# Key Native Ecosystem Operational Plan for Wellington South Coast

2025-2030

# Contents

# 1. Purpose

The purpose of this five-year Key Native Ecosystem (KNE) operational plan for Wellington South Coast KNE site is to:

- Identify the parties involved in preparing and delivering the operational plan.
- Summarise the ecological values of the site and identify the threats to those values.
- Outline the vision and objectives that guide management decision-making.
- Describe the operational activities undertaken to improve ecological conditions (eg, ecological weed control), and who will undertake the activities and the allocated budgets.

KNE operational plans are reviewed every five years to ensure the activities undertaken to protect and restore the KNE site are informed by experience and improved knowledge about the site. The KNE operational plan is aligned to key policy documents outlined in Appendix 1.

## 2. Wellington South Coast Key Native Ecosystem site

Wellington South Coast KNE site (121ha) covers an area of coastline and coastal escarpment on the southern tip of the Wellington peninsula. This KNE site is located between the Wellington City suburb of Ōwhiro Bay and the mouth of Karori Stream. The KNE site is split across two areas, one part being located within Te Kopahou Reserve and the other comprising Te Wai-Komaru conservation covenant (see Appendix 2, Map 1). Other important features within the KNE site include the Red Rocks and Sinclair Head scientific reserves.

The KNE site comprises the coastal shore platform formed by earthquake uplifts, exposed coastal escarpment and gullies that are exposed to strong onshore winds. The KNE site is known to support diverse and threatened vegetation communities and an array of threatened wildlife including coastal shore birds, lizards and seals.

The coastal platform contains low-lying beaches, gravel dunes and rock stack environments. These support a variety of plant species adapted to the salty environment and include hardy shrubs, grasses, herbs and rare plants. Features of particular interest include the Kinnoull sand dunes, Karori Stream mouth, and small pockets of marsh and native coastal turf associated with seal haul-outs. The coastal platform has been subject to restoration planting efforts for several years.

The steep escarpment supports extensive areas of wind-shorn grey scrub merging into rocky cliff environments which contain shrub, flax, tussock, and herb vegetation. The exposed tops of ridges and spurs support native grasses, tussock, speargrass, grey scrub, and shrublands.

# 3. Parties involved

There are multiple organisations, mana whenua, bach owners, and volunteer groups that play important roles in the care of the Wellington South Coast KNE site.

## 3.1. Landowners

Wellington City Council (WCC) owns and manages the parts of the KNE site within Te Kopahou Reserve (see Appendix 2, Map 1). WCC manages this reserve in line with the objectives set out within "*Our Natural Capital – Wellington's Biodiversity Strategy and Action Plan"*[1] and "Outer Green Belt Management Plan"[2] .

New Zealand Forestry Group Ltd (NZ Forestry Group) owns the lands associated with the Te Wai-Komaru conservation covenant (see Appendix 2, Map 1). This area includes the Kinnoull sand dunes. This land is subject to the overall objective stated in the covenant deed, being: (*T)he Land must be managed so as to preserve the Reserve Values*[3]. This covenant binds all subsequent owners of the land to ensure the reserve values are preserved.

## 3.2. Operational delivery

Within Greater Wellington, three teams are responsible for delivering the Wellington South Coast KNE operational plan.

- The Environment Restoration team leads the strategic planning, funding, and coordination of biodiversity management activities and advice within the KNE site.
- The Pest Plants and Pest Animals teams coordinate and implement ecological weed and pest animal control measures at the KNE site. These are funded from the Environment Restoration team's KNE programme budget.

Wellington City Council undertakes biodiversity management activities in Te Kopahou Reserve including ecological weed control and pest animal control. WCC is the primary contact for community groups and bach owners undertaking restoration or pest control activities within the reserve. WCC has also been actively involved in management activities at the Kinnoull sand dune in the past and continues to undertake restoration planting at the dune site.

## 3.3. Mana whenua partners

The Wellington South Coast KNE site area is significant to Te Rūnanga o Toa Rangatira and Taranaki Whānui ki Te Upoko o Te Ika, who are mana whenua partners with GW and WCC.

The area has been identified in the Natural Resources Plan for the Wellington Region (NRP)[4] as culturally important with reference to freshwater (wai Māori) and sea water (wai tai), recognising that these are areas where mana whenua lived and practiced māhinga kai, Te Ara a Kupe, wāhi tupuna, wāhi pakanga, mahi touhokohoko, and wāhi maumahara (see Table 1 below).

The Statutory Acknowledgements from the Ngāti Toa Rangatira Claims Settlement Act 2014[5] and the Port Nicholson Block (Taranaki Whānui ki Te Upoko o Te Ika) Claims Settlement Act 2009[6] provide further details of the associations that Te Rūnanga o Toa Rangatira and Taranaki Whānui ki Te Upoko o Te Ika have with Te Rimurapa/Sinclair Head and Pariwhero/Red Rocks, which are both located within the KNE site.

Greater Wellington is committed to identifying ways in which kaitiakitanga can be strengthened by exploring opportunities for mana whenua partners to participate in the development or delivery of KNE operational plans.

**Table 1: Mana whenua sites of significance in the Wellington South Coast KNE site[7]**

| Sites of significance | Mana whenua values |
|---|---|
| Te Rūnanga o Toa Rangatira<br>• **Te Rimurapa (Sinclar Head)**<br>• **Pariwhero (Red Rocks)**<br>(Schedule C) | mahinga kai, Te Ara a Kupe, wāhi tupuna, wāhi pakanga, mahi touhokohoko, wāhi maumahara |
| Taranaki Whānui ki te Upoko o te Ika<br>• **Te Rimurapa (Sinclar Head)**<br>• **Pariwhero (Red Rocks)**<br>(Schedule C) | mahinga kai |

## 3.4. Stakeholders

The Cross-Country Vehicle Club is a regular user of the Red Rocks coastal track. The club engages with WCC on volunteer opportunities within the KNE site, including pest control activities.

Within the KNE site boundary, there are 10 baches. The bach owners at Mestanes Bay and at Red Rocks have ground leases with WCC for their dwellings. The one bach owner at Long Beach has a ground lease with NZ Forestry Group.

# 4. Ecological values

This section describes the various ecological components and attributes that make the KNE site important. These factors determine the site's value at a regional scale and how managing it contributes to the maintenance of regional biodiversity.

## 4.1. Ecological designations

Table 2 below lists ecological designations within the Wellington South Coast KNE site.

**Table 2: Designations at the Wellington South Coast KNE site**

| Designation level | Type of designation |
|---|---|
| National | Parts of the Wellington South Coast KNE site are designated by the Department of Conservation (DOC) as Scientific Reserves:<br>• Te Rimurapa (Sinclar Head)<br>• Pariwhero (Red Rocks) |
| Regional | Parts of the Wellington South Coast KNE site are scheduled in the NRP as Ecosystems and Habitats with Significant Indigenous Biodiversity Values:<br>• Significant habitat for indigenous birds in the coastal marine area: Sinclair Head/Te Rimurapa to Owhiro Bay (Schedule F2c).<br>• River and lakes with significant indigenous ecosystems: Kārori Stream – Habitat for indigenous threatened/at risk species (Schedule F1).<br>• River and lakes with significant indigenous ecosystems: Kārori Stream – Habitat for six or more migratory indigenous fish species (Schedule F1).<br>Part of the Wellington South Coast KNE site is scheduled in the NRP as a site with significant geological features in the coastal marine area (Schedule J):<br>• Pariwhero/Red Rocks |
| District | Part of the Wellington South Coast KNE site is designated as Historic Reserve:<br>• Te Kopahou Reserve |
| Other | Part of the Wellington South Coast KNE site is protected via a DOC conservation covenant:<br>• Te Wai – Komaru Conservation Covenant<br>• Part of the Wellington South Coast KNE site is protected via a WCC conservation covenant:<br>• Kinnoull Conservation Covenant |

## 4.2. Ecological significance

The Wellington South Coast KNE site is considered to be of regional importance because:

- It contains highly **representative** ecosystems that were once typical or commonplace in the region,
- It contains ecological features that are **rare or distinctive** in the region, including naturally uncommon ecosystems,
- It contains high levels of ecosystem **diversity**, with several ecosystem types represented,
- Its **ecological context** is valuable at the landscape scale as it contains a variety of inter-connected habitats and provides core and seasonal habitat for six threatened indigenous species (see Appendix 3).

*Representativeness*

The Singers and Rogers[8] classification of pre-human vegetation indicates that the KNE site would have comprised three ecosystem types (see Appendix 2, Map 2). The original ecosystem present was primarily kohekohe, tawa forest (MF6) of which only 15% of the original extent remains in the Wellington region. A coprosma, muehlenbeckia shrubland/herbfield/rockland vegetation type (CL3) would have been present along much of the lower escarpment and steep escarpment cliff-faces. Much smaller patches of tawa, kamahi, podocarp forest (MF7) was present on the hilltops. Although modified, valuable aspects of these original vegetation types remain within the KNE site today.

The Threatened Environment Classification system defines ecosystem and habitat threat categories nationally, based on percentage of indigenous cover remaining[9]. The system indicates that the Kinnoull sand dune and Kārori Stream mouth ecosystems are classified as Acutely Threatened because there is only 10% native vegetation remaining on these types of land in New Zealand[10]. The remainder of the KNE site is considered Critically Under-protected because although there is more than 30% native vegetation remaining on these types of land in New Zealand, less than 10% is protected.

*Rarity/distinctiveness*

Several naturally uncommon ecosystems are present within the KNE site and are associated with dynamic coastal edge habitats. These are active sand dunes (Endangered), coastal turfs (Critically Endangered), estuaries (Vulnerable), marine mammal haul-outs (Critically Endangered), and shingle beaches (Endangered)[11].

Within the KNE site several plant species listed as Threatened in New Zealand's national threat classification system[12] have been recorded. The KNE site also provides seasonal/core habitat for eight Nationally Threatened or At Risk bird species. Four Nationally Threatened or At Risk native fish species are known to be present.

Similar numbers of species found within the KNE site are classified as regionally 'Threatened'. Appendix 3 contains lists of the nationally and regionally threatened species found within the KNE site.

The KNE site and immediate surroundings are known to support the only North Island mainland population of speargrass weevil (*Lyperobius huttonii*).

*Diversity*

The KNE site contains a diverse range of ecosystem types including forest, scrub, sand dune, estuarine, coastal turf, and coastal cliff communities. The KNE site is also noted as containing high plant species diversity[13].

*Ecological context*

Several ecosystems within the KNE site are considered national priorities for conservation. These ecosystem types, including coastal turfs and active sand dunes, have become uncommon on a national scale primarily due to human activity[14].

The south coast has been identified as one of 10 key coastal sites in the region that are a priority for protection and coastal management[15].

The KNE site forms part of an important wildlife corridor in the region from the south Wellington coast to the Porirua coastline which includes several other KNE sites including, the Western Wellington Forests, Porirua Western Forests and Whitireia Coast KNE sites.

## 4.3. Ecological features

The Wellington South Coast KNE site is located within the Wellington Ecological District which is characterised by steep, strongly faulted hills and ranges, with typically warm summers and mild winters. The climate is often windy with westerly to north-westerly winds prevailing with frequent gales and an annual rainfall ranging between 900-1400mm[16].

**Flora**

Much of the original canopy and emergent tree species such as kohekohe (*Didymocheton spectabilis*), tītoki (*Alectryon excelsus* ssp. *excelsus*), northern rātā (*Metrosideros robusta*), and tawa (*Beilschmiedia tawa*) are severely reduced or absent due to pest animal foraging and browsing pressure. However, the coastal escarpment and cliff vegetation communities still contain high plant species diversity, with 235 species summarised from New Zealand Plant Conservation Network records[17]. The predominant vegetation now mainly consists of regenerating low-lying coastal grey-scrub, flax and tussock land[18].

Plant species of note in the area include the Nationally Threatened Cook Strait kōwhai (*Sophora molloyi*), hinarepe/sand tussock (*Poa billardierei*), mingimingi (*Muehlenbeckia astonii),* and the Regionally Vulnerable *Melicytus orarius* and speargrass (*Aciphylla squarrosa* var. *squarrosa*). These species are severely reduced in numbers locally and are part of WCC's wider seed collection and planting programme.

Regenerating coastal grey-scrub is present in the escarpment and adjoining gullies. Typical species present here include mahoe/whitey wood (*Melicytus ramiflorus* subsp. *ramiflorus*); coastal tree daisy (*Olearia solandri*); taupata/mirror plant (Coprosma *repens*); tauhinu (*Ozothamnus leptophyllus*); mingmingi (*Coprosma propinqua* var. *propinqua*); ribbonwood (*Plagianthus divaricatus*); kāmahi (*Pterophylla racemosa*); kaikōmako (*Pennantia corymbosa*); mapau/red matipo

(*Myrsine australis*); kōtukutuku/tree fuschia (*Fuchsia excorticata*); akiraho/golden akeake (*Olearia paniculata*); tī kōuka/cabbage tree (*Cordyline australis*); koromiko (*Veronica stricta* var. *stricta*); mānuka (*Leptospermum scoparium* var. *scoparium*); kawakawa/pepper tree (*Piper excelsum* subsp. *excelsum*); thick-leaved māhoe (*Melicytus crassifolius*); whaririki/coastal flax (*Phormium cookianum* subsp. *cookianum*); and toetoe (*Austroderia toetoe*).

Towards the base of the escarpment, species present include silver tussock (*Poa cita*); horokaka/native ice plant (*Disphyma australe* ssp. *australe*); shore groundsel (*Senecio lautus*); coastal spleenwort (*Asplenium appendiculatum* ssp. *maritimum*); glasswort (*Sarcocornia quinqueflora*); piripiri/bidibid (*Acaena anserinifolia*); slender clubrush (*Isolepis cernua* var. *cernua*); and bachelors button (*Cotula coronopifolia*)[19,20,21,22].

The Kinnoull sand dunes were severely damaged in the past by off-road vehicles and pest animals. Previously, the site was known to contain hinarepe/sand tussock (*Poa billardierei*), toroheke/sand daphne (*Pimelea villosa*), tātaraheke/sand coprosma (*Coprosma acerosa*), pīngao/golden sand sedge (*Ficinia spiralis*), and kōwhangatara/spinifex (*Spinifex sericeus*). However, by the early 2000s small pockets of sand tussock and pīngao were the only native plants present[23]. A fence now physically protects these dunes, and some restoration planting of threatened plant species and pest plant control has been undertaken. As a result, the dunes are showing good signs of recovery with the native sand binders and species of *Pimelea* and *Raoulia* establishing well. While some small pockets of marram grass (*Calamagrostis arenaria*) and tree lupin (*Lupinus arboreus*) remain, ninety percent of these ecological weeds have been controlled at Kinnoull sand dunes over the last five years.

Coastal turfs are located amongst the rocky platforms and are largely associated with the seal haul-out areas. Species composition includes remuremu/selliera (*Goodenia radicans*), triglochin (*Triglochin striata*), sea primrose (*Samolus repens* var. *repens*), *Lilaeopsis novae-zelandiae*, glasswort (*Sarcocornia quinqueflora*), and bachelors button (*Cotula coronopifolia*)[24]. Notable recorded species around the rocky platforms within the KNE site include scattered populations of the threatened species sea holly (*Eryngium vesiculosum*) and woollyhead (*Craspedia uniflora* var. *maritima*).

**Fauna**

*Birds*

The KNE site is recognised as being core habitat for several coastal bird species including threatened species. Bird species recorded at the KNE site include tarāpunga/red-billed gull (*Chroicocephalus novaehollandiae*), pihoihoi/New Zealand pipit (*Anthus novaseelandiae*), tōrea pango/variable oystercatcher (*Haematopus unicolor*), tara/white-fronted tern (*Sterna striata*), māpunga/black shag (*Phalacrocorax carbo*)[25], tūturiwhatu/banded dotterel (*Anarhynchus bicinctus*)[26], matuku moana/reef heron (*Egretta sacra*) and kororā/little blue penguin (*Eudyptula minor*)[27]. Banded dotterels have recently been recorded nesting within the KNE site.

Other bird species known to visit the KNE site occasionally or seasonally are pakahā/fluttering shearwater (*Puffinus gavia*), kawaupaka/little shag (*Microcarbo melanoleucos*), tākapu/Australasian gannet (*Morus serrator*), karoro/southern black-backed gull (*Larus dominicanus*) and pāngurunguru/northern giant petrel (*Macronectes halli*)[28].

*Reptiles*

Lizard surveys conducted in 2014[29] across the KNE site and in 2016[30] within the wider Te Kopahou Reserve found three species: minimac gecko (*Woodworthia* 'Marlborough Mini' | At Risk-Declining), northern grass skink (*Oligosoma polychroma*), and Raukawa gecko (*Woodworthia maculata*).

Previous coastal lizard surveys along the wider southern coastline have also recorded glossy brown skink (*Oligosoma zelandicum*) and copper skink (*Oligosoma aeneum*)[31]. It is likely that these species are present within the KNE site.

*Freshwater fish*

Kārori Stream is recognised for its value to native freshwater fish. The New Zealand Freshwater Fish Database contains records within the stream of banded kōkopu (*Galaxias fasciatus*), īnanga (*Galaxias maculatus*), kōaro (*Galaxias brevipinnis*), longfin eel (*Anguilla dieffenbachii*), shortfin eel (*Anguilla* australis), lamprey (Geotria australis), upland bully (Gobiomorphus breviceps), redfin bully (*Gobiomorphus huttoni*), shortjaw kokopu (*Galaxias postvectis*), and giant kokopu (*Galaxias argenteus*)[32].

*Terrestrial invertebrates*

The KNE site and immediate surroundings support the only North Island mainland population of speargrass weevil (*Lyperobius huttonii*) which is also the only known coastal population of this species[33]. Speargrass weevils are wholly dependent on the speargrass plant for their entire life cycle[34]. Other invertebrates of note include katipō spider (*Lactrodectus katipo*), observed in the dune vegetation, and the *Notoreas* genus of moths. These moths are solely reliant on pimelea plants[35].

# 5. Threats to ecological values at the KNE site

Ecological values can be threatened by human activities, introduced predators and plants that change ecosystem dynamics. The key to protecting and restoring native biodiversity as part of the KNE programme is to manage key threats to the ecological values at each KNE site. Key threats to the Wellington South Coast KNE site are discussed below and all known threats to the KNE site are summarised in Appendix 4.

## 5.1. Key threats

The primary threats to the ecological values of the Wellington South Coast KNE site are ecological weed and pest animal species.

*Ecological weeds*

Ecological weeds have a negative impact on the biodiversity values of a habitat and change the ecosystem structure and diversity by inhibiting seedling establishment, out-competing and displacing native plants, and reducing the availability of food resources for native animals. Ecological weeds are widespread throughout the KNE site. These include woody tree species such as mature pine trees (*Pinus spp*.), tree lupin (*Lupinus arboreus*), and boneseed (*Chrysanthmoides monilifera*); exotic grasses such as marram (*Calamagrostis arenaria*); annual and perennial herbs such as purple groundsel (*Senecio elegans*) and horned poppy (*Glaucium flavum*); flowering plants such as hoary stock (*Matthiola incana*) and peppermint geranium (*Pelargonium tomentosum*); and ground covering species such as South African ice plant (*Carpobrotus edulis*). In addition, the non-local native species, karo (*Pittosporum crassifolium*) and pōhutakawa (*Metrosideros excelsa*) are also considered ecological weeds at the site as they are known to outcompete and hybridise with local native species. The complete list of ecological weeds present at the Wellington South Coast KNE site can be found in Appendix 5.

*Pest animals*

A suite of pest animal species is present within the KNE site and are considered a wider issue across the entire Wellington peninsula. Pest animal foliage-browsers are considered the biggest threat as these severely inhibit the regeneration of the vegetation communities and threatened plant species. These species include brushtail possum (*Trichosurus vulpecula*), feral goat (*Capra hircus*), rabbit (*Oryctolagus cuniculus*) and hare (*Lepus europaeus*). These four species are known to be present in the KNE site and are likely to be adversely affecting the regeneration of the native vegetation cover.

Feral pigs (*Sus scrofa*) are locally present and root up vegetation during their foraging, adversely affecting natural regeneration. Feral pigs eat the roots of speargrass plants within the KNE site and surrounding areas.

Mustelids such as stoats (*Mustela erminea*), weasels (*Mustela nivalis*), and ferrets (*Mustela furo*), as well as hedgehogs (*Erinaceus europeaeus*) and rats (*Rattus* spp.) have been recorded in the KNE site. These pest species adversely affect the KNE site's biodiversity values by preying on nesting birds, lizards, and invertebrates.

Recreation activities within the KNE site can damage the sand dunes and shingle beach habitats and disturb wildlife, including nesting coastal birds. The main threat to the KNE site in this regard is motorbike, quad bike, and 4X4 vehicle use. In addition, uncontrolled dogs can disturb and kill breeding birds and their chicks.

# 6. Vision and objectives

## 6.1. Vision

***'Key ecological processes are restored and protected, ensuring the protection and dispersal of native flora and fauna, and contributing to a resilient ecological corridor linking Wellington's south coast with Porirua's northern coastline.'***

## 6.2. Objectives

Objectives help to ensure that operational activities carried out are contributing to improvements in the ecological condition of the site.

The following objectives will guide the operational activities at the Wellington South Coast KNE site.

1. ***Protect and restore the key ecological processes***
2. ***Protect threatened coastal birds and invertebrates***
3. ***Protect coastal lizards***
4. ***Protect uncommon ecosystems and rare plant species***
5. ***Develop relationships and engage with community***

# 7. Operational activities

Operational activities are targeted at working towards the objectives listed in Section 6.2. The broad approach to operational activities is described below, and specific actions, with budget figures attached, are set out in the operational delivery schedule in Section 8.

## 7.1. Ecological weed control

The aim of ecological weed control at the KNE site is to reduce the density and distribution of targeted high impact pest plants enabling coastal ecological processes to be improved. Ecological weed control also allows for the protection and regeneration of the native seed bank, uncommon ecosystems and rare plant species, and provides support to restoration planting efforts. Weed control activities are targeted to work towards objectives 1, 4, and 5 in Section 6.2 (See Appendix 2, Map 3 for ecological weed control operational area locations).

Greater Wellington undertakes annual ecological weed control at the Kinnoull sand dunes (operational area B) and Kinnoull escarpment (operational area D). This is to prevent the establishment and spread of high impact ecological weeds such as marram grass, tree lupin, and horned poppy. Ecological weed control will enable native dune plants to continue to establish and protect identified threatened plant species.

Greater Wellington Pest Plants team controls the ecological weed boneseed (*Chrysanthemoides monilifera ssp. monilifera*) along the coastal escarpment within the Te Kopahou Reserve part of the KNE site (operational area C). This forms part of the regional strategy to reduce adverse effects of boneseed[36] and is programmed to be undertaken annually for the next five years via helicopter aerial herbicide application. This activity is primarily funded outside of the KNE programme via the Regional Pest Management Plan (RPMP) boneseed Sustained Control programme. Greater Wellington's Environment Restoration team and WCC contribute extra funding to maximise the programme's effectiveness by expanding the area under annual control. Other woody species are also targeted alongside boneseed. These include karo, pōhutukawa, wattle, and pine species.

WCC undertakes annual weed control along the coastal platform within the Te Kopahou Reserve part of the KNE site (operational area A) and in Te Raurekau catchment. Specific areas targeted for consistent control are the restoration planting sites, historic infestation sites, and Sinclair Head scientific reserve.

See Appendix 5 for a full list of ecological weeds that are controlled in the KNE site.

## 7.2. Pest animal control

The aim of pest animal control at the KNE site is to protect sand-binding plants to ensure dune system processes are allowed to develop naturally and provide protection to native fauna including lizards and shore birds such as banded dotterel. Pest animal control activities are targeted to work towards objectives 2, 3, and 4 outlined in Section 6.2.

Greater Wellington undertakes night-shooting twice a year targeting rabbits and hares at the Kinnoull sand dune (operational areas B and D). This is aimed at protecting the sand-binding plants and ensuring dune system processes are allowed to develop naturally. Whilst on-route to the sand dunes, other pest animals such as possums are also controlled.

In addition, Greater Wellington's Regional Predator Control Programme (RPCP) has installed a poison bait-station network across most of the Wellington peninsula including Kinnoull Station and Te Kopahou Reserve (see Appendix 2, Map 4). The primary aim of the RPCP is to control possums to low levels across the Wellington region landscape[37]. This programme is expected to help protect the KNE site's values.

WCC manages a pest animal control network within operational areas A and B. The pest control regime involves the servicing of DOC 200 and DOC 250 kill-traps. These traps target stoats and hedgehogs and provide protection to banded dotterels and other shorebirds within the operational areas. This is particularly important during the nesting and fledgling period between July and March. During this period brooding banded dotterels are particularly vulnerable to predation and nest disturbance.

WCC established a mustelid control network consisting of DOC 200 and DOC 250 kill-traps, and GoodNature A24 self-setting traps within Te Kopahou Reserve surrounding the KNE site. These traps are serviced monthly by community volunteer groups, in collaboration with Capital Kiwi. WCC plans to continue developing the pest control network within this area with the help of volunteers and is currently planning to increase the network using self-resetting traps along the escarpment.

WCC undertakes control of feral goats and pigs in the wider landscape through Te Kopahou Reserve, Kinnoull Station, and Terawhiti Station. This benefits the KNE site by reducing the overall browsing pressure on regenerating vegetation and the rooting up of regionally rare plants such as speargrass. This control work has been ongoing since 2016/17.

## 7.3. Revegetation

The aim of revegetation work at the KNE site is to support the regeneration of native vegetation communities and provide erosion control.

Restoration planting has been an important part of the management of the Wellington south coast and Kinnoull sand dunes. Map 5 in Appendix 2 shows the restoration planting operational areas in the KNE site. The KNE site is a difficult environment to establish new plantings in, experiencing harsh conditions typical of the Cook Strait eco-district – very exposed areas with steep escarpments, shallow soils, scree and bare rock.

WCC engages the local bach owners and volunteer groups to undertake plantings at Fly Rock (operational area A) and around the baches (operational area C). WCC coordinates and supports community groups in all restoration planting activities within the KNE site.

## 7.4. Threatened and regionally rare plant seed collection

WCC collects seed and cuttings annually from threatened and regionally rare plant species within the Te Wai-Komaru conservation covenant for propagation purposes. DOC and the Forestry Group Ltd have given their approval for this collection. Seed and/or cuttings have been collected from the following species for the stated purposes:

- *Muehlenbeckia astonii:* to establish stock plants and build a viable insurance population by crossing with other locally found remnant plant populations. Some stock maybe cyro-preserved by WCC as part of this programme
- *Poa billardierei:* to establish insurance population stock
- *Aciphylla squarrosa* var. *squarrosa:* to replant produced plants locally
- *Sophora molloyi:* to replant produced plants locally.

Greater Wellington and WCC will continue to work in partnership with others such as the threatened plant working group to develop this programme and increase populations of existing threatened and locally rare or uncommon plant species.

## 7.5. Monitoring and surveys

WCC plans to conduct surveys of speargrass weevil in the KNE site during the period of this operational plan to evaluate the current population and to inform appropriate management and protection measures. This may include fencing off areas to protect vulnerable plant and animal species from known threats (eg, to protect speargrass plants from pigs or to protect vulnerable rare plants from rabbit and hare browse).

WCC will conduct monitoring of native birds to monitor the establishment and dispersal of native birds within Te Kopahou Reserve. Monitoring will help to understand the role of the reserve as a wildlife corridor, in particular the coastal end of the reserve.

Freshwater seepages are known throughout the KNE site but are not mapped and their management requirements are poorly understood. WCC will map and identify management requirements of all known seepages and undertake actions to restore these habitats where appropriate.

Photopoints were established in 1998 to monitor and record effects on vegetation communities following the implementation of policy and site work to limit vehicles to the formed coast road. These photopoints will be re-done during the course of this operational plan.

## 7.6. Community engagement

Wellington City Council engages with and develops and facilitates partnerships within the community to promote public awareness and protection of the special values of Te Kopahou Reserve and the adjacent coast. This work has become

increasingly important with the emergence of community-led projects such as the development of Predator-Free communities and Capital Kiwi.

Wellington City Council runs regular public education days, in collaboration with the police, recreational motorised vehicle clubs and other agencies, to encourage visitors to share the coastal road and tracks respectfully, keep to tracks, and avoid damaging the fragile ecology in KNE site.

Wellington City Council works with the neighbours and the wider community to protect species which are connected through the landscape as an ecological corridor regardless of land ownership. This may include supporting private landowners with pest control and restoration planting efforts.

## 8. Operational delivery schedule

The operational delivery schedule shows the actions planned to achieve the stated objectives for the Wellington South Coast KNE site, and their timing and cost over the five-year period from 1 July 2025 to 30 June 2030. The budgets for the years 2026/27 to 2029/30 are indicative only and subject to change. Operational areas (see Appendix 2, Maps 2, 3, and 4) are also subject to change according to operational needs over the course of the operational plan.

**Table 3: Five-year operational delivery schedule for the Wellington South Coast KNE site**

| Objective | Activity | Operational area | Intended 5-year outcome | Implementing party | Timetable and resourcing where allocated | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 |
| 1, 2, 4 | **Aerial based ecological weed control**<br>Sustained control of boneseed | C | Abundance and diversity of native plants are increased to preserve the ecosystem's integrity | GW Pest Plants team and WCC | ^<br>$20,000 | ^<br>$20,000 | ^<br>$20,000 | ^<br>$20,000 | ^<br>$20,000 |
| 1, 4 | **Ground based ecological weed control**<br>Control and reduce cover of target weed species | B and D | Abundance and diversity of native plants are increased to preserve the active dune processes | GW Pest Plants team | $6,815 | $7,150 | $7,515 | $7,890 | $8,290 |
| 1, 4 | **Ground based ecological weed control**<br>Weed control on coastal escarpment and gravel dune on WCC land | A | Ecological weeds are not establishing<br>Abundance and diversity of native plants are increased to preserve the active dune processes | WCC | $21,000 | $21,000 | $21,000 | $21,000 | $21,000 |

| Objective | Activity | Operational area | Intended 5-year outcome | Implementing party | Timetable and resourcing where allocated | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 |
| 1, 2, 3, 4 | **Pest animal control**<br>Night shooting twice annually at the Kinnoull dunes, targeting rabbits and hares. Also control other pest animals seen on route along red rocks road | B | Suppression of browsing pest animals to facilitate vegetation growth | GW Pest Animals team | $2,645 | $2,825 | $3,025 | $3,250 | $3,475 |
| 1, 2, 3, 4 | **Pest animal control – RPCP**<br>Control possums across the Wellington peninsula | A, B and wider Wellington peninsula | Possum are kept to low levels to protect the KNE site values | GW Pest Animals team and WCC | $55,000 | $55,000 | $55,000 | $55,000 | $55,000 |
| 2 | **Pest animal control**<br>Servicing mustelid control network on a monthly basis across Te Kopahou Reserve | A and wider Te Kopahou Reserve | Mustelid control across entire reserve established and pests controlled | WCC and volunteers | * | * | * | * | * |
| 1, 4 | **Pest animal control**<br>Control possums and ungulates across Te Kopahou Reserve | A and wider Te Kopahou Reserve | Regeneration of forested landscape | WCC | * | * | * | * | * |
| 2,3 | **Pest animal control**<br>Servicing pest control network along shoreline on a monthly basis, deployment of additional protection when bird nests found (eg, extra traps and fencing) | A and B | Protection of reptiles and coastal shore birds | WCC | * | * | * | * | * |

| Objective | Activity | Operational area | Intended 5-year outcome | Implementing party | Timetable and resourcing where allocated | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 |
| 1, 4 | **Restoration plantings**<br>Annual plantings detailed as per 9.3 | A, B | Expansion of native vegetation cover across the site | WCC | * | * | * | * | * |
| 4 | **Rare plant seed and cutting collection**<br>Annual seed/cutting collections and growing on | Site wide | Increased populations of threatened and locally rare/uncommon plant species | WCC / threatened plant working group | * | * | * | * | * |
| 2 | **Monitoring and surveys**<br>Speargrass weevil survey | Site wide | Evaluate population and identify management requirements | WCC | * | * | * | * | * |
| 2 | **Monitoring and surveys**<br>Monitor native birds at coastal end of Te Kopahou reserve (including coast) | A | Understand the role and value of the site as a habitat and in bird establishment and dispersal | WCC | * | * | * | * | * |
| 1 | **Monitoring and surveys**<br>Re-do photopoints from 1998 | A, B | | WCC | * | * | * | * | * |
| 4 | **Monitoring and surveys**<br>Seepages mapped, vegetation communities and management actions described | Site-wide | Protect and manage uncommon ecosystems | WCC | * | * | * | * | * |
| 4 | **Monitoring and surveys**<br>Kinnoull sand dune fence audit | B | Ensure the protection of the sand dune system | GW Environment Restoration | * | * | * | * | * |

| Objective | Activity | Operational area | Intended 5-year outcome | Implementing party | Timetable and resourcing where allocated | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 |
| 5 | **Community engagement**<br>WCC working with volunteer groups at the KNE site and surrounding WCC-owned land | Site-wide | Support community in their efforts to protect the values at the KNE site | WCC | * | * | * | * | * |
| Total | | | | | 105,460 | 105,975 | 106,540 | 107,140 | 107,765 |

^ = The need for an aerial operation will be determined annually by the Environment Restoration Advisor

*= The timing of and the funding required for this action cannot be determined at this time

# 9. Funding contributions

## 9.1. Budget allocated by Greater Wellington

The budgets for the years 2026/27 to 2029/30 are indicative only and subject to change.

**Table 4: Greater Wellington allocated budget for the Wellington South Coast KNE site**

| Management activity | Timetable and resourcing | | | | |
|---|---|---|---|---|---|
| | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 |
| Ecological weed control | $6,210 | $6,520 | $6,850 | $7,192 | $7,552 |
| Pest animal control (Environment Restoration) | $2,645 | $2,825 | $3,025 | $3,250 | $3,475 |
| Pest Animal control (RPCP) | $32,000 | $32,000 | $32,000 | $32,000 | $32,000 |
| **Total** | **$40,855** | **$41,345** | **$41,875** | **$42,442** | **$43,027** |

## 9.2. Budget allocated by Wellington City Council

The budget is subject to confirmation through Wellington City Council long-term planning process.

**Table 5: Wellington City Council allocated budget for the Wellington City Council KNE site**

| Management activity | Annual resourcing |
|---|---|
| Ecological weed control | $21,000 |
| Pest animal control | $23,000 |
| **Total** | **$44,000.00** |

# Appendix 1: Policy context and the Key Native Ecosystem programme

*Policy context*

Under the Resource Management Act 1991 (RMA)[38] regional councils have responsibility for maintaining indigenous biodiversity, as well as protecting significant vegetation and habitats of threatened species.

Funding for the KNE programme is allocated under the Greater Wellington Long Term Plan (2024-2034)[39] and is managed in accordance with the Greater Wellington Biodiversity Strategy[40]. This sets a framework for how Greater Wellington protects and manages biodiversity in the Wellington region. Goal One of the Biodiversity Strategy – *"Areas of high biodiversity value are protected or restored"* – drives the delivery of the KNE programme.

Other important drivers for the KNE programme include the Natural Resources Plan for the Wellington Region (NRP)[41] and the Regional Pest Management Plan 2019-2039[42].

*Key Native Ecosystem programme*

The KNE programme is a non-regulatory programme. The programme seeks to protect some of the best examples of original (pre-human) ecosystem types in the Wellington region. Greater Wellington has identified sites with the highest biodiversity values and prioritized them for management[43].

KNE sites are managed in accordance with five-year KNE operational plans prepared by Greater Wellington's Environment Restoration team. Greater Wellington works with landowners, mana whenua and other operational delivery providers to achieve mutually beneficial goals.

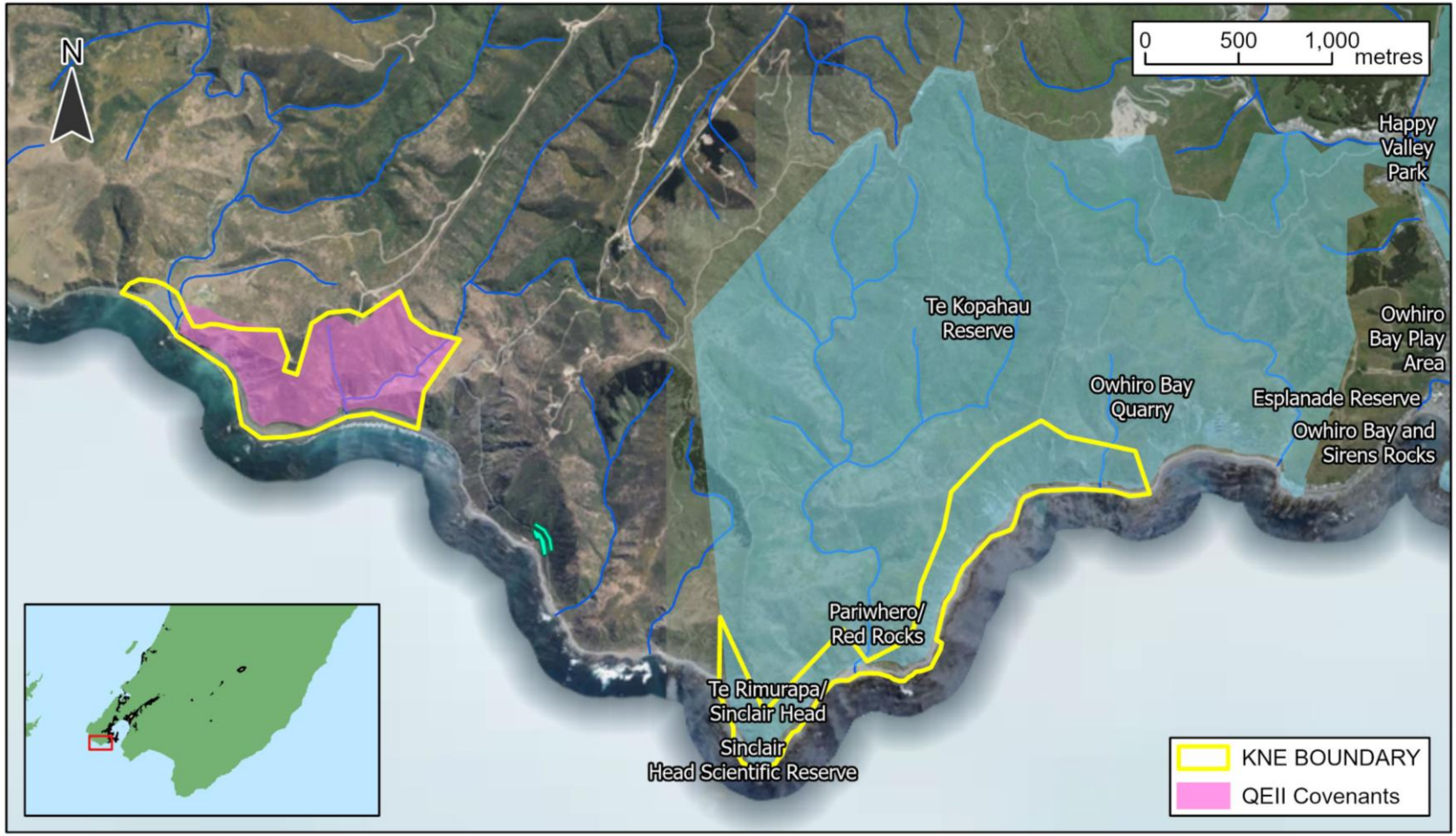
KNE sites can be located on private or publicly owned land. Any work undertaken on private land as part of this programme is at the discretion of landowners and their involvement in the programme is entirely voluntary. Involvement may just mean allowing work to be undertaken on that land. Land managed by the Department of Conservation (DOC) is generally excluded from this programme.

Sites are identified as of high biodiversity value for the purposes of the KNE programme by applying the four ecological significance criteria described below.

| **Representativeness** | **Rarity/ distinctiveness** | **Diversity** | **Ecological context** |
|---|---|---|---|
| The extent to which ecosystems and habitats represent those that were once typical in the region but are no longer commonplace | Whether ecosystems contain Threatened/At Risk species, or species at their geographic limit, or whether rare or uncommon ecosystems are present | The levels of natural ecosystem diversity present, ie, two or more original ecosystem types present | Whether the site provides important core habitat, has high species diversity, or includes an ecosystem identified as a national priority for protection |

A site must be identified as ecologically significant using the above criteria and be considered "sustainable" for management to be considered for inclusion in the KNE programme. "Sustainable" for the purposes of the KNE programme is defined as: a site where the key ecological processes remain intact or continue to influence the site, and resilience of the ecosystem is likely under some realistic level of management.

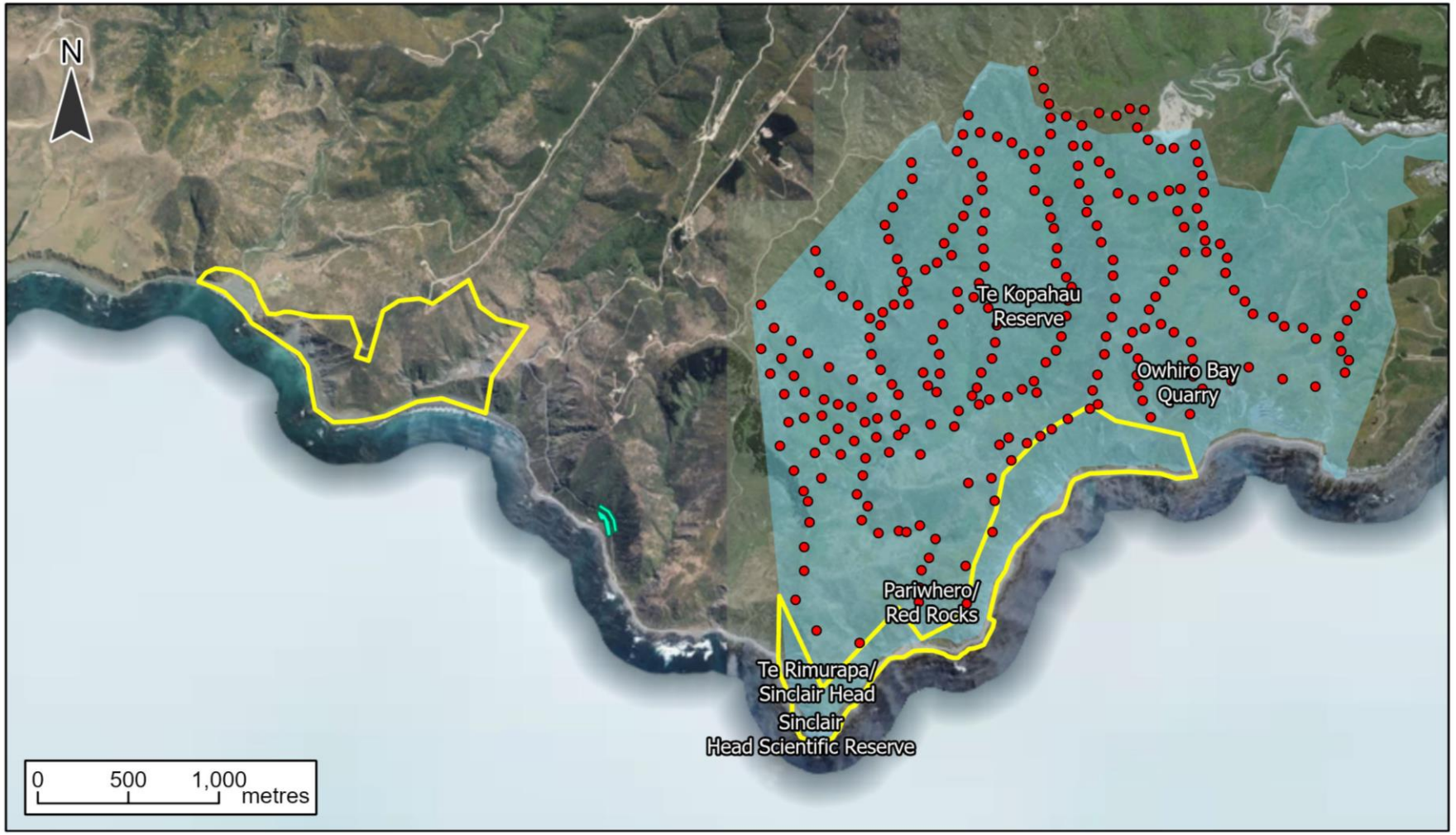
## Appendix 2: Wellington South Coast KNE site maps




**Map 1: The Wellington South Coast KNE site boundary, Te Wai-Komaru (in pink), and Te Kopahau Reserve (in blue)**


**Map 2: Singers and Rogers classification of pre-human forest vegetation types for the Wellington South Coast KNE site**


**Map 3: Ecological weed control operational areas in the Wellington South Coast KNE site**




**Map 4: Bait-station network at Te Kopahou Reserve as part of the Wellington's Regional Predator Control Programme (RPCP)**


**Map 5: Restoration planting operational areas at the Wellington South Coast KNE site**

# Appendix 3: Nationally and regionally threatened species list

Table 6 below lists nationally and regionally Threatened and At Risk species that are resident in, or regular visitors to, the Wellington South Coast KNE site.

The New Zealand Threat Classification System (NZTCS) lists species nationally according to their threat of extinction. The status of each species group (plants, reptiles, etc.) is assessed over a five-year cycle[44]. Species are regarded as Threatened if they are classified as Nationally Critical, Nationally Endangered or Nationally Vulnerable[45]. They are regarded as At Risk if they are classified as Declining, Recovering, Relict or Naturally Uncommon. A limited set of taxonomic groups have also been assigned a regional threat status. The regional threat status methodology was developed by a collaborative group comprising representatives from DOC, regional councils and a local authority. The resulting regional threat listing methodology leverages off the NZTCS, but applies a species population threshold adjusted to the regional land area under consideration (relative to the national land area) for species that are not nationally threatened. The assigned regional threat status cannot be lower than that of the national threat status, but can be higher, (eg, a Nationally Vulnerable species could be assessed as being Regionally Critical). Other assessments made in the regional threat listing process include identifying populations that are national strongholds and the use of regional qualifiers, such as natural or historic range limits.

**Table 6: Nationally and regionally Threatened and At Risk species**

| Scientific name | Māori name/common name | National threat status | Regional threat status | Observation |
|---|---|---|---|---|
| Plants (vascular) – National[46] and Regional[47] Threat Status | | | | |
| *Coprosma acerosa* | Tātaraheke/sand coprosma | At Risk – Declining | Declining | Spence & Bergin (2009)[48] |
| *Ficinia spiralis* | Pīngao/golden sand sedge | At Risk – Declining | Vulnerable | Spence & Bergin (2009) |
| *Melicytus crassifolius* | Thick-leaved mahoe | At Risk – Declining | Declining | Druce (1992)[49] |
| *Melicytus orarius* | - | At Risk – Declining | Critical | Druce (1992) |
| *Muehlenbeckia astonii* | Mingimingi/shrubby tororaro | Threatened – Nationally Endangered | Critical | WCC[50] |
| *Pimelea villosa* | Toroheke/sand daphne | At Risk – Declining | Declining | Spence & Bergin (2009) |
| *Poa billardierei* | hinarepe/sand tussock | At Risk – Declining | Declining | Spence & Bergin (2009) |
| *Sophora molloyi* | Cook Strait kōwhai | At Risk – Naturally Uncommon | Critical | Brian Thomas, WCC, pers obs (2016) |
| Birds - National[51] and Regional[52] Threat Status | | | | |
| *Anthus novaeseelandiae* | Pīhoihoi/New Zealand pipit | At Risk – Declining | Endangered | GWRC (2015)[53] |
| *Charadrius bicinctus* | Tūturiwhatu/banded dotterel | Threatened – Nationally Vulnerable | Endangered | Spence and Bergin 2009 |
| *Egretta sacra* | Matuku moana/reef heron | Threatened – Nationally Endangered | Critical | WCC |
| *Eudyptula minor* | Kororā/little ‘blue’ penguin | At Risk – Declining | Vulnerable | WCC |
| *Haematopus unicolor* | Tōrea pango/variable oystercatcher | At Risk – Recovering | Endangered | GWRC (2015) |
| *Chroicocephalus novaehol landiae* | Tarāpunga/red-billed gull | Threatened – Nationally Vulnerable | Vulnerable | GWRC (2015) |

| Scientific name | Māori name/common name | National threat status | Regional threat status | Observation |
|---|---|---|---|---|
| *Phalacrocorax carbo* | Māpunga/black shag | At Risk – Naturally Uncommon | Critical | GWRC (2015) |
| *Sterna striata* | Tara/white-fronted tern | At Risk – Declining | Endangered | GWRC (2015) |
| Reptiles - National[54] and Regional[55] Threat Status | | | | |
| *Oligosoma zelandicum* | Glossy brown skink | At Risk – Declining | at Risk - Declining | GWRC (2015) |
| Freshwater fish - National[56] and Regional[57] Threat Status | | | | |
| *Anguilla dieffenbachii* | Longfin eel | At Risk – Declining | Declining | GWRC (2015) |
| *Galaxias brevipinnis* | Kōaro | At Risk – Declining | Declining | GWRC (2015) |
| *Galaxias maculatus* | Īnanga | At Risk – Declining | Declining | GWRC (2015) |
| *Geotria australis* | Lamprey | Threatened – Nationally Vulnerable | Vulnerable | GWRC (2015) |
| Spiders – National[58] Threat Status | | | | |
| *Latrodectus katipo* | Katipō | At Risk – Declining | - | Spence &Bergin (2009) |

# Appendix 4: Threat table

The following table presents a summary of all known threats to the Wellington South Coast KNE site including those discussed in Section 5.

**Table 7: Threats to the Wellington South Coast KNE site**

| Threat code | Threat and impact on biodiversity in the KNE site | Operational area/location |
|---|---|---|
| Ecological weeds (EW) | | |
| EW-1 | Ground covering ecological weeds smother and displace native vegetation, inhibit indigenous regeneration, and alter vegetation structure and composition. These include tradescantia (*Tradescantia fluminensis*) and English ivy (*Hedera helix*). See Appendix 5 for a list of weed species known at the KNE site. | Entire KNE site |
| EW-2 | Woody weed species displace native vegetation, inhibit indigenous regeneration, and alter vegetation structure and composition. These include karo (P*ittosporum crassifolium*) and brush wattle (*Paraserianthes lophantha*) See Appendix 5 for a list of weed species known at the KNE site. | Entire KNE site |
| EW-3 | Climbing weeds smother and displace native vegetation often causing canopy collapse, inhibit indigenous regeneration, and alter vegetation structure and composition. These include Japanese honeysuckle (*Lonicera japonica*) and cape ivy (*Senecio angulatus*). See Appendix 5 for a list of weed species known at the KNE site. | Entire KNE site |
| Pest animals (PA) | | |
| PA-1 | Possums (*Trichosurus vulpecula*) browse palatable canopy vegetation until it can no longer recover[59,60]. This destroys the forest's structure, diversity and function. Possums may also prey on native birds and invertebrates[61]. | Entire KNE site |
| PA-2* | Rats (*Rattus* spp.) browse native fruit, seeds, and vegetation. They compete with native fauna for food and can reduce forest regeneration. They also prey on invertebrates, lizards, and native birds[62,63]. | Entire KNE site |
| PA-3 | Mustelids such as stoats[64,65] (*Mustela erminea*), ferrets[66,67] (*M. furo*), and weasels[68,69] (*M. nivalis*) prey on native birds, lizards, and invertebrates, reducing their breeding success and potentially causing local extinctions. | Entire KNE site |
| PA-4 | Hedgehogs (*Erinaceus europaeus*) prey on native invertebrates[70], lizards[71], and the eggs[72] and chicks of ground-nesting birds[73]. | Entire KNE site |
| PA-5* | House mice (*Mus musculus)* browse native fruit, seeds and vegetation, and prey on invertebrates. They compete with native fauna for food and can reduce forest regeneration. They also prey on invertebrates, lizards and small eggs and nestlings[74,75]. | Entire KNE site |
| PA-6* | Feral, stray, and domestic cats (*Felis catus*) prey on native birds[76], lizards[77], and invertebrates[78], reducing native fauna breeding success and potentially causing local extinctions[79]. | Entire KNE site |

| Threat code | Threat and impact on biodiversity in the KNE site | Operational area/location |
|---|---|---|
| PA-7 | Rabbits (*Oryctolagus cuniculus*) and hares (*Lepus europaeus*) graze on palatable native vegetation and prevent natural regeneration in some environments[80]. Rabbits are particularly damaging in sand dune environments where they graze native binding plants and restoration plantings. | Entire KNE site |
| PA-8* | Red deer (*Cervus elaphus*) browse the forest understory and can significantly change vegetation composition by preferential browsing and preventing regeneration[81,82,83]. | Entire KNE site |
| PA-9 | Feral pigs (*Sus scrofa*) root up the soil and eat roots, invertebrates, seeds, and native plants preventing forest regeneration[84]. | Entire KNE site |
| PA-10 | Goats (*Capra hircus*) browsing affects the composition and biomass of native vegetation in the understory tiers of forest habitats, preventing regeneration of the most palatable understory species and reducing species diversity[85]. | Entire KNE site |
| PA-11* | Brown trout (*Salmo trutta*) and rainbow trout (*Oncorhynchus mykiss*) prey on native fish and compete with them for food resources[86]. | Kārori Stream |
| Human activities (HA) | | |
| HA-1* | Recreational use such as tramping, mountain biking and horse riding can cause damage and disturbance of the native ecosystem. It is also likely to disturb native fauna and introduce ecological weeds. | Entire KNE site |
| HA-2* | Encroachment of residential gardens into the KNE site from urban areas causes habitat loss and introduces ecological weeds. | Coastal Platform |
| HA-3* | Dogs (*Canis lupus familiaris*), if uncontrolled/unleashed can disturb or kill nesting birds, chicks, and lizards within the KNE site, particularly in close proximity to walking tracks[87]. | Entire KNE site |
| HA-4* | Recreational vehicles such as 4WDs and motorbikes can cause damage to dune systems and disturbance of the native ecosystem. | Coastal Platform |
| Other threats | | |
| OT-1* | Fire is a natural occurrence, which can be instrumental in creating new ecosystems and providing for new succession opportunities. However, fire can be destructive to native flora and fauna and create conditions for pest plant invasion. | Site wide |

*Threats marked with an asterisk are not addressed by actions in the operational delivery schedule

# Appendix 5: Ecological weed species

The following table lists key ecological weed species that have been recorded in the Wellington South Coast KNE site.

**Table 8: Ecological weed species recorded in the Wellington South Coast KNE site**

| Scientific name | Common name |
|---|---|
| *Acanthus mollis* | Bear's breeches |
| *Agapanthus praecox* subsp. *orientalis* | Agapanthus |
| *Aloe maculata* | Aloe |
| *Calamagrotis arenaria* | Marram grass |
| *Angelica pachycarpa* | Angelica |
| *Arctotheca calendula* | Cape weed (arctotis) |
| *Berberis darwinii* | Darwin's barberry |
| *Buddleja davidii* | Buddleia |
| *Cakile edentula* var. *edentula* | Sea rocket |
| *Carpobrotus edulis* | South African iceplant |
| *Centranthus ruber* subsp. *ruber* | Spur valerian |
| *Chrysanthemoides monilifera* subsp. *monilifera* | Boneseed |
| *Cortaderia* spp. | Pampas |
| *Cotyledon orbiculata* var. *orbiculata* | Pig's ear |
| *Crassula multicava* subsp. *multicava* | Fairy crassula |
| *Crocosmia* x *crocosmiiflora* | Montbretia |
| *Cytisus scoparius* | Broom |
| *Erigeron karvinskianus* | Mexican daisy |
| *Euphorbia characias* subsp. *characias* | Wulfen spurge |
| *Euryops chrysanthemoides* | Paris daisy |
| *Foeniculum vulgare* | Fennel |
| *Gazania rigens* | Gazania |
| *Glaucium flavum* | Horned poppy |
| *Hedera helix* | English ivy |
| *Hydrangea macrophylla* | Hydrangea |
| *Lathyrus latifolius* | Everlasting pea |
| *Lonicera japonica* | Japanese honeysuckle |
| *Lupinus arboreus* | Tree lupin |
| *Malva arborea* | Tree mallow |
| *Matthiola incana* | Hoary stock |

| Scientific name | Common name |
|---|---|
| *Metrosideros excelsa* | Pohutukawa* |
| *Osteospermum fruticosum* | Dimorphotheca |
| *Paraserianthes lophantha* | Brush wattle |
| *Parietaria judaica* | Pellitory of the wall |
| *Pelargonium tomentosum* | Peppermint geranium |
| *Pinus* spp. | Wilding pine |
| *Pittosporum crassifolium* | Karo* |
| *Pseudosasa japonica* | Bamboo |
| *Rosa rubiginosa* | Briar rose |
| *Senecio angulatus* | Cape ivy |
| *Senecio elegans* | Purple groundsel |
| *Silybum marianum* | Variegated thistle |
| *Tradescantia fluminensis* | Tradescantia |
| *Tropaeolum majus* | Nasturtium |
| *Ulex europaeus* | Gorse |
| *Zantedeschia aethiopica* | Arum lily |

* Denotes a New Zealand native plant that is not local to the KNE site

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