

REGIONAL PEST MANAGEMENT PLAN 2019-2039



## 1. Kupu Arataki/Introduction

## 1.1 Regional Pest Management Plan

The Regional Pest Management Plan 2019-2039 (RPMP) was prepared in accordance with the Biosecurity Act 1993 and became operative on the 2nd of July 2019.

This Operational Plan has been prepared in accordance with section 100B of the Biosecurity Act 1993. This plan identifies and outlines the nature and scope of activities that the Greater Wellington Regional Council (GW) intends to undertake in the implementation of its RPMP for the financial year 2023/24.

The RPMP contains objectives specific to individual pests and outlines how we, as the Management Agency, will achieve those objectives. The RPMP has clearly defined rules to be met by all land occupiers. It is our responsibility to ensure land occupiers are aware of, and meet, their obligations for pest management on their properties. We can also undertake pest control operations where there is recognised regional benefit.

## 1.2 Implementation

The purpose of this plan is to implement the RPMP region-wide by:

**Monitoring** for the presence of declared pests in the Wellington Region.

**Minimising** the actual and potential adverse or unintended effects associated with the specified organisms.

**Eradicating** certain organisms, reducing the extent of others, and containing those species that are already well established.

#### 1.3 Areas of responsibility

This plan and the RPMP are based on the following core areas of our responsibilities:

#### Regulation (standards and enforcement)

Standards, rules and restrictions are set, and compliance enforced with penalties, when and where necessary.

#### Inspection

Regular property inspections ensure that rules and regulations are being met and changes in pest densities are determined over time.

## Surveillance

Undertaking surveillance (also referred to as monitoring) for pests in the region to determine their presence, distribution and effects, and to measure the extent to which the objectives of the RPMP are being achieved.

#### **Direct control**

Funding and undertaking pest control in some circumstances as a service for regional benefit.

#### Advice and education

Free advice is given to raise awareness of pest problems and to provide land occupiers with the information to control their own pests.

#### **Community initiatives**

Guidance and support are provided for community driven initiatives to control pests.

#### Cost recovery

A full cost recovery operational service is available for pest control.

## **Biological control**

As approved biological control agents become available, we may utilise them. Biocontrol is currently a key tool in the management of rabbits, various pest plants and other harmful species.

#### 1.4 Integration with Annual Plan and Environment Business Plan

The Operational Plan is integrated with the GW Annual Plan and the Environment Group Business Plan. The Annual Plan sets the overall priorities and work programmes for the organisation and provides an overview of related pest management activities for the 2023/24 year. The Environment Group Business Plan is a more detailed plan for the year and includes implementation costs.

## 1.5 Implementation report

A report on the RPMP Operational Plan and the summary of its implementation will be prepared no later than five months after conclusion of the financial year. Copies of the report will be made available to the public.

## 1.6 Review

This plan will be reviewed and reported on annually. The plan may be amended to ensure that the objectives of the RPMP will be achieved within its terms. Section 100G of the Biosecurity Act allows us to make minor changes to the RPMP, provided we are satisfied that the changes will not have any significant effects on the rights and obligations of any persons.

## 2. Kaupapa - tirohanga whānui/Programme overview

## 2.1 Species led programmes

There are four species led programmes that are outlined in the RPMP:

**Exclusion programme**: To prevent the establishment of a species that is present in New Zealand but not yet established in an area.

**Eradication programme:** To reduce the infestation level of a species to zero levels in an area in the short to medium term.

**Progressive Containment programme**: To contain or reduce the geographic distribution of a species.

**Sustained Control programme:** To provide ongoing control of a species to reduce its impacts on values and spread to other properties.

Additionally, we are involved in four programmes that are part of national agreements and/or are funded nationally:

**National Pest Plant Accord**: To prevent the sale, distribution and propagation of a set list of pest plants (approximately 135 named species) within New Zealand.

**National Interest Pest Response programme:** To eradicate certain species (currently just Manchurian wild rice) from the Wellington Region.

**Check, Clean, Dry**: To keep our waterways clean and free of invasive freshwater pests.

**Biocontrol programme:** To fund biocontrol programmes for prioritised pest species.

## 2.2 Site led programmes

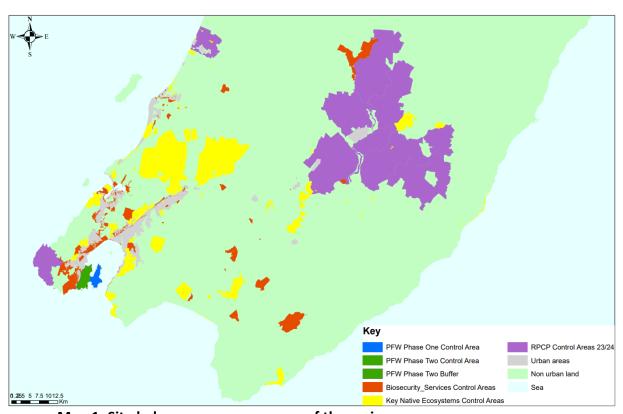
There are four site led programmes that are delivered through the RPMP (see Map 1).

**Predator Free Wellington programme (PFW):** To eradicate mustelids, possums and rats from the Miramar Peninsula before extending the project across the city. Predator Free Wellington is a programme funded by the Wellington City Council, GW, Predator Free 2050 and the NEXT Foundation.

Regional Predator Control Programme (RPCP): to control possums and other predators that are a serious threat to our native biodiversity and economy. The areas we work in are chosen based on protecting the best biodiversity ecosystems outside of the Key Native Ecosystem programme. 2023/24 will be a transition from the former programme that was driven largely by declarations of bovine Tb freedom to a new programme focused on maintaining or enhancing indigenous biodiversity.

**Biosecurity Services programme:** This activity aims to provide biosecurity delivery services across the region. This includes maintaining a buffer for predators around Pūkaha/Mt Bruce, providing cost recovery services to Territorial Authorities and landowners and controlling Argentine ants to minimise the risk to Kāpiti Island. Activities such as these lead to biodiversity gains for the region by reducing the impact of pest and invasive species.

**Key Native Ecosystem programme (KNE):** To protect and restore representative examples of original indigenous ecosystem types of high value in the Wellington Region through effective biodiversity management. This involves the development of strategic operational plans, planning operational activities, working with management partners and delivery of management activities including pest control.

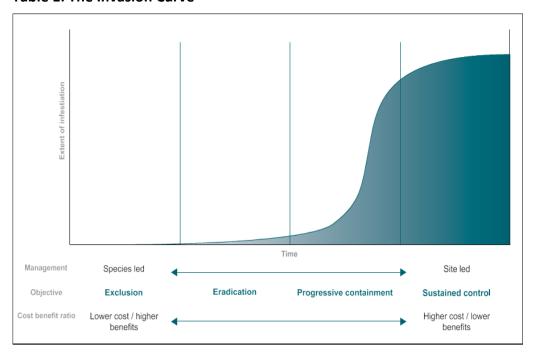


Map 1: Site led programme coverage of the region

## 2.3 How were the pest species decided?

A cost-benefit analysis (CBA) was undertaken for all species proposed for the RPMP. This process decided what control, if any, was to be undertaken and what level of management was needed for the species. The CBA works in conjunction with the invasion curve, which designates the different management programmes.

**Table 1: The Invasion Curve** 



Management programmes	Infestation phase	Phase characteristics
Exclusion	Absent	Pest not yet established in the Wellington Region, or it has been eradicated from all known sites in the region.
Eradication	Lag	Pest numbers low, rate of population increase low, distribution limited.
Progressive Containment	Explosion	Rapid growth in pest population size and range.
Sustained Control	Established	Pest is abundant and/or widespread.

Figure 1: Pest infestation phases through time in relation to its appropriate management. Adapted from our Regional Pest Management Plan 2019-39

#### 2.4 Pest control methods

We use a range of methods and tools to control pest plants and pest animals within the region. All control operations are undertaken by trained staff, contractors or volunteers using industry accepted best practice techniques. Our methodology considers innovation, environmental and humane factors alongside cost-effectiveness and practicality. Where chemical based pest control methods are utilised, the most effective and least harmful option is always preferred, with all chemical application following best practice manufacturer instructions, endorsed by the New Zealand Environmental Protection Authority.

## 3. Tipu Riha/Pest Plants

## 3.1 Exclusion programme

Alligator weed (*Alternanthera philoxeroides*), Chilean needle grass (*Nassella neesiana*), Nassella tussock (*N. trichotoma*).

**Aim:** Prevent the establishment of exclusion plant species in the Wellington Region.

## **Performance Measures**

## **Identify new sites**

Identify new incursion sites of exclusion plant species.

## Incident investigation and response

Undertake initial investigations for all reports within five working days.

Develop and implement response plans within 20 working days.



Alligator weed

## 3.2 Eradication programme

Moth plant (*Araujia hortorum*), Senegal tea (*Gymnocoronis spilanthoides*), Spartina (*Sporobolus anglicus, S. alterniflorus*), Velvetleaf (*Abutilon theophrasti*), Woolly nightshade (*Solanum mauritianum*).

**Aim:** Destroy all known infestations of eradication plant species in the Wellington Region.

#### **Performance Measures**

#### **Identify new sites**

Identify new sites of eradication plant species.

## Incident investigation and response

Respond to reports from the public on eradication plant species within five working days and complete actions within 20 working days.

## **Best practice management**

Conduct routine control visits to all management sites in accordance with scheduled best practices.

## 3.3 Progressive Containment programme

Purple loosestrife (*Lythrum salicaria*), Wilding conifers: European larch (*Larix decidua*), Douglas fir (*Pseudotsuga menziesii*) and pine species (*Pinus spp.*).

**Aim:** Progressively contain and reduce the geographic distribution of progressive containment plant species in the Wellington Region.

#### **Performance Measure**

#### Incident investigation and response

Undertake initial investigations for all reported sightings or discoveries of

- Purple loosestrife (in wetlands or waterbodies identified as natural and/or outstanding waterbodies and wetlands in the Natural Resources Plan for the Wellington Region), and
- Wilding conifers (in the Pakuratahi Forest KNE site where the alpine and sub-alpine ecosystems are at risk)

within five working days and document decisions within 20 working days.

#### **Best practice management**

Conduct routine control visits to all management sites in accordance with scheduled best practices.

## 3.4 Sustained Control programme

Blue passionflower (*Passiflora caerulea*), Boneseed (*Chrysanthemoides monilifera*), Climbing spindleberry (*Celastrus orbiculatus*), Eelgrass (*Vallisneria spiralis*, *V. qiqantea*).

**Aim:** Control sustained control plant species to reduce their spread and minimise adverse effects.

#### **Performance Measures**

## Incident investigation and response

Undertake initial investigations for all reported sightings or discoveries of sustained control plant species within 10 working days and document decisions within 20 working days.

#### Best practice management

Conduct routine control visits to all management sites in accordance with scheduled best practices.

## 3.5 Site led programme

Banana passionfruit (*Passiflora mixta*, *P. mollissima*, *P. tripartita*), Cathedral bells (*Cobaea scandens*), Old man's beard (*Clematis vitalba*)

**Aim:** Control and reduce the geographic distribution and/or extent of these species within the Hutt City Council Territorial Authority boundary (programme delivered by the Hutt City Council).

#### **Performance Measure**

#### Incident investigation and response

Provide compliance enforcement assistance to the Hutt City Council within 10 working days of receiving a request.

#### 3.6 National Pest Plant Accord

**Aim:** Prevent the sale, distribution and propagation of a set list of plants within the Wellington Region.

#### **Performance Measures**

## Incident investigation and response

Undertake initial investigations for all reports of pest plants on the National Pest Plant Accord list within five working days.

#### **Events**

Monitor events that sell plants and visit retail outlets.

## 3.7 National Interest Pest Response programme

**Aim:** Eradicate National Interest Pest Response (NIPR) plants from the Wellington Region, as directed by the Ministry of Primary Industries.

#### **Performance Measure**

#### **Identify new sites**

Identify new incursion sites of National Interest Pest Response plants.

## Incident investigation and response

Respond to reports from the public on National Interest Pest Response plants within five working days and complete actions within 20 working days.

## **Best practice management**

Visit all Manchurian wild rice management sites and undertake control on scheduled best practise rotation.

Host Manchurian wild rice Best Practice workshop for stakeholders nationwide.

## 3.8 Biocontrol programme

**Aim:** Undertake Biocontrol for prioritised target weeds in the Wellington Region.

#### **Performance Measures**

## Release and transfers of biocontrol agents

Release biocontrol agents (directly from Manaaki Whenua Landcare Research) or transfer from other translocation sites.

#### **Progress towards establishment**

Monitor agents until it is determined that a given agent has successfully established and is self-spreading or has failed to establish.



Buddleia showing damage from the buddleia leaf weevil



Buddleia leaf weevil

## 3.9 Check, Clean, Dry programme

**Aim:** Keep waterways in the Wellington Region free of invasive freshwater pests.

#### **Performance Measures**

## **Promote CCD message**

Attend outdoor/freshwater events.

Regularly produce social media posts during summer.

Distribute CCD resources to relevant retailers etc in the region.

## Waterside CCD signs maintained

Review and maintain 73 waterside signs at least once over the season.



Didymo

## 4. Kīrearea/Pest Animals

## 4.1 Exclusion programme

Wallaby (Macropus rufogriseus, Macropus eugenii).

Aim: Prevent the establishment of wallabies in the Wellington Region.

## **Performance Measures**

## **Identify new sites**

Identify new wallaby incursion sites.

## Incident investigation and response

Undertake initial investigations for all reports within five working days.

Develop and implement response plans within 20 working days.

Continue to work with MPI and provide surveillance activities for the Kaitoke eradication.

## Wallaby surveillance sites

Report on sites of interest/recent investigations.







Bennett's Wallaby

## 4.2 Eradication programme

Rook (Corvus frugilegus)

Aim: Eradicate all rooks from the Wellington Region.

#### **Performance Measures**

## **Identify new sites**

Survey historic rookeries and any new reported rookeries.

#### Best practice management

Undertake control (by aerial nest treatment or ground control) of rooks at all known sites.

## 4.3 Sustained Control programme

Feral rabbit (*Oryctolagus cuniculus*), Wasps (common wasp – *Vespula vulgaris*, German wasp – *V. germanica*, Australian paper wasp – *Polistes humilis*, Asian paper wasp – *P. chinensis*).

**Aim:** Sustained control of feral rabbits to minimise adverse effects to the environment and maintain populations below Level 5 McLeans Scale (See Appendix 1).

#### **Performance Measure**

#### **Public enquiries**

Respond to public enquiries about feral rabbits within 10 working days.

## **Cost-recovery management**

Undertake appropriate control at sites, as resources allow.

## Monitoring

Carry out regional trend monitoring using Modified McLean Scale, Kilometre night counts and fly testing for Rabbit Haemorrhagic Disease presence.

**Aim:** Sustained control of wasps to minimise adverse effects to the environment and protect human health.

#### **Performance Measures**

#### **Public enquiries**

Respond to public enquiries about wasps within 10 working days.

#### Management

Ensure appropriate wasp control is undertaken at sites to protect human health.

## 5. Kaupapa - whakahaere ā-pae/Site led programmes

## 5.1 Predator Free Wellington

Mustelids (ferrets – Mustela furo, stoats – M. erminea, weasels – M. nivalis), Possum (Trichosurus vulpecula), Rats (Rattus norvegicus, R. rattus).

**Aim:** Eradicate mustelids, possums and rats from land contained within the boundaries of the Predator Free Wellington initiative (Phase one - Miramar Peninsula, Phase two – Island Bay to CBD).

#### **Performance Measures**

#### **Community engagement**

Gain permission from landowners/occupiers to work on private land.

Enable and train community to continue predator control work in Phase two, and biosecurity work in Phase one.

Maintain community support for the project.

## **Progress towards eradication**

Eradicate remaining target species (R. rattus) on the Miramar Peninsula.

Establish Phase one biosecurity network and maintain predator freedom.

Commence eradication of target species in the Phase two area.

## 5.2 Regional Predator Control Programme

Mustelids (ferrets – Mustela furo, stoats – M. erminea, weasels – M. nivalis), Possum (Trichosurus vulpecula), Pest cat (Felis catus).

**Aim:** Control possums and other predators that are a serious threat to our native biodiversity and economy.

#### **Performance Measure**

#### **Predator management**

Complete planned control at all management sites (94,021ha)

#### **Possum Monitoring**

Monitor possum populations at selected sites

## 5.3 Biosecurity Services programme

European hedgehog (*Erinaceus europaeus occidentalis*), Feral deer – fallow, red and sika (*Dama, Cervus elaphus, C. nippon*), Feral rabbit (*Oryctolagus cuniculus*), Mustelids (ferrets – *Mustela furo*, stoats – *M. erminea*, weasels – *M. nivalis*), Pest cat (*Felis catus*), Possum (*Trichosurus vulpecula*), Rats (*Rattus norvegicus*, *R. rattus*).

**Aim:** Provide biosecurity delivery services across the Wellington Region.

#### **Performance Measures**

#### **Small mammal management**

Complete bait station and trapping operations at 31 Territorial Authority sites.

## Small mammal management

Complete predator trapping operations in the Pūkaha/Mount Bruce buffer and Wairarapa Moana area.

## Feral rabbit management

Complete feral rabbit night shooting control at 50 Territorial Authority sites and seven Recloaking Papatuanuku sites.

#### **Ungulate management**

Complete planned control at all deer, goat and pig management sites (four sites).

## Magpie enquiries

Respond to owners/occupiers wanting to undertake magpie control with 15 days of receiving a request for information and/or assistance.

#### Magpie control

Undertake control of magpies within 10 working days where there is a threat of injury to people.

## **Argentine ant control**

Control Argentine ants at Queen Elizabeth Park and Kāpiti Boating Club.



Pig rooting at Wainuiomata Mainland Island

## 5.4 Key Native Ecosystem programme

European hedgehog (*Erinaceus europaeus occidentalis*), Feral deer – fallow, red and sika (*Dama, Cervus elaphus, C. nippon*), Mustelids (ferrets – *Mustela furo,* stoats – *M. erminea*, weasels – *M. nivalis*), Pest cat (*Felis catus*), Possum (*Trichosurus vulpecula*), Rats (*Rattus norvegicus, R. rattus*).

**Aim:** Protect and restore representative examples of original indigenous ecosystem types of high value in the Wellington Region (58 sites, approximately 48,000 ha). Below is the pest control component of this program.

#### **Performance Measures: Pest Animals**

#### **Small mammal management**

Complete bait station and trapping operations at 38 KNE sites.

#### **Small mammal monitoring**

Undertake small mammal monitoring at selected sites.

## Possum management (aerial)

Complete follow up actions for the aerial sodium fluoroacetate (1080) operation in the Kaitoke - Hutt Water Collection KNE site. This involves carcass monitoring, sign removal, river searches.

## **Ungulate management**

Complete planned control at all deer, goat and pig management sites (14 sites).

#### **Performance Measures: Pest Plants**

## **Ground based weed control**

Complete ground-based weed control at 55 KNE sites.

## **Aerial based weed control**

Complete aerial-based weed control at up to three KNE sites.

# 6. He Tohutohu, He Mātauranga, He Whakaanga/Advice, Education and Engagement

**Aim:** Support pest animal and plant management through education and advice on pest control and impacts.

#### **Performance Measure**

## Response to public enquiries

Provide information to landowners about their responsibilities for pest control.

Provide information and advice to the public regarding pest identification, impacts and control, through website information, social media, events and site inspections.

Provide advice and support to community groups undertaking pest control.

Provide up to date information on all RPMP pest species on our website.

## 7. Tahua/Budget for 2023/24

Table 2: 2023/24 budget for implementing this Plan.

Species or Site led	Programme	Pest Animals or Pest Plants	Budget
Species led	RPMP	Pest Animals	\$1,493,899
		Pest Plants	\$1,519,143
	National	Pest Plants	\$45,000*
Site led	PFW	Pest Animals	\$3,823,050
	RPCP	Pest Animals	\$2,046,247
	Biosecurity services	Pest Animals	\$264,042*
	KNE	Combined	\$1,732,185

<sup>\*</sup>external revenue for this work included in budget

# Ngā Āpitihanga/Appendices

# Appendix 1: Modified McLean Scale

Scale	Rabbit Infestation
1	No sign found. No rabbits seen.
2	Very infrequent sign present. Unlikely to see rabbits.
3	Pellet heaps spaced 10m or more apart on average. Odd rabbits seen; sign and some pellet heaps showing up.
4	Pellet heaps spaced 5-10m apart on average. Pockets of rabbits; sign and fresh burrows very noticeable.
5	Pellet heaps spaced 5m or less apart on average. Infestation spreading out from heavy pockets.
6	Sign very frequent, with pellet heaps often less than 5m apart over the whole area. Rabbits may be seen over the whole area.
7	Sign very frequent, with two or three pellet heaps often less than 5m apart over the whole area. Rabbits may be seen in large numbers over the whole area.
8	Sign very frequent, with three or more pellet heaps less than 5 metres apart over the whole area. Rabbits likely to be seen in large numbers over the whole area.



For more information, please contact Greater Wellington:

Wellington office PO Box 11646 Wellington 6142

Upper Hutt office PO Box 40847 Upper Hutt 5140

Masterton office PO Box 41 Masterton 5840

www.gw.govt.nz info@gw.govt.nz 0800496734





