

Table A6.2 Terrestrial and freshwater plant pests continued

COMMON AND SCIENTIFIC NAMES	DISTRIBUTION	PRESSURES / THREATS	MANAGEMENT RESPONSE	PRIORITY PLACES FOR ACTION
Brush wattle <i>Paraserianthes lophantha</i>	Widespread	Dominates shrublands	Managed at sites with control programmes	Kaimaumu (East Beach Conservation Area, Kaimaumu Scientific Reserve and Waikaramu Lake Conservation Area), Otou/ North Cape Scientific Reserve and Te Paki Recreation Reserve
Bulbil watsonia <i>Watsonia meriana</i> 'Bulbillifera'	Widespread	Dominates groundcover	Managed at sites with control programmes	Kaimaumu (East Beach Conservation Area, Kaimaumu 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	
Climbing asparagus <i>Asparagus scandens</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)
Coastal banksia <i>Banksia integrifolia</i>	Widespread	Dominates open sites	Managed at sites with control programmes	Kaimaumu (East Beach Conservation Area, Kaimaumu Scientific Reserve and Waikaramu Lake Conservation Area)
Coral tree <i>Erythrina × sykesii</i>	Widespread	Dominates forest canopy	Managed at sites with control programmes	Te Paki Recreation Reserve
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

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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
Heather <i>Calluna vulgaris</i>	Limited sites	Dominates shrublands	Managed at sites with control programmes	Kaimaumau (East Beach Conservation Area, Kaimaumau 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	Kaimaumau (East Beach Conservation Area, Kaimaumau 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>Crocsmia × 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	Kaimaumau (East Beach Conservation Area, Kaimaumau Scientific Reserve and Waikaramu Lake Conservation Area), Mokaikai Scenic Reserve and Otou/North Cape Scientific Reserve
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	Kaimaumau (East Beach Conservation Area, Kaimaumau Scientific Reserve and Waikaramu Lake Conservation Area), Mokaikai Scenic Reserve, Otou/North Cape Scientific Reserve and Te Paki Recreation Reserve

Table A6.2 Terrestrial and freshwater plant pests continued

COMMON AND SCIENTIFIC NAMES	DISTRIBUTION	PRESSURES / THREATS	MANAGEMENT RESPONSE	PRIORITY PLACES FOR ACTION
Pampas grass <i>Cortaderia selloana</i>	Widespread	Dominates disturbed sites, post-fire sites and heathlands/gumlands	<ul style="list-style-type: none"> <li>Managed at sites with control programmes</li> <li>Liaison with production foresters and those administering tree planting programmes</li> <li>Forms part of post-fire responses</li> </ul>	Mokaikai Scenic Reserve, Otou/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	<ul style="list-style-type: none"> <li>At sites with control programmes</li> <li>Liaison with production foresters and those administering tree planting programmes</li> <li>Forms part of post-fire responses</li> </ul>	Mokaikai Scenic Reserve, Otou/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	Kaimaumau (East Beach Conservation Area, Kaimaumau 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	Kaimaumau (East Beach Conservation Area, Kaimaumau Scientific Reserve and Waikaramu Lake Conservation Area)
Spartina <i>Spartina anglica</i>	Widespread	Dominates saltwater wetlands	Managed at sites with control programmes	All harbours and estuaries
Spartina hybrid <i>Spartina × townsendii</i>	Limited sites	Dominates saltwater wetlands	Managed at sites with control programmes	Rangaunu Harbour

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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
Sydney golden wattle <i>Acacia longifolia</i>	Widespread	Dominates forest canopy	Managed at sites with control programmes	Kaimaumu (East Beach Conservation Area, Kaimaumu Scientific Reserve and Waikaramu Lake Conservation Area), Otou/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	Kaimaumu (East Beach Conservation Area, Kaimaumu Scientific Reserve and Waikaramu Lake Conservation Area)
Wandering willie <i>Tradescantia fluminensis</i>	Widespread	Dominates groundcover	Managed at sites with control programmes	Kaimaumu (East Beach Conservation Area, Kaimaumu Scientific Reserve and Waikaramu Lake Conservation Area)
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
Spartina <i>Spartina</i> spp.	Widespread	Colonises mudflats; displaces wading birds	Eradication attempt underway	All <i>Te Korowai</i> harbours
Saltwater paspallum <i>Paspalum vaginatum</i>	Widespread	Colonises mudflats; displaces wading birds	Eradication	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 2016.<sup>14</sup>

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 (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.<sup>15</sup>

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 (Aotearoa). 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 the Te Hiku CMS.

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<sup>14</sup> Townsend, A.J.; de Lange, P.J.; Duffy, C.A.J.; Miskelly, C.M.; Molloy, J.; Norton, D.A. 2007: New Zealand Threat Classification System manual. Department of Conservation, Wellington. 35 p. [www.doc.govt.nz/about-us/science-publications/conservation-publications/nz-threat-classification-system/nz-threat-classification-system-manual-2008/](http://www.doc.govt.nz/about-us/science-publications/conservation-publications/nz-threat-classification-system/nz-threat-classification-system-manual-2008/)

<sup>15</sup> For a list of the New Zealand Threat Classification System status assessment reports, visit [www.doc.govt.nz/about-us/science-publications/conservation-publications/nz-threat-classification-system/](http://www.doc.govt.nz/about-us/science-publications/conservation-publications/nz-threat-classification-system/).

## A7.1 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 A7.1.1 List and status of vascular and non-vascular plants

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Fern	At Risk – Naturally Uncommon		<i>Asplenium</i> aff. <i>haurakiense</i> (b) (AK 280527; Three Kings Is.)	Northland	Endemic					
Fern	Non-resident Native – Vagrant	prickly rasp fern	<i>Doodia aspera</i>			Present				
Fern	At Risk – Naturally Uncommon		<i>Austroblechnum norfolkianum</i>		Present	Present				
Fern	At Risk – Naturally Uncommon	pātōtara, parsley fern	<i>Botrychium australe</i>			Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Fern	At Risk – Naturally Uncommon	christella	<i>Christella dentata</i>			Present	Present			
Fern	At Risk – Naturally Uncommon		<i>Cyathea</i> aff. <i>dealbata</i> (a) (WELT P027464; Te Paki)	Te Hiku		Present		Present	Present	Presence unknown
Fern	At Risk – Declining		<i>Cyclosorus interruptus</i>			Locally extinct	Present			
Fern	At Risk – Naturally Uncommon	Puketi haresfoot fern	<i>Davallia tasmanii</i> subsp. <i>tasmanii</i>	Three Kings	Endemic					
Fern	At Risk – Naturally Uncommon	tūākura, stumpy tree fern	<i>Dicksonia lanata</i> subsp. <i>hispida</i>	Northland				Present	Presence unknown	Presence unknown

Table A7.1.1 List and status of vascular and non-vascular plants continued

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

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Table A7.1.1 List and status of vascular and non-vascular plants continued

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

Table A7.1.1 List and status of vascular and non-vascular plants continued

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

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Table A7.1.1 List and status of vascular and non-vascular plants continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
<i>Dicot – shrub</i>	At Risk – Naturally Uncommon		<i>Geniostoma ligustrifolium</i> var. <i>crassum</i>	Three Kings	Endemic					
<i>Dicot – vine</i>	At Risk – Naturally Uncommon		<i>Geniostoma ligustrifolium</i> var. <i>majus</i>	Te Hiku		Endemic				
<i>Dicot – tree</i>	At Risk – Naturally Uncommon		<i>Hedycarya</i> aff. <i>arborea</i> (a) (AK 183168; “northern offshore islands”)	Northland	Endemic					
<i>Dicot – shrub</i>	Threatened – Nationally Critical		<i>Hibiscus</i> aff. <i>diversifolius</i> (AK 347684; Surville)	Te Hiku		Locally extinct				
<i>Dicot – shrub</i>	Threatened – Nationally Critical	swamp hibiscus	<i>Hibiscus diversifolius</i>			Present	Present			
<i>Dicot – vine</i>	At Risk – Naturally Uncommon	pōwhiwhi, coastal morning glory	<i>Ipomoea cairica</i>			Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
<i>Dicot – vine</i>	At Risk – Naturally Uncommon	beach morning glory	<i>Ipomoea pes-caprae</i> subsp. <i>brasiliensis</i>			Present				
<i>Dicot – shrub</i>	Threatened – Nationally Critical	dwarf mistletoe	<i>Korthalsella salicornioides</i>	Aotearoa		Present		Present		

Table A7.1.1 List and status of vascular and non-vascular plants continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
<i>Dicot – tree</i>	Threatened – Nationally Vulnerable	rawiritoa, kānuka	<i>Kunzea amathicola</i>	Aotearoa		Present	Present	Present		
<i>Dicot – tree</i>	Threatened – Nationally Vulnerable	rāwiri mānuka, kānuka	<i>Kunzea linearis</i>	Te Hiku		Endemic	Endemic			
<i>Dicot – tree</i>	Threatened – Nationally Vulnerable	rawirinui, kānuka	<i>Kunzea robusta</i>	Aotearoa				Present	Present	Present
<i>Dicot – tree</i>	Threatened – Nationally Critical	Three Kings kānuka	<i>Kunzea triregensis</i>	Aotearoa	Present					
<i>Dicot – herb</i>	Threatened – Nationally Endangered		<i>Leptinella rotundata</i>	Northland		Present		Present		
<i>Dicot – shrub</i>	Threatened – Nationally Vulnerable	coastal silver prostrate mānuka	<i>Leptospermum hoipolloi</i> f. <i>procumbens</i>	Aotearoa		Present				
<i>Dicot – shrub</i>	Threatened – Nationally Critical	Three Kings mānuka	<i>Leptospermum</i> aff. <i>scoparium</i> (e) (AK 228146; Three Kings)	Three Kings	Endemic					
<i>Dicot – shrub</i>	Threatened – Nationally Vulnerable	North Cape mānuka	<i>Leptospermum</i> aff. <i>scoparium</i> (f) (AK 319498; North Cape)	Te Hiku		Endemic				

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Table A7.1.1 List and status of vascular and non-vascular plants continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
<i>Dicot – shrub</i>	Threatened – Nationally Critical	Surville Cliffs mānuka	<i>Leptospermum</i> aff. <i>scoparium</i> (g) (AK 319494; Surville Cliffs)	Te Hiku		Endemic				
<i>Dicot – shrub</i>	Threatened – Nationally Critical		<i>Leptospermum</i> aff. <i>scoparium</i> var. <i>incanum</i> (h) (AK 309827; North Cape)	Te Hiku		Endemic	Endemic			
<i>Dicot – shrub</i>	Threatened – Nationally Vulnerable	mānuka, kahikātoa	<i>Leptospermum hoipolloi</i> f. <i>incanum</i>	Te Hiku		Endemic	Endemic	Endemic	Endemic	Endemic
<i>Dicot – shrub</i>	At Risk – Declining	mānuka, kahikātoa	<i>Leptospermum scoparium</i>	Aotearoa				Present	Present	Present
<i>Dicot – shrub</i>	At Risk – Naturally Uncommon	Surville Cliffs mingimingi	<i>Leucopogon xerampelinus</i>	Te Hiku		Endemic				
<i>Dicot – herb</i>	Threatened – Nationally Vulnerable	koru, oru, New Zealand hydrangea	<i>Lobelia physaloides</i>	Northland	Present	Present	Present	Present	Present	Present
<i>Dicot – tree</i>	Threatened – Nationally Critical	ramarama	<i>Lophomyrtus bullata</i>	Aotearoa		Present		Present	Present	Present
<i>Dicot – tree</i>	Threatened – Nationally Critical	rōhutu	<i>Lophomyrtus obcordata</i>	Aotearoa		Present				

Table A7.1.1 List and status of vascular and non-vascular plants continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
<i>Dicot – herb</i>	Threatened – Nationally Endangered		<i>Mazus novaezeelandiae</i> subsp. <i>impolitus</i> f. <i>impolitus</i>	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
<i>Dicot – herb</i>	Threatened – Nationally Critical	dwarf musk	<i>Mazus novaezeelandiae</i> subsp. <i>impolitus</i> f. <i>hirtus</i>	Aotearoa			Present	Present		
<i>Dicot – herb</i>	At Risk – Declining	hīoi, New Zealand mint	<i>Mentha cunninghamii</i>	Aotearoa		Locally extinct				
<i>Dicot – tree</i>	At Risk – Naturally Uncommon	pukanui	<i>Meryta sinclairii</i>	Three Kings	Endemic					
<i>Dicot – vine</i>	Threatened – Nationally Vulnerable	akatea, akatoki, white flowering rātā	<i>Metrosideros albiflora</i>	Aotearoa				Present	Present	Present
<i>Dicot – tree</i>	Threatened – Nationally Critical	rātā moehau, Bartlett’s rātā	<i>Metrosideros bartlettii</i>	Te Hiku		Endemic				
<i>Dicot – vine</i>	Threatened – Nationally Vulnerable	carmine rātā	<i>Metrosideros carminea</i>	Aotearoa		Present	Present	Presence unknown	Present	Present

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Table A7.1.1 List and status of vascular and non-vascular plants continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
<i>Dicot – vine</i>	Threatened – Nationally Vulnerable	aka, white rātā	<i>Metrosideros diffusa</i>	Aotearoa		Present		Present	Present	Present
<i>Dicot – tree</i>	Threatened – Nationally Vulnerable	pōhutukawa	<i>Metrosideros excelsa</i>	Aotearoa	Present	Present	Present	Present		Present
<i>Dicot – vine</i>	Threatened – Nationally Vulnerable	akatawhiwhi, climbing rātā	<i>Metrosideros fulgens</i>	Aotearoa		Present		Present	Present	Present
<i>Dicot – vine</i>	Threatened – Nationally Vulnerable	akatea, climbing rātā	<i>Metrosideros perforata</i>	Aotearoa	Present	Present	Presence unknown	Present	Present	Present
<i>Dicot – tree</i>	Threatened – Nationally Vulnerable	northern rātā	<i>Metrosideros robusta</i>	Aotearoa	Present	Present		Present	Present	Present
<i>Dicot – tree</i>	Threatened – Nationally Vulnerable	southern rātā	<i>Metrosideros umbellata</i>	Aotearoa		Present		Present	Presence unknown	Presence unknown
<i>Dicot – tree</i>	At Risk – Declining	maire	<i>Mida salicifolia</i>	Aotearoa		Present		Present	Present	Present
<i>Dicot – herb</i>	At Risk – Declining	stout water milfoil	<i>Myriophyllum robustum</i>	Aotearoa			Present			
<i>Dicot – tree</i>	At Risk – Relict	Poor Knights matipo	<i>Myrsine aquilonia</i>	Northland			Present			
<i>Dicot – tree</i>	At Risk – Naturally Uncommon	Three Kings matipo	<i>Myrsine oliveri</i>	Three Kings	Endemic					

Table A7.1.1 List and status of vascular and non-vascular plants continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Dicot – tree	Threatened – Nationally Critical	rōhutu, myrtle	<i>Neomyrtus pedunculata</i>	Aotearoa		Locally extinct				
Dicot – tree	At Risk – Relict		<i>Nestegis apetala</i>		Present	Presence unknown	Present			
Dicot – tree	At Risk – Naturally Uncommon		<i>Olearia angulata</i>	Aotearoa		Present		Present	Presence unknown	Presence unknown
Dicot – herb	At Risk – Naturally Uncommon		<i>Oxalis thompsoniae</i>			Present				
Dicot – vine	Threatened – Nationally Critical	Surville Cliffs jasmine	<i>Parsonsia praeruptis</i>	Te Hiku		Endemic				
Dicot – tree	Threatened – Nationally Critical	Three Kings kaikōmako	<i>Pennantia baylisiana</i>	Three Kings	Endemic					
Dicot – herb	Threatened – Nationally Vulnerable		<i>Picris burbidgeae</i>			Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Dicot – shrub	Threatened – Nationally Critical	pimelea	<i>Pimelea orthia</i> subsp. <i>orthia</i>	Aotearoa		Present	Present	Present		
Dicot – shrub	At Risk – Naturally Uncommon		<i>Pimelea sporadica</i>	Northland		Endemic				

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Table A7.1.1 List and status of vascular and non-vascular plants continued

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

Table A7.1.1 List and status of vascular and non-vascular plants continued

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

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Table A7.1.1 List and status of vascular and non-vascular plants continued

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

Table A7.1.1 List and status of vascular and non-vascular plants continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
<i>Dicot – vine</i>	Threatened – Nationally Critical	akapūkāea, tecomanthe	<i>Tecomanthe speciosa</i>	Three Kings	Endemic					
<i>Dicot – herb</i>	Threatened – Nationally Critical	hydatella	<i>Trithuria inconspicua</i>	Northland		Present				
<i>Dicot – shrub</i>	Threatened – Nationally Critical	Adams’s koromiko	<i>Veronica adamsii</i>	Te Hiku		Endemic				
<i>Dicot – shrub</i>	At Risk – Naturally Uncommon		<i>Veronica aff. diosmifolia</i> (a) (AK 215221; “summer flowering tetraploid”)	Te Hiku		Endemic	Endemic	Endemic		
<i>Dicot – shrub</i>	At Risk – Naturally Uncommon		<i>Veronica aff. ligustrifolia</i> (a) (AK 207101; Surville Cliffs)	Te Hiku		Endemic				
<i>Dicot – shrub</i>	Threatened – Nationally Endangered	Bartlett’s koromiko	<i>Veronica perbella</i>	Northland				Present	Presence unknown	Presence unknown
<i>Dicot – shrub</i>	At Risk – Naturally Uncommon	Surville Cliffs koromiko	<i>Veronica punicea</i>	Northland		Endemic				
<i>Dicot – shrub</i>	At Risk – Declining	napuka, tītīrangī, rawiri, purple hebe	<i>Veronica speciosa</i>	Northland		Locally extinct				

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Table A7.1.1 List and status of vascular and non-vascular plants continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
<i>Dicot – shrub</i>	Data Deficient		<i>Alseuosmia</i> aff. <i>banksii</i> (a) (AK 351926; “bullate”)	Northland		Presence unknown		Presence unknown	Present	Present
<i>Dicot – shrub</i>	Data Deficient		<i>Alseuosmia</i> aff. <i>banksii</i> (b) (AK 252824; “tawheowheo”)	Northland				Presence unknown		
<i>Dicot – shrub</i>	At Risk – Naturally Uncommon		<i>Alseuosmia</i> aff. <i>banksii</i> (c) (AK 272552; “toro”)	Northland				Present		
<i>Dicot – shrub</i>	Data Deficient		<i>Alseuosmia</i> aff. <i>banksii</i> (e) (AK 279415; “horoeka”)	Northland				Presence unknown		
<i>Dicot – shrub</i>	Data Deficient		<i>Alseuosmia</i> aff. <i>banksii</i> (f) (AK 138943; “maire”)	Northland				Presence unknown		
<i>Monocot – herb</i>	At Risk – Naturally Uncommon	Surville Cliffs rengarenga	<i>Arthropodium</i> aff. <i>cirratum</i> (AK 309832; Surville Cliffs)	Te Hiku		Endemic				
<i>Monocot – herb</i>	At Risk – Relict	rengarenga lily	<i>Arthropodium bifurcatum</i>	Northland	Present	Present		Present		
<i>Monocot – orchid</i>	At Risk – Naturally Uncommon		<i>Bulbophyllum tuberculatum</i>	Aotearoa		Present	Present	Presence unknown	Present	Presence unknown

Table A7.1.1 List and status of vascular and non-vascular plants continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Monocot – orchid	At Risk – Naturally Uncommon	fairy fingers	<i>Caladenia alata</i>			Present				
Monocot – orchid	At Risk – Naturally Uncommon		<i>Caladenia atradenia</i>	Aotearoa		Present				
Monocot – orchid	At Risk – Naturally Uncommon		<i>Caladenia bartlettii</i>	Te Hiku		Present				
Monocot – orchid	Data Deficient	caladenia	<i>Caladenia minor</i>				Locally extinct			
Monocot – orchid	Threatened – Nationally Critical	flying duck orchid	<i>Caleana minor</i>				Locally extinct			
Monocot – orchid	Threatened – Nationally Critical	copper beard orchid	<i>Calochilus herbaceus</i>	Aotearoa		Present		Present		
Monocot – orchid	At Risk – Naturally Uncommon	bearded orchid	<i>Calochilus paludosus</i>	Aotearoa				Present		
Monocot – sedge	At Risk – Naturally Uncommon	Three Kings sedge	<i>Carex elingamita</i>	Three Kings	Endemic					
Monocot – sedge	At Risk – Naturally Uncommon	North Cape sedge	<i>Carex ophiolithica</i>	Te Hiku		Endemic				

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Table A7.1.1 List and status of vascular and non-vascular plants continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Monocot – sedge	At Risk – Naturally Uncommon	Surville Cliffs bastard grass	<i>Carex perplexa</i>	Te Hiku		Endemic				
Dicot – shrub	At Risk – Naturally Uncommon		<i>Cassinia amoena</i>	Te Hiku		Endemic				
Monocot – orchid	Non-resident Native – Vagrant	ant orchid	<i>Chiloglottis formicifera</i>				Locally extinct			
Monocot – tree	Non-resident Native – Vagrant	coconut palm	<i>Cocos nucifera</i>				Locally extinct			
Dicot – shrub	At Risk – Declining	tātaraheke, sand coprosma	<i>Coprosma acerosa</i>	Aotearoa		Present	Present	Present		Present
Dicot – shrub	At Risk – Declining		<i>Coprosma</i> aff. <i>macrocarpa</i> (AK 309497; Surville)	Te Hiku		Endemic				
Dicot – shrub	At Risk – Naturally Uncommon		<i>Coprosma distantia</i>	Te Hiku		Endemic				
Monocot – tree	At Risk – Naturally Uncommon	Three Kings cabbage tree	<i>Cordyline oblecta</i>		Present	Present				
Monocot – orchid	At Risk – Naturally Uncommon	yellow gumland leek orchid	<i>Corunastylis pumila</i>			Present				

Table A7.1.1 List and status of vascular and non-vascular plants continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Monocot – orchid	Threatened – Nationally Critical	swamp helmet orchid	<i>Corybas carsei</i>	Aotearoa			Locally extinct			
Monocot – orchid	At Risk – Naturally Uncommon	hidden spider orchid	<i>Corybas cryptanthus</i>	Aotearoa	Present	Present		Presence unknown	Presence unknown	Presence unknown
Monocot – orchid	At Risk – Naturally Uncommon	spider orchid	<i>Corybas rivularis</i>	Aotearoa				Presence unknown	Presence unknown	Presence unknown
Monocot – orchid	Non-resident Native – Coloniser	duck bill orchid	<i>Cryptostylis subulata</i>				Present			
Monocot – sedge	At Risk – Declining		<i>Cyperus insularis</i>	Aotearoa	Present	Present	Present			
Monocot – orchid	At Risk – Naturally Uncommon		<i>Danhatchia australis</i>	Aotearoa			Presence unknown	Presence unknown	Presence unknown	Presence unknown
Dicot – herb	At Risk – Relict	pygmy sundew	<i>Drosera pygmaea</i>				Present	Present		
Monocot – sedge	At Risk – Declining	sand spike sedge	<i>Eleocharis neozelandica</i>	Aotearoa			Present	Present		
Monocot – rush	At Risk – Declining	wire rush	<i>Empodisma robustum</i>	Aotearoa			Present	Present	Present	Present
Dicot – herb	At Risk – Recovering	hairy willowherb	<i>Epilobium hirtigerum</i>				Locally extinct			

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Table A7.1.1 List and status of vascular and non-vascular plants continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Dicot – herb	At Risk – Declining	waiū atua, shore spurge	<i>Euphorbia glauca</i>	Aotearoa			Present	Present		
Monocot – sedge	At Risk – Declining	pīngao, golden sand sedge	<i>Ficinia spiralis</i>	Aotearoa		Present	Present	Present		Present
Monocot – sedge	At Risk – Naturally Uncommon		<i>Fimbristylis velata</i>			Presence unknown	Present			
Dicot – herb	At Risk – Declining	matua-kūmara, Solander's geranium	<i>Geranium solanderi</i>			Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Dicot – herb	At Risk – Naturally Uncommon	Surville Cliffs haloragis	<i>Haloragis erecta</i> subsp. <i>cartilaginea</i>	Te Hiku		Endemic				
Dicot – herb	At Risk – Naturally Uncommon		<i>Hibiscus</i> aff. <i>trionum</i> (AK 297935; “NZ diploid”)	Northland			Present			Present
Dicot – herb	Threatened – Nationally Critical	puarangi, native hibiscus	<i>Hibiscus richardsonii</i>			Present				
Dicot – herb	At Risk – Naturally Uncommon		<i>Hydrocotyle</i> aff. <i>robusta</i> (c) (CHR 558642; Te Paki)	Te Hiku		Endemic				

Table A7.1.1 List and status of vascular and non-vascular plants continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Monocot – sedge	Threatened – Nationally Critical		<i>Isolepis lenticularis</i>				Present			
Monocot – rush	Threatened – Nationally Critical		<i>Juncus holoschoenus</i>				Potentially locally extinct			
Monocot – rush	Threatened – Nationally Vulnerable	leafless rush	<i>Juncus pauciflorus</i>		Present	Present	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Dicot – herb	At Risk – Naturally Uncommon		<i>Lagenophora lanata</i>	Aotearoa		Present		Presence unknown	Presence unknown	Presence unknown
Dicot – herb	Data Deficient	duckweed	<i>Lemna disperma</i>			Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Dicot – herb	Threatened – Nationally Endangered	nau, Cook’s scurvy grass	<i>Lepidium oleraceum</i>	Aotearoa	Present		Present			
Monocot – sedge	At Risk – Declining	fountain sedge	<i>Lepidosperma neozelandicum</i>			Present	Present	Presence unknown	Presence unknown	Presence unknown
Monocot – herb	Threatened – Nationally Critical		<i>Libertia aff. ixioides</i> (c) (AK 319490; Surville Cliffs)	Te Hiku		Endemic				
Monocot – sedge	Threatened – Nationally Vulnerable		<i>Machaerina complanata</i>	Aotearoa		Present				
Monocot – orchid	Threatened – Nationally Critical	Matthews’s forget-me-not	<i>Myosotis matthewsii</i>	Te Hiku				Endemic	Locally extinct	

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Table A7.1.1 List and status of vascular and non-vascular plants continued

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

Table A7.1.1 List and status of vascular and non-vascular plants continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Monocot – orchid	Data Deficient		<i>Spiranthes</i> aff. <i>novae-zelandiae</i> (CHR 518297; Motutangi)	Northland		Endemic	Endemic			
Monocot – orchid	At Risk – Declining	lady’s tresses	<i>Spiranthes australis</i>	Aotearoa		Present	Present			
Monocot – rush	At Risk – Relict	bamboo rush	<i>Sporadanthus ferrugineus</i>	Aotearoa		Locally extinct				
Monocot – herb	At Risk – Naturally Uncommon	fennel-leaved pondweed	<i>Stuckenia pectinata</i>	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Monocot – orchid	Threatened – Nationally Critical	sun orchid	<i>Thelymitra</i> (a) (WELT SP79140; Ahipara)	Te Hiku			Endemic	Endemic		
Monocot – orchid	At Risk – Naturally Uncommon	sun orchid	<i>Thelymitra</i> (c) (AK 229531; “rough leaf”)	Te Hiku	Endemic	Endemic	Endemic			
Monocot – orchid	Data Deficient	sun orchid	<i>Thelymitra</i> aff. <i>brevifolia</i> (AK 347116; Northland)			Presence unknown	Presence unknown		Presence unknown	
Monocot – orchid	Data Deficient	Colenso’s sun orchid	<i>Thelymitra colensoi</i>	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Monocot – orchid	At Risk – Naturally Uncommon	spotted sun orchid	<i>Thelymitra ixioides</i>				Locally extinct		Locally extinct	
Monocot – orchid	Non-resident Native – Coloniser	mauve sun orchid	<i>Thelymitra malvina</i>			Present	Present			

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Table A7.1.1 List and status of vascular and non-vascular plants continued

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

Table A7.1.1 List and status of vascular and non-vascular plants continued

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

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Table A7.1.1 List and status of vascular and non-vascular plants continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Monocot – grass	At Risk – Naturally Uncommon		<i>Trisetum serpentinum</i>	Aotearoa		Present				
Monocot – grass	At Risk – Declining	prickly couch	<i>Zoysia minima</i>	Aotearoa		Locally extinct				
Non-vascular – liverwort	Data Deficient		<i>Cheilolejeunea</i> (h) (AK 284270; Unuwahao)	Te Hiku		Endemic				
Marine alga – red alga	Data Deficient		<i>Dictyota</i> sp. C (WELT A010418; Manawatāwhi)	Three Kings	Endemic					
Non-vascular – liverwort	Data Deficient		<i>Drepanolejeunea pentadactyla</i>						Present	
Non-vascular – moss	Data Deficient		<i>Fissidens perangustus</i>					Present		
Non-vascular – liverwort	Data Deficient		<i>Frullania toropuku</i>	Aotearoa		Present				
Marine alga – red alga	Data Deficient		<i>Herposiphonia</i> sp. A (WELT A014004; Manawatāwhi)	Three Kings	Endemic					
Marine alga – red alga	Data Deficient		<i>Melanthalia</i> sp. B (WELT A032412; Northland sensu Nelson et al. 2013)	Northland		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Marine alga – red alga	Data Deficient		<i>Predaea</i> sp. A (WELT A013935; Manawatāwhi)	Three Kings	Endemic					

Table A7.1.1 List and status of vascular and non-vascular plants continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Marine alga – red alga	Data Deficient		<i>Schizoseris</i> sp. C (WELT A013925; Manawatāwhi)	Three Kings	Endemic					
Non-vascular – moss	Threatened – Nationally Critical		<i>Erpodium glaucum</i>			Present				
Non-vascular – liverwort	Threatened – Nationally Critical	Radar Bush liverwort	<i>Frullania wairua</i>	Te Hiku		Endemic				
Non-vascular – liverwort	Threatened – Nationally Endangered		<i>Goebelobryum unguiculatum</i>			Present	Present	Present	Presence unknown	Presence unknown

Table A7.1.2 List and status of invertebrates

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

Table A7.1.2 List and status of invertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Beetle	Data Deficient		<i>Derolathrus</i> sp. 1 (Northland, NZAC04001430)	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Beetle	At Risk – Naturally Uncommon		<i>Dysnocryptus balthasar</i>	Three Kings	Endemic					
Beetle	At Risk – Naturally Uncommon		<i>Dysnocryptus melchior</i>	Three Kings	Endemic					
Beetle	At Risk – Naturally Uncommon		<i>Ectopsis foveigera</i>	Aotearoa	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Beetle	At Risk – Relict		<i>Hadracalles fuliginosus</i>	Aotearoa	Present					
Beetle	At Risk – Naturally Uncommon		<i>Kiwiharpalus townsendi</i>	Three Kings	Endemic					
Beetle	At Risk – Naturally Uncommon		<i>Kupeharpalus embersoni</i>	Te Hiku		Endemic				
Beetle	At Risk – Naturally Uncommon		<i>Maoriharpalus sutherlandi</i>	Three Kings	Endemic					
Beetle	At Risk – Naturally Uncommon		<i>Mecodema ponaiti</i>	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Beetle	At Risk – Declining		<i>Mecodema tenaki</i>	Te Hiku		Endemic				

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Table A7.1.2 List and status of invertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Beetle	At Risk – Naturally Uncommon		<i>Menimus borealis</i>	Aotearoa		Endemic				
Beetle	At Risk – Naturally Uncommon		<i>Menimus brouni</i>	Aotearoa		Endemic				
Beetle	At Risk – Naturally Uncommon		<i>Menimus elongatus</i>	Te Hiku					Endemic	
Beetle	At Risk – Naturally Uncommon		<i>Microbrontes lineatus</i>	Aotearoa	Present					
Beetle	At Risk – Naturally Uncommon		<i>Mimopeus turbotti</i>	Three Kings	Endemic					
Beetle	At Risk – Naturally Uncommon		<i>Nesoptychias simpliceps</i>	Aotearoa	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Beetle	At Risk – Naturally Uncommon		<i>Parabaris hoarei</i>	Te Hiku		Endemic				
Beetle	Threatened – Nationally Endangered		<i>Paralissotes oconnori</i>	Te Hiku		Endemic				
Beetle	At Risk – Naturally Uncommon		<i>Partystona metallica</i>	Three Kings	Endemic					

Table A7.1.2 List and status of invertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Beetle	At Risk – Naturally Uncommon		<i>Platysus zelandicus</i>	Three Kings	Endemic					
Beetle	At Risk – Naturally Uncommon		<i>Praolepra</i> sp. 1 “Poor Knights” (Poor Knights, NZAC04039868)	Aotearoa	Present					
Beetle	Data Deficient		<i>Prospbrodrus</i> sp. 1 (Northland, NZAC04001371)	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Beetle	At Risk – Naturally Uncommon		<i>Syrphetodes</i> sp. 5 (Te Paki, NZAC04018963)	Te Hiku		Endemic				
Beetle	At Risk – Naturally Uncommon		<i>Syrphetodes</i> sp. 6 (Three Kings, Great I, NZAC04018958)	Three Kings	Endemic					
Beetle	At Risk – Naturally Uncommon		<i>Tuiharpalus crosbyi</i>	Three Kings	Endemic					
Beetle	At Risk – Naturally Uncommon		<i>Tuiharpalus gourlayi</i>	Three Kings	Endemic					
Beetle	At Risk – Naturally Uncommon		<i>Tuiharpalus hallae</i>	Aotearoa			Presence unknown	Presence unknown	Presence unknown	Presence unknown
Beetle	At Risk – Naturally Uncommon		<i>Tuiharpalus moorei</i>	Te Hiku		Endemic				

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Table A7.1.2 List and status of invertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Beetle	At Risk – Naturally Uncommon		<i>Xylochus triregius</i>	Three Kings	Endemic					
Beetle	At Risk – Naturally Uncommon		<i>Zomedes borealis</i>	Three Kings	Endemic					
Butterfly/ moth	At Risk – Relict		<i>Chalastra cf. pellurgata</i>	Aotearoa		Present				
Butterfly/ moth	Threatened – Nationally Vulnerable		<i>Clepsicosma sp. "Titirangi"</i>	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Butterfly/ moth	Threatened – Nationally Critical		<i>Declana cf. hermione</i> "Te Paki"	Aotearoa		Endemic				
Butterfly/ moth	At Risk – Relict	forest ringlet butterfly	<i>Dodonidia helmsii</i>	Aotearoa				Presence unknown		
Butterfly/ moth	At Risk – Declining		<i>Ericodesma aerodana</i>	Aotearoa		Present	Present	Presence unknown	Presence unknown	Presence unknown
Butterfly/ moth	At Risk – Naturally Uncommon		<i>Hierodoris bilineata</i>	Three Kings	Endemic					
Butterfly/ moth	At Risk – Naturally Uncommon		<i>Izatha haumu</i>	Te Hiku		Endemic	Endemic			
Butterfly/ moth	At Risk – Naturally Uncommon		<i>Izatha minimira</i>	Aotearoa				Present	Present	Present

Table A7.1.2 List and status of invertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Butterfly/ moth	At Risk – Naturally Uncommon		<i>Izatha quinquejacula</i>	Three Kings	Endemic					
Butterfly/ moth	At Risk – Naturally Uncommon		<i>Izatha taingo</i>	Aotearoa		Present, potentially endemic	Present, potentially endemic			
Butterfly/ moth	At Risk – Naturally Uncommon		<i>Lepidopteryx</i> sp. 1 (TePaki, Spirits Bay, Tom Bowling NZAC04039534)	Te Hiku		Endemic				
Butterfly/ moth	At Risk – Naturally Uncommon		“Lysiphragma” <i>argentaria</i>	Three Kings	Endemic					
Butterfly/ moth	At Risk – Naturally Uncommon		<i>Musotima</i> sp. “Three Kings”	Three Kings	Endemic					
Butterfly/ moth	Threatened – Nationally Vulnerable		<i>Notoreas perornata</i> “ND/AK”	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Butterfly/ moth	At Risk – Declining		<i>Tatosoma agrionata</i>	Aotearoa				Presence unknown	Presence unknown	Presence unknown
Butterfly/ moth	At Risk – Naturally Uncommon		<i>Trachypepla cyphonias</i>	Aotearoa			Present	Presence unknown	Presence unknown	Presence unknown
Butterfly/ moth	At Risk – Declining		<i>Zelleria sphenota</i>	Aotearoa				Potentially locally extinct	Potentially locally extinct	Potentially locally extinct

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Table A7.1.2 List and status of invertebrates continued

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

Table A7.1.2 List and status of invertebrates continued

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

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Table A7.1.2 List and status of invertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail	At Risk – Relict		<i>Allodiscus wairua</i>	Te Hiku		Endemic				
Land snail	At Risk – Declining		<i>Amborhytida dunniae</i>	Northland				Present	Present	Present
Land snail	Threatened – Nationally Critical		<i>Amborhytida duplicata</i>	Te Hiku		Endemic	Endemic			
Land snail	At Risk – Declining		<i>Amborhytida forsythi</i>	Northland			Present	Presence unknown	Presence unknown	Presence unknown
Land snail	Threatened – Nationally Endangered		<i>Amborhytida</i> sp. 1 “Aupōuri” (NMNZ M.173834)	Te Hiku			Endemic			
Land snail	At Risk – Naturally Uncommon		<i>Athoracophoridae</i> sp. 7 (NMNZ M.151433) “Warawara 2”	Northland				Present		
Land snail	At Risk – Naturally Uncommon		<i>Athoracophorus</i> sp. 11 (NMNZ M.158288) “Warawara 1”	Te Hiku				Endemic		
Land snail	At Risk – Naturally Uncommon		<i>Athoracophorus</i> sp. 4 (NMNZ M.151430) “northern NZ”	Te Hiku		Endemic				
Land snail	Threatened – Nationally Endangered		<i>Charopidae</i> sp. 27 (NMNZ M.058110) “Sinployea paucicostata”	Te Hiku		Endemic				

Table A7.1.2 List and status of invertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail	Data Deficient		<i>Charopidae</i> sp. 1 (NMNZ M.079608) <i>Therasiella</i> "narrow umbilicus"	Te Hiku		Endemic				
Land snail	At Risk – Relict		<i>Charopidae</i> sp. 105 (NMNZ M.077007) "Sinployea hazelwoodi"	Aotearoa				Presence unknown	Presence unknown	Presence unknown
Land snail	At Risk – Naturally Uncommon		<i>Charopidae</i> sp. 16 (NMNZ M.127828) <i>Cavellia</i> "parrishi"	Aotearoa		Present				
Land snail	Data Deficient		<i>Charopidae</i> sp. 169 (NMNZ M.160257) <i>Therasiella</i> sp.	Te Hiku		Endemic				
Land snail	At Risk – Naturally Uncommon		<i>Charopidae</i> sp. 35 (NMNZ M.103006) "Sinployea karangahake"	Aotearoa					Present	
Land snail	Threatened – Nationally Critical		<i>Charopidae</i> sp. 46 (NMNZ M.087828) "Tom Bowling Bay sunken spire"	Te Hiku		Endemic				
Land snail	At Risk – Naturally Uncommon		<i>Charopidae</i> sp. 52 (NMNZ M.151456) <i>Rotadiscus</i> "aff. urquharti Southland – group"	Aotearoa					Present	

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Table A7.1.2 List and status of invertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail	At Risk – Relict		<i>Charopidae</i> sp. 73 (NMNZ M.077056) <i>Therasiella</i> “tall tamora”	Te Hiku		Endemic				
Land snail	At Risk – Naturally Uncommon		<i>Therasiella</i> sp. aff. “elevata” (NMNZ M.096613; <i>Charopidae</i> sp. 75)	Aotearoa		Present				
Land snail	At Risk – Naturally Uncommon		<i>Climocella manawatawhia</i>	Three Kings	Endemic					
Land snail	Threatened – Nationally Critical		<i>Climocella pukanui</i>	Three Kings	Endemic					
Land snail	At Risk – Relict		<i>Climocella reinga</i>	Te Hiku		Endemic	Endemic			
Land snail	Threatened – Nationally Endangered		<i>Costaliodiscus parrishi</i>	Te Hiku		Endemic	Endemic			
Land snail	At Risk – Naturally Uncommon		<i>Cytora annectens</i>	Three Kings	Endemic					
Land snail	Threatened – Nationally Endangered		<i>Cytora brooki</i>	Te Hiku		Endemic				
Land snail	At Risk – Naturally Uncommon		<i>Cytora filicosta</i>	Three Kings	Endemic					

Table A7.1.2 List and status of invertebrates continued

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

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Table A7.1.2 List and status of invertebrates continued

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

Table A7.1.2 List and status of invertebrates continued

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

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Table A7.1.2 List and status of invertebrates continued

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

Table A7.1.2 List and status of invertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail	At Risk – Naturally Uncommon		<i>Phrixgnathus subariel</i>	Three Kings	Endemic					
Land snail	Data Deficient		<i>Phrixgnathus murdochi</i>	Te Hiku						Potentially locally extinct
Land snail	Threatened – Nationally Critical	pūpū wha-karongotaua	<i>Placostylus ambagiosus</i>	Te Hiku		Endemic				
Land snail	Threatened – Nationally Endangered		<i>Placostylus (Basileostylus) bollonsi</i>	Three Kings	Endemic					
Land snail	At Risk – Naturally Uncommon		<i>Pseudaneitea pallida</i>	Three Kings	Endemic					
Land snail	Threatened – Nationally Critical		<i>Pseudaneitea ramsayi</i>	Three Kings	Endemic					
Land snail	At Risk – Naturally Uncommon		<i>Punctidae</i> sp. 104 (NMNZ M.054260) “Paralaoma pararaki”	Te Hiku		Endemic				
Land snail	At Risk – Relict		<i>Punctidae</i> sp. 130 (NMNZ M.062132) “poecilosticta-group oglei”	Te Hiku		Endemic				

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Table A7.1.2 List and status of invertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail	At Risk – Naturally Uncommon		<i>Punctidae</i> sp. 153 (NMNZ M.087994) “glabriuscula-group aupouria”	Te Hiku		Endemic				Locally extinct
Land snail	Data Deficient		<i>Punctidae</i> sp. 155 (NMNZ M.151445) “glabriuscula-group panguru”	Te Hiku			Endemic			
Land snail	Threatened – Nationally Critical		<i>Punctidae</i> sp. 156 (NMNZ M.079798) “glabriuscula-group parrishi”	Te Hiku		Endemic				
Land snail	At Risk – Naturally Uncommon		<i>Punctidae</i> sp. 167 (NMNZ M.088205) “moellendorffi-group cochranei”	Te Hiku				Endemic		
Land snail	Data Deficient		<i>Punctidae</i> sp. 170 (NMNZ M.099071) “glabriuscula-group nukutaunga”	Te Hiku			Endemic			
Land snail	Data Deficient		<i>Punctidae</i> sp. 208 (NMNZ M.084447) Paralaoma “roscoei”	Te Hiku					Endemic	
Land snail	Threatened – Nationally Critical		<i>Punctidae</i> sp. 223 (NMNZ M.151458) “ariel-group Bream Head”	Aotearoa		Present				

Table A7.1.2 List and status of invertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail	At Risk – Naturally Uncommon		<i>Punctidae</i> sp. 225 (NMNZ M.098351) “hirsuta-group hazelwoodi”	Aotearoa	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Land snail	Threatened – Nationally Critical		<i>Punctidae</i> sp. 226 (NMNZ M.154908) <i>Laomarex</i> sp. “aff. <i>L. regia</i> (Gardner, 1968)”	Three Kings	Endemic					
Land snail	At Risk – Relict		<i>Punctidae</i> sp. 229 (NMNZ M.079639) “haasti-group tepakiensis”	Te Hiku		Endemic				
Land snail	At Risk – Relict		<i>Punctidae</i> sp. 250 (NMNZ M.055454) “Rengakora brunneum”	Te Hiku		Endemic				
Land snail	At Risk – Relict		<i>Punctidae</i> sp. 30 (NMNZ M.087982) “phrynia-group kohuronaki”	Te Hiku		Endemic				
Land snail	At Risk – Relict		<i>Punctidae</i> sp. 33 (NMNZ M.087987) “hirsuta-group gardneri”	Te Hiku		Endemic				
Land snail	At Risk – Naturally Uncommon		<i>Punctidae</i> sp. 58 (NMNZ M.083426) “moellendorffi-group minima”	Te Hiku				Endemic		

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Table A7.1.2 List and status of invertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail	At Risk – Relict		<i>Punctidae</i> sp. 63 (NMNZ M.068881) “moellendorffi-group compacta”	Te Hiku		Endemic				
Land snail	At Risk – Naturally Uncommon		<i>Punctidae</i> sp. 86 (NMNZ M.077256) <i>Punctum</i> “mayhillae”	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Land snail	Data Deficient		<i>Punctidae</i> sp. 9 (NMNZ M.151440) “Kokikora sp. Ahipara”	Te Hiku			Endemic			
Land snail	At Risk – Relict		<i>Punctidae</i> sp. 99 (NMNZ M.083503) <i>Obanella</i> “pandora”	Te Hiku		Endemic				
Land snail	Threatened – Nationally Critical		<i>Rhytidarex buddlei</i>	Three Kings	Endemic					
Land snail	At Risk – Naturally Uncommon		<i>Rhytidarex johnsoni</i>	Three Kings	Endemic					
Land snail	At Risk – Relict		<i>Serpho matthewsi</i>	Te Hiku		Endemic	Endemic			
Land snail	Threatened – Nationally Critical		<i>Succinea archeyi</i>	Aotearoa		Present	Present			

Table A7.1.2 List and status of invertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Land snail	At Risk – Naturally Uncommon		<i>Therasiella pectinifera</i>	Three Kings	Endemic					
Land snail	At Risk – Naturally Uncommon		<i>Therasiella</i> sp. aff. “elevata” (NMNZ M.096613; Charopidae sp. 75)	Aotearoa		Present				
Mantis	At Risk – Declining		<i>Orthodera novaezealandiae</i>	Aotearoa	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Mantis	At Risk – Declining		<i>Podagrion</i> sp. ex <i>Orthodera novaezealandiae</i>	Aotearoa	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
Mite	Data Deficient		<i>Riccardoella (Proriccardoella)</i> sp.	Aotearoa				Present		
Spider	At Risk – Naturally Uncommon		<i>Alistra reinga</i>	Aotearoa		Present, potentially endemic				
Spider	At Risk – Naturally Uncommon		<i>Cambridgea reinga</i>	Aotearoa		Present, potentially endemic				
Spider	Data Deficient		<i>Cambridgea turbotti</i>	Three Kings	Endemic					
Spider	At Risk – Naturally Uncommon		<i>Gasparia tepakia</i>	Aotearoa		Present, potentially endemic				

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Table A7.1.2 List and status of invertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Spider	At Risk – Naturally Uncommon		<i>Hapona reinga</i>	Te Hiku		Endemic				
Spider	At Risk – Naturally Uncommon		<i>Hypodrassodes insulanus</i>	Three Kings	Endemic					
Spider	At Risk – Naturally Uncommon		<i>Kaitawa insulare</i>	Three Kings	Endemic					
Spider	At Risk – Declining	katipō	<i>Latrodectus katipo</i>	Aotearoa		Present	Present	Presence unknown	Presence unknown	Presence unknown
Spider	Data Deficient		<i>Matachia marplei</i>	Three Kings	Endemic					
Spider	At Risk – Naturally Uncommon		<i>Migas borealis</i>	Three Kings	Endemic					
Spider	At Risk – Naturally Uncommon		<i>Paramamoea insulana</i>	Three Kings	Endemic					
Spider	At Risk – Relict		<i>Paramamoea pandora</i>	Aotearoa		Presence unknown				
Spider	At Risk – Naturally Uncommon		<i>Paranapis isolata</i>	Three Kings	Endemic					
Spider	At Risk – Naturally Uncommon		<i>Reinga grossa</i>	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown

Table A7.1.2 List and status of invertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Spider	Data Deficient		<i>Stanwellia houhora</i>	Aotearoa			Presence unknown			
Spider	At Risk – Naturally Uncommon		<i>Stanwellia regia</i>	Three Kings	Endemic					
Stick insect	At Risk – Naturally Uncommon		<i>Clitarchus nov. sp. 1</i> (NZAC03005448)	Te Hiku		Endemic				
Stick insect	At Risk – Naturally Uncommon		<i>Pseudoclitarchus sentus</i>	Three Kings	Endemic					
Stick insect	Threatened – Nationally Critical		<i>Tepakiphasma ngatikuri</i>	Te Hiku		Endemic				
True bug	At Risk – Naturally Uncommon		<i>Basileobius gilviceps</i>	Three Kings	Endemic					
True bug	At Risk – Naturally Uncommon		<i>Basilioterpa bullata</i>	Three Kings	Endemic					
True bug	Data Deficient		<i>Carystoterpa minima</i>	Te Hiku		Endemic				
True bug	At Risk – Naturally Uncommon		<i>Carystoterpa trimaculata</i>	Three Kings	Endemic					
True bug	At Risk – Naturally Uncommon		<i>Cermada triregia</i>	Three Kings	Endemic					

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Table A7.1.2 List and status of invertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
True bug	At Risk – Naturally Uncommon	Turbott's brown soldier bug	<i>Cermatulus nasalis turbotti</i>	Three Kings	Endemic					
True bug	At Risk – Naturally Uncommon		<i>Diomocoris woodwardi</i>	Three Kings	Endemic					
True bug	Data Deficient		<i>Millerocoris conus</i>	Aotearoa		Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
True bug	At Risk – Naturally Uncommon		<i>Millerocoris ductus</i>	Aotearoa		Present			Present	
True bug	At Risk – Naturally Uncommon		<i>Myerslophia triregia</i>	Three Kings	Endemic					
True bug	At Risk – Naturally Uncommon		<i>Zopheridae incertae sedis</i> sp. 1 (Three Kings, NZAC04040271)	Three Kings	Endemic					
True bug	At Risk – Naturally Uncommon		<i>Novothybris extremitatis</i>	Te Hiku		Endemic				
True bug	At Risk – Naturally Uncommon		<i>Paratruncala insularis</i>	Three Kings	Endemic					
True bug	Threatened – Nationally Critical		<i>Pimeleocoris viridis</i>	Aotearoa			Present			

Table A7.1.2 List and status of invertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
True bug	Data Deficient		<i>Tridiplous virens</i>	Aotearoa						
True bug	At Risk – Naturally Uncommon		<i>Xiphoides regis</i>	Three Kings	Endemic					
True bug	At Risk – Naturally Uncommon		<i>Zanchius totus</i>	Three Kings	Endemic					
True fly	At Risk – Naturally Uncommon		<i>Anabarhynchus gibbsi</i>	Aotearoa	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown	Presence unknown
True fly	At Risk – Naturally Uncommon		<i>Anabarhynchus microphallus</i>	Aotearoa		Present				
True fly	Data Deficient		<i>Corynoptera dividospica</i>	Aotearoa						Presence unknown
True fly	At Risk – Naturally Uncommon		<i>Neoitamus "tetatus"</i>	Three Kings	Endemic					
True fly	At Risk – Naturally Uncommon		<i>Parentia argentifrons</i>	Three Kings	Endemic					
True fly	At Risk – Naturally Uncommon		<i>Parentia insularis</i>	Three Kings	Endemic					
True fly	At Risk – Naturally Uncommon		<i>Pollenia nigripalpis</i>	Three Kings	Endemic					

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Table A7.1.2 List and status of invertebrates continued

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

Table A7.1.3 List and status of vertebrates

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

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Table A7.1.3 List and status of vertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	At Risk – Declining	koitareke, marsh crane	<i>Zapornia pusilla affinis</i>	Aotearoa		Present	Present	Locally extinct	Locally extinct	Present
Bird	At Risk – Declining	pūweto, spotless crane	<i>Zapornia tabuensis tabuensis</i>			Present	Present	Locally extinct	Present	Present
Bird	At Risk – Declining	tītī, sooty shearwater	<i>Ardenna grisea</i>			Present				
Bird	At Risk – Declining	tara, white-fronted tern	<i>Sterna striata</i>			Present	Present	Present		Present
Freshwater fish	At Risk – Declining	longfin eel	<i>Anguilla dieffenbachii</i>	Aotearoa		Present	Present	Present	Present	Present
Freshwater fish	At Risk – Declining	torrentfish	<i>Cheimarrichthys fosteri</i>	Aotearoa				Present	Present	Present
Freshwater fish	At Risk – Declining	kōaro	<i>Galaxias brevipinnis</i>	Aotearoa			Present	Present	Present	
Freshwater fish	At Risk – Declining	bluegill bully	<i>Gobiomorphus hubbsi</i>	Aotearoa					Present	
Freshwater fish	At Risk – Declining	black mudfish	<i>Neochanna diversus</i>	Northland		Present	Present			
Lizard	At Risk – Declining	Matapia gecko	<i>Dactylocnemis</i> “Matapia Island”	Te Hiku		Endemic	Endemic			
Lizard	At Risk – Declining	Te Paki gecko	<i>Dactylocnemis</i> “North Cape”	Te Hiku		Endemic	Endemic			
Lizard	At Risk – Declining	forest gecko	<i>Mokopirirakau granulatus</i>	Aotearoa				Present	Present	Present
Lizard	At Risk – Declining	Te Paki green gecko	<i>Naultinus flavirictus</i>	Te Hiku		Endemic				

Table A7.1.3 List and status of vertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Lizard	At Risk – Declining	elegant gecko	<i>Naultinus elegans</i>	Aotearoa						Present
Lizard	At Risk – Declining	Northland green gecko	<i>Naultinus grayii</i>	Northland			Present	Presence unknown	Present	Present
Lizard	At Risk – Declining	Tatahi skink	<i>Oligosoma</i> aff. <i>smithi</i> “Three Kings, Te Paki, Western Northland”	Te Hiku		Endemic	Endemic			
Lizard	At Risk – Declining	ornate skink	<i>Oligosoma ornatum</i>	Aotearoa		Present	Present	Presence unknown	Present	Present
Bird	Threatened – Nationally Vulnerable	white-capped noddy	<i>Anous minutus</i>				Present			
Bird	At Risk – Naturally Uncommon	kōmako, Three Kings bellbird	<i>Anthornis melanura obscura</i>	Aotearoa	Endemic					
Bird	At Risk – Naturally Uncommon	black-fronted dotterel	<i>Euseyornis melanops</i>				Present			
Bird	Threatened – Nationally Vulnerable	koekoeā, long-tailed cuckoo	<i>Eudynamis taitensis</i>			Present	Present	Present	Present	
Bird	At Risk – Naturally Uncommon	Australian coot	<i>Fulica atra australis</i>			Present	Present	Present	Present	

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Table A7.1.3 List and status of vertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	At Risk – Relict	kawau, black shag	<i>Phalacrocorax carbo novaehollandiae</i>			Present	Present	Present	Present	Present
Bird	At Risk – Naturally Uncommon	kawau tūi, little black shag	<i>Phalacrocorax sulcirostris</i>			Present	Present	Locally extinct		Present
Bird	At Risk – Naturally Uncommon	kōtuku ngutupapa, royal spoonbill	<i>Platalea regia</i>				Present	Present		Present
Bird	At Risk – Relict	grey ternlet	<i>Anous albivittus</i>					Locally extinct		
Bird	At Risk – Declining	Buller’s shearwater	<i>Ardenna bulleri</i>	Aotearoa			Present			
Freshwater fish	At Risk – Naturally Uncommon	giant bully	<i>Gobiomorphus gobioides</i>	Aotearoa		Present	Present		Present	Present
Lizard	At Risk – Naturally Uncommon	Three Kings gecko	<i>Dactylocnemis</i> “Three Kings”	Three Kings	Endemic					
Lizard	At Risk – Naturally Uncommon	Falla’s skink	<i>Oligosoma fallai</i>	Three Kings	Endemic					
Lizard	At Risk – Declining	shore skink	<i>Oligosoma smithi</i>	Aotearoa			Present	Present		Present
Bird	Threatened – Nationally Increasing	pāteke, brown teal	<i>Anas chlorotis</i>	Aotearoa			Locally extinct	Locally extinct	Locally extinct	

Table A7.1.3 List and status of vertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	Threatened – Nationally Increasing	kiwi pukupuku, little spotted kiwi	<i>Apteryx owenii</i>	Aotearoa					Locally extinct	
Bird	Threatened – Nationally Increasing	North Island kōkako	<i>Callaeas wilsoni</i>	Aotearoa				Locally extinct		
Bird	Threatened – Nationally Increasing	tūturiwhatu, northern New Zealand dotterel	<i>Charadrius obscurus aquilonius</i>	Aotearoa		Present	Present	Present		Present
Bird	Threatened – Nationally Increasing	kārearea, bush falcon	<i>Falco novaeseelandiae ferox</i>	Aotearoa					Locally extinct	
Bird	At Risk – Relict	North Island weka	<i>Gallirallus australis greyi</i>	Aotearoa				Locally extinct	Locally extinct	Locally extinct
Bird	At Risk – Recovering	tōrea pango, variable oystercatcher	<i>Haematopus unicolor</i>	Aotearoa	Present	Present	Present	Present		Present
Bird	At Risk – Recovering	North Island kākā	<i>Nestor meridionalis septentrionalis</i>	Aotearoa				Locally extinct	Locally extinct	
Bird	Threatened – Nationally Increasing	amokura, red-tailed tropic bird	<i>Phaethon rubricauda</i>			Present	Present			
Bird	At Risk – Recovering	kāruhiruhi, pied shag	<i>Phalacrocorax varius varius</i>	Aotearoa	Present	Present	Present	Present	Present	Present

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Table A7.1.3 List and status of vertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	At Risk – Relict	tīeke, North Island saddleback	<i>Philesturnus rufusater</i>	Aotearoa					Locally extinct	
Bird	Threatened – Nationally Increasing	weweia, New Zealand dabchick	<i>Poliiocephalus rufopectus</i>	Aotearoa			Present	Locally extinct	Locally extinct	Present
Bird	At Risk – Recovering	totorore, North Island little shearwater	<i>Puffinus assimilis haurakiensis</i>	Aotearoa			Present			
Lizard	At Risk – Recovering	robust skink	<i>Oligosoma alani</i>	Aotearoa		Present	Present			
Lizard	At Risk – Recovering	McGregor’s skink	<i>Oligosoma macgregori</i>	Aotearoa		Locally extinct	Locally extinct			
Bird	At Risk – Relict	kākā-wairiki, red-crowned parakeet	<i>Cyanoramphus novaezelandiae novaezelandiae</i>	Aotearoa	Present			Locally extinct	Locally extinct	
Bird	At Risk – Relict	tītī wainui, fairy prion	<i>Pachyptila turtur</i>		Present	Present	Present			
Bird	At Risk – Relict	takahikare-moana, New Zealand white-faced storm petrel	<i>Pelagodroma marina maoriana</i>	Aotearoa		Present	Present			
Bird	At Risk – Relict	kuaka, northern diving petrel	<i>Pelecanoides urinatrix urinatrix</i>		Present	Present	Present			

Table A7.1.3 List and status of vertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	At Risk – Relict	pakahā, fluttering shearwater	<i>Puffinus gavia</i>	Aotearoa		Present	Present			
Lizard	At Risk – Relict	northern Duvaucel's gecko	<i>Hoplodactylus duvaucelii</i> "northern"	Northland		Present				
Tuatara	At Risk – Relict	tuatara	<i>Sphenodon punctatus</i>	Aotearoa		Locally extinct	Locally extinct	Locally extinct	Locally extinct	Locally extinct
Lizard	At Risk – Relict	moko skink	<i>Oligosoma moco</i>	Aotearoa		Present	Present			
Lizard	At Risk – Relict	egg-laying skink	<i>Oligosoma suteri</i>	Aotearoa	Present	Present	Present			
Bird	Non-resident Native – Coloniser	glossy ibis	<i>Plegadis falcinellus</i>				Present			
Bird	Non-resident Native – Coloniser	Australasian little grebe	<i>Tachybaptus novaehollandiae novaehollandiae</i>				Present	Locally extinct	Locally extinct	
Bird	Non-resident Native – Migrant	eastern cattle egret	<i>Ardea ibis coromanda</i>			Present	Present		Present	Present
Bird	Non-resident Native – Migrant	ruddy turnstone	<i>Arenaria interpres interpres</i>			Present	Present	Locally extinct	Locally extinct	
Bird	Non-resident Native – Migrant	sharp-tailed sandpiper	<i>Calidris acuminata</i>				Present	Locally extinct		

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Table A7.1.3 List and status of vertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	Non-resident Native – Migrant	red-necked stint	<i>Calidris ruficollis</i>				Present	Locally extinct		
Bird	Non-resident Native – Migrant	white-winged black tern	<i>Chlidonias leucopterus</i>				Present			
Bird	Non-resident Native – Migrant	pomarine skua	<i>Stercorarius pomarinus</i>				Present	Locally extinct		
Bird	Non-resident Native – Migrant	pāngurunguru, southern giant petrel	<i>Macronectes giganteus</i>				Present			
Bird	Non-resident Native – Vagrant	far-eastern curlew	<i>Numenius madagascariensis</i>				Present	Locally extinct		
Bird	Non-resident Native – Migrant	Asiatic whimbrel	<i>Numenius phaeopus variegatus</i>				Present	Locally extinct		
Bird	Non-resident Native – Migrant	kuriri, Pacific golden plover	<i>Pluvialis fulva</i>			Present	Present	Present		
Bird	Non-resident Native – Migrant	Arctic skua	<i>Stercorarius parasiticus</i>				Present	Locally extinct		Present
Bird	Non-resident Native – Migrant	eastern little tern	<i>Sternula albifrons sinensis</i>				Present	Locally extinct		Present

Table A7.1.3 List and status of vertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Turtle	Non-resident Native – Migrant	green turtle	<i>Chelonia mydas</i>			Present	Present			
Turtle	Non-resident Native – Migrant	leatherback turtle	<i>Dermochelys coriacea</i>			Present	Present			
Bird	Non-resident Native – Vagrant	Australian darter	<i>Anhinga melanogaster novaehollandiae</i>				Present			
Bird	Non-resident Native – Vagrant	white-necked heron	<i>Ardea pacifica</i>				Present			
Bird	Non-resident Native – Vagrant	fan-tailed cuckoo	<i>Cacomantis flabelliformis flabelliformis</i>				Present			
Bird	Non-resident Native – Vagrant	sanderling	<i>Calidris alba</i>			Present	Present	Locally extinct		
Bird	Non-resident Native – Vagrant	curlew sandpiper	<i>Calidris ferruginea</i>				Present	Locally extinct		
Bird	Non-resident Native – Vagrant	white-rumped sandpiper	<i>Calidris fuscicollis</i>				Present			
Bird	Non-resident Native – Vagrant	western sandpiper	<i>Calidris mauri</i>				Present			

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Table A7.1.3 List and status of vertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	Non-resident Native – Vagrant	pectoral sandpiper	<i>Calidris melanotos</i>				Present	Locally extinct		
Bird	Non-resident Native – Vagrant	great knot	<i>Calidris tenuirostris</i>				Present			
Bird	Non-resident Native – Vagrant	large sand dotterel	<i>Charadrius leschenaultii leschenaultii</i>				Present			
Bird	Non-resident Native – Vagrant	Mongolian dotterel	<i>Charadrius mongolus</i>				Present			
Bird	Non-resident Native – Vagrant	oriental dotterel	<i>Charadrius veredus</i>				Present			
Bird	Non-resident Native – Vagrant	oriental cuckoo	<i>Cuculus optatus</i>				Present			
Bird	Non-resident Native – Vagrant	little egret	<i>Egretta garzetta immaculata</i>				Present			Present
Bird	Non-resident Native – Vagrant	dollarbird	<i>Eurystomus orientalis pacificus</i>				Present			
Bird	Non-resident Native – Vagrant	nankeen kestrel	<i>Falco cenchroides cenchroides</i>			Present	Present			

Table A7.1.3 List and status of vertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	Non-resident Native – Vagrant	white-throated needletail	<i>Hirundapus caudacutus caudacutus</i>			Present				
Bird	Non-resident Native – Vagrant	eastern broad-billed sandpiper	<i>Calidris falcinellus sibirica</i>				Present			
Bird	Non-resident Native – Vagrant	American black-tailed (Hudsonian) godwit	<i>Limosa haemastica</i>				Present	Locally extinct		
Bird	Non-resident Native – Vagrant	Asiatic black- tailed godwit	<i>Limosa limosa melanuroides</i>				Present	Locally extinct		
Bird	Non-resident Native – Vagrant	little whimbrel	<i>Numenius minutus</i>				Present			
Bird	Non-resident Native – Vagrant	American whimbrel	<i>Numenius hudsonicus</i>				Present			
Bird	Non-resident Native – Vagrant	yellow-billed spoonbill	<i>Platalea flavipes</i>				Present			
Bird	Non-resident Native – Vagrant	American golden plover	<i>Pluvialis dominicus</i>				Present			
Bird	Non-resident Native – Vagrant	grey plover	<i>Pluvialis squatarola</i>				Present	Locally extinct		

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Table A7.1.3 List and status of vertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	Non-resident Native – Coloniser	hoary-headed grebe	<i>Poliiocephalus poliocephalus</i>				Present			
Bird	Non-resident Native – Vagrant	channel-billed cuckoo	<i>Scythrops novaehollandiae</i>			Present	Present			
Bird	Non-resident Native – Vagrant	brown booby	<i>Sula leucogaster plotus</i>				Present			
Bird	Non-resident Native – Vagrant	chestnut-breasted shelduck	<i>Tadorna tadornoides</i>				Present			
Bird	Non-resident Native – Vagrant	greater crested tern	<i>Thalasseus bergii cristata</i>							
Bird	Non-resident Native – Vagrant	Australian white ibis	<i>Threskiornis molucca molucca</i>				Present			Present
Bird	Non-resident Native – Vagrant	Siberian tattler	<i>Tringa brevipes</i>				Present	Locally extinct		
Bird	Non-resident Native – Vagrant	Terek sandpiper	<i>Xenus cinereus</i>				Present	Locally extinct		
Bird	Non-resident Native – Vagrant	common sandpiper	<i>Actitis hypoleucos</i>				Present			

Table A7.1.3 List and status of vertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	Non-resident Native – Vagrant	wandering tattler	<i>Tringa incana</i>				Present	Locally extinct		
Bird	Non-resident Native – Vagrant	common greenshank	<i>Tringa nebularia</i>				Present	Locally extinct		
Bird	Non-resident Native – Vagrant	marsh sandpiper	<i>Tringa stagnatilis</i>				Present	Locally extinct		
Turtle	Non-resident Native – Vagrant	loggerhead turtle	<i>Caretta caretta</i>				Present			
Turtle	Non-resident Native – Vagrant	hawksbill turtle	<i>Eretmochelys imbricata</i>				Present			
Bird	Threatened – Nationally Vulnerable	pārerā, grey duck	<i>Anas superciliosa</i>			Present	Present		Present	Present
Bird	Threatened – Nationally Critical	kōtuku, white heron	<i>Ardea alba modesta</i>				Present	Present	Present	Present
Bird	Threatened – Nationally Critical	matuku-hūrepo, Australasian bittern	<i>Botaurus poiciloptilus</i>			Present	Present	Present	Present	Present
Bird	At Risk – Declining	tarāpuka, black-billed gull	<i>Chroicocephalus bulleri</i>	Aotearoa		Present	Present			

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Table A7.1.3 List and status of vertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	Threatened – Nationally Critical	tara iti, New Zealand fairy tern	<i>Sternula nereis davisae</i>	Aotearoa				Locally extinct		
Bat	Threatened – Nationally Critical	pekapeka, long-tailed bat	<i>Chalinolobus tuberculatus</i>	Aotearoa		Locally extinct		Present	Present	Presence unknown
Bird	Threatened – Nationally Endangered	black-fronted tern	<i>Chlidonias albobstriatus</i>	Aotearoa			Present			
Bird	Threatened – Nationally Endangered	matuku moana, reef heron	<i>Egretta sacra sacra</i>			Present	Present	Present		Present
Bird	Threatened – Nationally Increasing	ngutu parore, wrybill	<i>Anarhynchus frontalis</i>	Aotearoa			Present	Locally extinct		Present
Bird	At Risk – Declining	huahou, lesser knot	<i>Calidris canutus rogersi</i>			Present	Present	Locally extinct		Present
Bird	At Risk – Declining	tūturiwhatu, banded dotterel	<i>Charadrius bicinctus bicinctus</i>	Aotearoa		Present	Present	Present		Present
Bird	Threatened – Nationally Vulnerable	taranui, Caspian tern	<i>Hydroprogne caspia</i>	Aotearoa		Present	Present	Present		Present
Bird	Threatened – Nationally Vulnerable	tāiko, black petrel	<i>Procellaria parkinsoni</i>	Aotearoa						

Table A7.1.3 List and status of vertebrates continued

SPECIES TYPE	THREAT STATUS	COMMON NAME	SCIENTIFIC NAME	ENDEMISM	TK	TP	AUP	AHP	MTW	HOK
Bird	At Risk – Relict	toanui, flesh-footed shearwater	<i>Ardenna carneipes</i>			Present				
Freshwater fish	Threatened – Nationally Vulnerable	shortjaw kōkopu	<i>Galaxias postvectis</i>	Aotearoa					Present	
Bat	Threatened – Nationally Vulnerable	northern short-tailed bat	<i>Mystacina tuberculata</i> <i>aupourica</i>	Northland				Locally extinct	Present	
Lizard	Threatened – Nationally Endangered	slight skink	<i>Oligosoma levidensum</i>	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,  
500–1000 m; lower slope, 1000–4000 m.

ECOSYSTEM	HABITAT TYPE	SIGNIFICANT VALUES	PRESSURES / THREATS
<b>Manawatāwhi/Three Kings Islands bioregion</b>			
Full bioregion	<ul style="list-style-type: none"> <li>Exposed rocky shore</li> <li>High-current shallow reef</li> <li>High-current deep reef</li> <li>High-current deep gravel</li> <li>High-current deep sand</li> <li>Water column</li> <li>Upper slope</li> <li>Mid-slope</li> </ul>	<p>Centre of endemism and biodiversity hotspot.</p> <p>Diverse and distinctive marine biota due to oceanographic setting, upwelling, very low levels of terrestrial sedimentation and isolation from the mainland.</p> <p>Reefs dominated by endemic species of large brown macroalgae to at least 60 m depth.</p> <p>Endemic species belonging to many other taxa, including reef fishes (eg blue-finned butterflyfish [<i>Odax cyanallix</i>]).</p> <p>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.</p> <p>Large seabird colonies and kekeno/New Zealand fur seal (<i>Arctocephalus forsteri</i>) haulout.</p> <p>Spotted black grouper (<i>Epinephelus daemeli</i>) and mangō taniwha/great white shark (<i>Carcharodon carcharias</i>) habitat.</p> <p>Possibly part of the wider Northland green turtle (<i>Chelonia mydas</i>) post-pelagic developmental ground.</p>	<p>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.</p> <p>Invasive non-indigenous marine species.</p>

ECOSYSTEM	HABITAT TYPE	SIGNIFICANT VALUES	PRESSURES / THREATS
<b>West Coast North Island bioregion (Tauroa Peninsula to Kaipara Harbour)</b>			
Exposed outer coast and adjoining shelf	<ul style="list-style-type: none"> <li>Exposed beach</li> <li>Exposed rocky shore</li> <li>Exposed shallow reef</li> <li>Exposed shallow sand</li> <li>Deep sand</li> <li>Deep reef</li> <li>Upper slope</li> </ul>	<p>Poorly known.</p> <p>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-Tōhe/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.</p>	<p>Overfishing and bycatch of protected and threatened species.</p> <p>Overharvesting of intertidal shellfish.</p> <p>Invasive non-indigenous marine species (eg the threat to indigenous intertidal assemblages and customary fisheries posed by <i>Pyura doppelgangera</i>).</p>
Herekino and Whangapē harbours	<ul style="list-style-type: none"> <li>Saltmarsh</li> <li>Mānawa/mangrove (<i>Avicennia marina</i>)</li> <li>Estuarine rocky shore</li> <li>Estuarine beach</li> <li>Intertidal mudflat</li> <li>Estuarine sand</li> <li>High-current shallow sand</li> <li>Estuarine reef</li> </ul>	<p>Poorly known.</p> <p>Relatively low invertebrate diversity.</p> <p>Limited wading bird habitat.</p>	<p>Infilling due to historical catchment clearance.</p>
Hokianga Harbour	<ul style="list-style-type: none"> <li>Saltmarsh</li> <li>Mānawa/mangrove</li> <li>Intertidal sand and mudflat</li> <li>Estuarine rocky shore</li> <li>Estuarine sand</li> <li>High-current shallow sand</li> <li>High-current shallow reef</li> <li>Saltmarsh</li> <li>Estuarine rocky shore</li> </ul>	<p>Marine species extend at least 12 km from the harbour entrance.</p> <p>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.</p> <p>Extensive subtidal horse mussel (<i>Atrina zelandica</i>) and kuku beds.</p> <p>Kōura papatea/southern rock lobster (<i>Jasus edwardsii</i>) settlement occurs in 'the narrows'.</p>	<p>Infilling due to historical catchment clearance.</p> <p>Habitat loss due to reclamation and impoundment.</p> <p>Point source and diffuse (non-point source) discharges of pathogens, nutrients and other contaminants.</p> <p>Invasive species (eg spartina [<i>Spartina</i> spp.]).</p>

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ECOSYSTEM	HABITAT TYPE	SIGNIFICANT VALUES	PRESSURES / THREATS
	<ul style="list-style-type: none"> <li>• Estuarine beach</li> <li>• Intertidal sand and mudflat</li> <li>• Karepō/seagrass (<i>Zostera</i> spp.)</li> <li>• Estuarine sand</li> <li>• Shallow high-current sand</li> <li>• Estuarine reef</li> </ul>	<p>Upper reaches of the harbour contain important wading bird habitat.</p> <p>Productive customary fishery.</p>	
<b>Northeastern bioregion (Ahipara to Mangawhai)</b>			
Te Oneroa-a-Tōhe/ Ninety Mile Beach and adjoining shelf	<ul style="list-style-type: none"> <li>• Exposed beach</li> <li>• Moderate beach</li> <li>• Exposed rocky shore</li> <li>• Moderate shallow sand</li> <li>• Exposed shallow sand</li> <li>• Deep sand</li> <li>• Exposed shallow reef</li> <li>• Deep reef</li> <li>• High-current deep reef</li> </ul>	<p>Important feeding area for tōrea pango/variable oystercatcher (<i>Haematopus unicolor</i>) and taranui/ Caspian tern (<i>Hydroprogne caspia</i>).</p> <p>Primary spat collection area for the kuku aquaculture industry (spat attach to subtidal algae and hydroids are presumed to grow on nearshore reefs).</p> <p>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.</p> <p>The natural values of the offshore habitats, including Ahipara Banks, are largely unknown.</p>	<p>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 (eg vehicles on the beach, overharvesting, changed land use) on their habitat but the actual causes are unknown.</p> <p>Invasive non-indigenous marine species (eg threat to indigenous intertidal assemblages and customary fisheries posed by <i>Pyura doppelgangera</i>).</p> <p>Vehicles driving in the intertidal zone.</p>

ECOSYSTEM	HABITAT TYPE	SIGNIFICANT VALUES	PRESSURES / THREATS
Tiriparepa/Scott Point to Otou/ North Cape and adjoining shelf	<ul style="list-style-type: none"> <li>Exposed beach</li> <li>Moderate beach</li> <li>Exposed rocky shore</li> <li>Moderate rocky shore</li> <li>Moderate shallow sand</li> <li>High-current shallow sand</li> <li>High-current gravel</li> <li>Exposed shallow gravel</li> <li>High-current deep sand</li> <li>Deep sand</li> <li>Exposed shallow reef</li> <li>Moderate shallow reef</li> <li>High-current shallow reef</li> <li>High-current deep reef</li> <li>Upper slope</li> <li>Mid-slope</li> <li>Water column</li> </ul>	<p>Global marine biodiversity hotspot.</p> <p>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.</p> <p>Highest diversities occur off Piwhane/Spirits Bay and Takapaukura/Tom Bowling Bay at a depth of 40–80m.</p> <p>Very high numbers of nationally and regionally endemic fauna.</p> <p>The natural values of Pandora Bank are largely unknown.</p> <p>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.</p> <p>Foraging area for endangered leatherback turtles (<i>Dermochelys coriacea</i>), a variety of cetaceans and seabirds.</p>	<p>Removal of epifauna and habitat homogenisation by mobile fishing gear (primarily commercial scallop dredging).</p> <p>Invasive non-indigenous marine species (eg threat to indigenous intertidal assemblages and customary fisheries posed by <i>Pyura doppelganger</i>).</p> <p>Global climate change via effects on seasonal upwelling and ocean currents.</p> <p>Overfishing.</p> <p>Bycatch of protected species.</p> <p>Marine debris.</p>
Pārengarenga Harbour	<ul style="list-style-type: none"> <li>Saltmarsh</li> <li>Mānawa/mangrove</li> <li>Karepō/seagrass bed</li> <li>Intertidal sand and mudflat</li> <li>Estuarine beach</li> <li>Estuarine sand</li> <li>Estuarine reef</li> </ul>	<p>Productive customary fishery.</p> <p>Clear water.</p> <p>Extensive karepō beds covering c. 50% of the intertidal area.</p> <p>An extremely diverse invertebrate fauna (at least 452 species), of which at least half are subtidal species.</p>	<p>Invasive species (eg spartina, <i>Theora lubrica</i>, <i>Limaria orientalis</i>, <i>Pyura doppelganger</i>, <i>Eudistoma elongatum</i>, <i>Styela clava</i>).</p> <p>Point and non-point source discharges of fine sediments, excess nutrients, pathogens and other contaminants.</p>

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ECOSYSTEM	HABITAT TYPE	SIGNIFICANT VALUES	PRESSURES / THREATS
		<p>Numerous subtropical species that are not typically found in estuaries elsewhere in Aotearoa New Zealand.</p> <p>Diverse fish fauna, including unusual estuarine populations of lancelets (<i>Epigonichthys benhami</i> and <i>E. hectori</i>), sand divers (<i>Limnichthys polyactis</i>) and short-finned worm eels (<i>Scolecenchelys australis</i>).</p> <p>Abundant elasmobranchs, including eagle rays, stingrays, tope/school sharks (<i>Galeorhinus galeus</i>), ngengero/bronze whalers (<i>Carcharhinus brachyurus</i>) and juvenile mangō taniwaha.</p> <p>Post-pelagic developmental ground for green turtles.</p> <p>Nationally important roosting, feeding and breeding area for waders and shorebirds.</p>	<p>Habitat loss, lowered productivity and hydrological changes due to reclamations and impoundments.</p> <p>Intertidal habitat loss due to aquaculture.</p> <p>Overfishing.</p>
Houhora Harbour	<ul style="list-style-type: none"> <li>• Saltmarsh</li> <li>• Mānawa/mangrove</li> <li>• Karepō/seagrass bed</li> <li>• Intertidal sand and mudflat</li> <li>• Estuarine sand</li> </ul>	<p>Extensive karepō beds.</p> <p>Subtropical invertebrates.</p> <p>Foraging area for green turtles.</p> <p>Important roosting, feeding and breeding area for waders and shorebirds.</p>	<p>Invasive species (eg spartina, <i>Undaria pinnatifida</i>).</p> <p>Point and non-point source discharges of fine sediments and other contaminants.</p> <p>Reclamations and impoundments.</p> <p>Intertidal habitat loss due to aquaculture.</p> <p>Overfishing.</p>
Rangaunu Harbour	<ul style="list-style-type: none"> <li>• Saltmarsh</li> <li>• Mānawa/mangrove</li> <li>• Karepō/seagrass bed</li> <li>• Intertidal sand and mudflat</li> <li>• Estuarine beach</li> <li>• Estuarine sand</li> </ul>	<p>Productive customary, commercial and recreational fishery.</p> <p>Extremely clear water due to low freshwater and sediment inflows.</p>	<p>Invasive species (eg spartina, <i>Pyura doppelgangera</i>, <i>Styela clava</i>).</p> <p>Point and non-point source discharges of fine sediments, excess nutrients, pathogens and other contaminants.</p>

ECOSYSTEM	HABITAT TYPE	SIGNIFICANT VALUES	PRESSURES / THREATS
	<ul style="list-style-type: none"> <li>• Estuarine reef</li> <li>• Sheltered rocky shore</li> <li>• Sheltered shallow sand</li> <li>• Sheltered shallow reef</li> </ul>	<p>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 (&lt; 1-year-old) fishes, including tāmure/ snapper (<i>Chrysophrys auratus</i>).</p> <p>Abundant elasmobranchs, including eagle rays, stingrays, tope and ngengero.</p> <p>Post-pelagic developmental ground for green turtles.</p> <p>Nationally important roosting, feeding and breeding area for waders and shorebirds.</p> <p>Diverse benthic invertebrate fauna on reefs in the harbour entrance.</p>	<p>Habitat loss, lowered productivity and hydrological changes due to reclamations and impoundments.</p> <p>Intertidal habitat loss due to aquaculture.</p> <p>Overfishing.</p>
Great Exhibition Bay and Rangaunu Bay	<ul style="list-style-type: none"> <li>• Moderate rocky shore</li> <li>• Sheltered rocky shore</li> <li>• Moderate beach</li> <li>• Sheltered beach</li> <li>• Moderate shallow reef</li> <li>• Sheltered shallow reef</li> <li>• Moderate shallow sand</li> <li>• Rhodolith bed</li> <li>• Deep reef</li> <li>• Deep sand</li> <li>• Upper slope</li> </ul>	<p>Diverse intertidal and shallow rocky reef assemblages around headlands, islands and rock stacks.</p> <p>Extensive deep reef complex supporting diverse benthic invertebrate fauna (mapped by Ocean Survey 20/20 in 2008–2009).</p> <p>Scallops.</p> <p>Shallow, clean, sand habitats also support abundant populations of lancelets and short-finned worm eels.</p> <p>Productive intertidal and inshore fisheries.</p> <p>Mangō taniwha habitat.</p> <p>Post-pelagic developmental ground for green turtles.</p>	<p>Overfishing.</p> <p>Bycatch of protected species.</p> <p>Removal of epifauna and flora, and habitat homogenisation by mobile fishing gear.</p> <p>Coastal development, including aquaculture.</p> <p>Vehicles on beaches.</p> <p>Invasive marine species (eg <i>Undaria pinnatifida</i>; <i>Pyura doppelgangera</i>).</p>



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## 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
<b>International</b>			
Hokianga sand dunes	One of the most spectacular examples of an active dune system in Aotearoa New Zealand (Aotearoa)		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		No
Te Paki dunes	Best area of active dunes on the Aupōuri Peninsula		Yes

*Continued on next page*

Appendix 9 table continued

FEATURE	SIGNIFICANCE	PRESSURE / THREAT	PROTECTED AREA
<b>National</b>			
Surville Serpentinite Formation	<p>Only significant-sized exposure of the lower-most sequences (the Tangihua Complex) of an ophiolite formation (the Northland Allochthon)</p> <p>[The Tangihua Complex usually comprises areas of early Cretaceous basalt sea floor; however, at North Cape, c. 9200ha of mafic gabbro and c. 160ha 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.]</p>	Mining; mineral prospecting	Yes
<b>Regional</b>			
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	<ul style="list-style-type: none"> <li>• Areas inside or on the periphery of urban areas</li> <li>• Typically include historic or cultural sites</li> </ul>	<ul style="list-style-type: none"> <li>• Remnant native forests, wetlands, marine reserves and historic or cultural sites in areas dominated by farmland and plantation forest</li> </ul>	<ul style="list-style-type: none"> <li>• Areas where the majority of visitation occurs; typically small areas, scattered within or on the periphery of large, relatively natural areas</li> <li>• Include the vicinity of main ‘scenic’ roads passing through public conservation lands</li> <li>• Often focused on a particular attraction</li> </ul>	<ul style="list-style-type: none"> <li>• Large-scale natural settings that are generally accessed through the front country</li> <li>• Include popular walks and tramps set within the body of large-scale natural settings and/ or that provide access to other settings</li> </ul>	<ul style="list-style-type: none"> <li>• 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</li> </ul>	<ul style="list-style-type: none"> <li>• Gazetted wilderness</li> </ul>

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	<ul style="list-style-type: none"> <li>Typically accessed via sealed and unsealed roads or, in some cases, by boat</li> <li>Enabled for people of most ages and abilities</li> </ul>	<ul style="list-style-type: none"> <li>Readily accessible areas, usually via sealed roads or scheduled ferry or air services</li> <li>Mostly accessed by car, but tour buses and guided parties also visit some sites</li> <li>Enabled for people of most ages and abilities</li> </ul>	<ul style="list-style-type: none"> <li>People will have travelled some distance to reach these settings</li> <li>'Backcountry accessible' focuses on gravel roads, four-wheel drive roads, navigable waters and aircraft landing sites</li> <li>Motorised ground access generally restricted to roads and designated routes</li> <li>'Backcountry walk-in' is focused beyond the influence of motorised access</li> </ul>	<ul style="list-style-type: none"> <li>Typically 5 or more hours' travel from the front country</li> <li>Access supported by aircraft in some areas</li> </ul>	<ul style="list-style-type: none"> <li>Requires travel through backcountry and remote areas to reach the boundary</li> </ul>

Continued on next page

Appendix 11 table continued

SETTING	URBAN	RURAL	FRONT COUNTRY	BACKCOUNTRY – ACCESSIBLE AND WALK-IN	REMOTE	WILDERNESS
Predominant visitor groups	<ul style="list-style-type: none"> <li>Short-stop travellers and day visitors</li> </ul>	<ul style="list-style-type: none"> <li>Short-stop travellers, day visitors and over-night visitors</li> </ul>	<ul style="list-style-type: none"> <li>Predominantly short-stop travellers, day visitors and over-night visitors</li> <li>Other visitors in transition to backcountry and remote settings</li> </ul>	<ul style="list-style-type: none"> <li>Predominantly ‘backcountry comfort seekers’ and ‘backcountry adventurers’</li> </ul>	<ul style="list-style-type: none"> <li>‘Backcountry adventurers’ and ‘remoteness seekers’</li> </ul>	<ul style="list-style-type: none"> <li>‘Remoteness seekers’</li> </ul>
Facility setting	<ul style="list-style-type: none"> <li>High-standard footpaths, cycleways and modified landscapes</li> <li>High degree of control via information and directional signs and barriers</li> </ul>	<ul style="list-style-type: none"> <li>Short walks, campgrounds and picnic areas for a range of ages and abilities</li> <li>High degree of control via information and directional signs and barriers</li> </ul>	<ul style="list-style-type: none"> <li>Good-quality facilities and services and easy access</li> <li>Sometimes the starting point for tramping tracks and routes, with signs and information to make this transition clear</li> <li>High degree of control via information and directional signs and barriers</li> </ul>	<ul style="list-style-type: none"> <li>A range of facility standards, including any designated vehicle routes and popular walks and tramping tracks</li> <li>Evidence of control limited to essential directional signs and barriers on Great Walks and in places where there are significant hazards</li> </ul>	<ul style="list-style-type: none"> <li>Basic huts, bridges, low-use tracks and marked routes</li> <li>Evidence of control is limited to essential signs</li> </ul>	<ul style="list-style-type: none"> <li>No facilities</li> </ul>

Appendix 11 table continued

SETTING	URBAN	RURAL	FRONT COUNTRY	BACKCOUNTRY – ACCESSIBLE AND WALK-IN	REMOTE	WILDERNESS
Desired visitor experience and interactions	<ul style="list-style-type: none"> <li>Varied, from activities with large groups through to time with small groups/families, some time away from other groups and, in some cases, solitude</li> </ul>			<ul style="list-style-type: none"> <li>Generally some time away from other groups and, in some cases, solitude</li> <li>Occasional encounters with organised groups</li> <li>Generally accepting of occasional intrusion of noise</li> </ul>	<ul style="list-style-type: none"> <li>Reasonable expectation of isolation from sights, sounds and activities of other people</li> <li>Interaction with few other groups</li> <li>Considerable self-reliance on backcountry skills</li> </ul>	<ul style="list-style-type: none"> <li>Complete isolation from sights, sounds and activities of other people</li> <li>Maximum interaction with only one other group is generally acceptable</li> </ul>
Preferred maximum party size	<ul style="list-style-type: none"> <li>Whatever is socially appropriate</li> <li>Conforming concessions schedule: 15</li> </ul>	<ul style="list-style-type: none"> <li>50</li> <li>Conforming concessions schedule: 15</li> </ul>	<ul style="list-style-type: none"> <li>15</li> <li>50 for periodic tour bus parties</li> <li>Conforming concessions schedule: 15</li> </ul>	<ul style="list-style-type: none"> <li>15</li> </ul>	<ul style="list-style-type: none"> <li>8</li> </ul>	<ul style="list-style-type: none"> <li>6</li> </ul>

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Appendix 11 table continued

SETTING	URBAN	RURAL	FRONT COUNTRY	BACKCOUNTRY – ACCESSIBLE AND WALK-IN	REMOTE	WILDERNESS
Typical visitor interaction levels	<ul style="list-style-type: none"> <li>Whatever is socially appropriate</li> </ul>	<ul style="list-style-type: none"> <li>20 or fewer people seen per hour</li> </ul>	<ul style="list-style-type: none"> <li>30 or fewer people seen per visit duration</li> </ul>	<ul style="list-style-type: none"> <li>15 or fewer people seen per day for ‘backcountry adventurer’ tracks or routes</li> <li>40 or fewer people seen per day for ‘backcountry comfort seeker’ tracks or routes</li> </ul>	<ul style="list-style-type: none"> <li>10 or fewer people seen per day</li> </ul>	<ul style="list-style-type: none"> <li>6 or fewer people seen per visit duration</li> </ul>
Concessions operations	<ul style="list-style-type: none"> <li>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</li> <li>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</li> </ul>					<ul style="list-style-type: none"> <li>Concessions should not be granted for this setting</li> </ul>
Concessions effects management	<ul style="list-style-type: none"> <li>Avoid, remedy or mitigate effects by setting conditions</li> </ul>		<ul style="list-style-type: none"> <li>Avoid or mitigate effects</li> </ul>	<ul style="list-style-type: none"> <li>Concessions activities to be indistinguishable from other approved activities</li> </ul>		<ul style="list-style-type: none"> <li>No concessions</li> </ul>
Aircraft management	<ul style="list-style-type: none"> <li>Aircraft access for visitor use purpose should not be approved other than in accordance with Parts Two and Three of Te Hiku CMS</li> </ul>					<ul style="list-style-type: none"> <li>Aircraft access will not be granted</li> </ul>

# 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 (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 the Te Hiku o Te Ika-a-Māui Conservation Management Strategy (Te Hiku CMS), Te Papa Atawhai is 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 the 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 the 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 Old School Historic Reserve	Kirkpatrick Street, Kohukohu, north Hokianga	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 the 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 (eg meteorological, seismic) or utilities (eg communication systems, transmission lines) that have been authorised by the Department of Conservation Te Papa Atawhai (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 (eg 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 (eg 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 (eg forest cover, steep terrain); or
  - there is likely to be little demand for aircraft access over the life of the 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 (eg heli-skiing, heli-fishing, ground-based hunting);
  - to only allow specific types of aircraft (eg 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 the Te Hiku CMS and as shown in the maps in Volume III.

Outcomes and/or policies may specify numeric limits for aircraft landings (eg 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	
<b>Average percentage of time aircraft are likely to be encountered</b>	<b>1% or less</b>	<b>5%</b>	<b>25%</b>	<b>50% or more</b>
<b>Likely visitor management zone</b>	Remote and/or backcountry zones		Backcountry and/or front-country zones	
<b>Word used in outcomes/policies to describe and achieve this</b>	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 the 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
<b>Manu (birds)</b>		
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>
komako, korimako	bellbird	<i>Anthornis melanura</i>
kororā	little blue penguin	<i>Eudyptula minor</i>
kōtare	sacred kingfisher	<i>Todiramphus sanctus</i>
kōtuku	white heron	<i>Ardea alba</i>

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Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
koukou	morepork	<i>Ninox novaeseelandiae</i>
kūaka, kakao, kura	bar-tailed godwit	<i>Limosa lapponica</i>
kūkuru, kūkuruatu	northern New Zealand dotterel	<i>Charadrius 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>
pīpīwharauoa	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>
tīrairaka	fantail	<i>Rhipidura fuliginosa</i>
tōrea	oystercatcher (generic)	<i>Haematopus</i> spp.

Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
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>
<b>Ngārara (reptiles)</b>		
honu	turtle (generic)	
kākāriki	Northland green gecko	<i>Naultinus grayii</i>
mokomoko	skink (generic)	
mokopāpā	brown gecko	
<b>Ngārara (invertebrates)</b>		
mokoroa	pūriri moth caterpillar	<i>Aenetus virescens</i>
ngaro puāwai, pī	native bee (generic)	
pūngāwerewere	spider (generic)	
pūpū	snail (generic)	
pūpū harakeke, pūpū whakarongo tauā	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
<b>Ngohi wai māori (freshwater invertebrates)</b>		
kāeo	freshwater mussel	<i>Echyridella menziesii</i>
kēwai	freshwater crayfish	<i>Paranephrops planifrons</i>
tarawera	shrimp	<i>Paratya curvirostris</i>
torewai	freshwater mussel (various)	<i>Echyridella</i> spp.

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## Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
<b>Ngohi wai māori (freshwater fishes)</b>		
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>
<b>Ngohi wai tai (saltwater fishes)</b>		
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)	
kumukumu	red gurnard	<i>Chelidonichthys kumu</i>
kuparu	John Dory	<i>Zeus faber</i>

Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
mangā	barracouta	<i>Thyrsites atun</i>
maomao	blue maomao	<i>Scorpis 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>
pātiki tōtara	yellowbelly flounder	<i>Rhombosolea leporina</i>
pātutuki, rānaru, rāwaru	rock cod, blue cod	<i>Parapercis colias</i>

Continued on next page

Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
pōrae	grey morwong	<i>Nemadactylus douglasii</i>
puhi	moray eel (generic)	
rāhiri	Māori chief	<i>Epinephelus daemелиi</i>
reperepe	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>Seriolella brama</i>
<b>Mangō and whai (sharks and rays)</b>		
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	
repo, whairepo	black stingray	<i>Bathytoshia lata</i>
reremai	basking shark	<i>Cetorhinus maximus</i>
tōiki	bronze whaler	<i>Carcharhinus brachyurus</i>

Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
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>
<b>Ngohi moana (marine mammals)</b>		
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>
<b>Mātaitai (marine invertebrates)</b>		
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 adpersa</i>
kina	common sea urchin	<i>Evechinus chloroticus</i>
koeke, tarawera	common shrimp	<i>Palaemon affinis</i>
kōkota	pipi	<i>Paphies australis</i>
kōpūpūtai	sponge (generic)	

Continued on next page

Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
kōtore moana, komi moana, hūmenga	sea anemone (various)	<i>Cnidaria species</i>
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 spp.</i>
pātangatanga, pātangaroa, pekapeka	starfish (generic)	<i>Echniodermata spp.</i>
pāua	abalone (various)	<i>Haliotis spp.</i>
pūpū	winkle (generic)	
rore, rori	sea cucumber, sea snail	<i>Australostichopus mollis</i>
tio	rock oyster	<i>Saccostrea cucullata</i>
tipa	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>
<b>Rākau (trees)</b>		
hangehange		<i>Geniostoma ligustrifolium var. ligustrifolium</i>
hīnau		<i>Elaeocarpus dentatus</i>

Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
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>
māī	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>
manoao	silver pine	<i>Manoao colensoi</i>
maukurangi	miniature tree fern	<i>Diploblechnum fraseri</i>
miro	brown pine	<i>Pectinopitys ferruginea</i>
neinei	spiderwood	<i>Dracophyllum latifolium</i>

Continued on next page

Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
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>Cyathea 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>Cyathea 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>
tāwhiri		<i>Pittosporum tenuifolium</i>
tī, tītī	cabbage tree	<i>Cordyline australis</i>
tīpau	red matipo	<i>Myrsine australis</i>

Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
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>
<b>Tuputupu whenua (ground plants)</b>		
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>
kohukohu	moss (generic)	
kōhutuhutu	tree fuchsia	<i>Fuchsia excorticata</i>
kōpuru	scented moss (generic)	

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Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
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>
muka	swamp flax (generic)	
napuka		<i>Veronica speciosa</i>
naupata, taupata	mirror bush, looking glass plant	<i>Coprosma perpusilla</i> subsp. <i>subantarctica</i>

Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
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 billardierei</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>
runa	saltmarsh ribbonwood	<i>Plagianthus divaricatus</i>
tauhinu	cottonwood	<i>Ozothamnus leptophyllus</i>

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Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
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>
<b>Tuputupu māra (cultivated plants)</b>		
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>
uremangu	variety of Māori potato	

Appendix 14 table continued

MĀORI NAME	ENGLISH NAME	SCIENTIFIC NAME
uwahi	yam (various)	<i>Dioscorea</i> spp.
wāina	variety of sweet potato	
<b>Tuputupu rangi (vines and epiphytes)</b>		
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.
<b>Tuputupu moana (coastal and marine plants)</b>		
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>
rimuwānui	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	
<b>Hōkeke (fungi)</b>		
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-Tōhe/Te Oneroa-a-Tōhe Beach Management Plan, the Warawara Whenua Ngāhere i te Taiao/Warawara Cultural Redress and Te Rerenga Wairua Reserve.

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

### Te Rautaki o Te Oneroa-a-Tōhe/Te Oneroa-a-Tōhe Beach Management Plan

For generations, Te Oneroa-a-Tōhe 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-Tōhe 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-Maui iwi have a vision for a healthy beach that is capable of sustaining their communities and expressing their cultural and historical significance.

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

Te Rautaki o Te Oneroa-a-Tōhe 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 [www.teonerua-a-tohe.nz/beach-management-plan](http://www.teonerua-a-tohe.nz/beach-management-plan).



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

### Warawara Whenua Ngāhere i Te Taiao/Warawara Cultural Redress

Warawara Conservation Park (6493 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.

The 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 the 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 [www.legislation.govt.nz/act/public/2015/0079/latest/DLM6577914.html](http://www.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.

As the northernmost promontory of Aotearoa New Zealand, 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, the 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







