

Regional Pest Management Plan 2022-2032

Pūronga ā-Tau mō te Mahere Mahi

Operational Plan Annual Report 2024/25

Prepared by Biosecurity Section, Integrated Catchment Management



Wallaby surveillance.

Rārangi kaupapa

Contents

He tīmatanga kōrero Introduction

Key stats 2024/25	4
Enforcement	5
Incidents and requests for service	5
Web stats	5
Financial summary	6
RPMP programmes	7
Report format	8

Part 1: Ngā whakamārama o te hōtaka whakahaere kīrearea Pest management programme reporting

Exclusion programme	10
Eradicating eel grass!	11
Eradication programme	12
Japanese knotweed – a persistent pest plant challenge!	14
The last rook!	15
Progressive containment programme	16
Mitigating pest plant spread during land development	18
Sustained control programme	19
Priority possum control programme	20
Wilding Conifer Programme	23
Site-led programmes	24
Wetlands site-led programme	24
Project Yellow site-led programme	25

Part 2: Ētehi atu mahi tiakitanga taiao Other biosecurity activities

Effective leadership and governance	27
Preparing for bird flu	27
Tackling wallabies	28
Working together as a region	29
Maungakawa project	29
Summer advocacy	30
Moth plant comp	31
Wasp control	31
Tackling Cuscuta	32
Valuing and building on our investments	33
Bird survey shows tūi continue to thrive!	33
National Interest Pest Response	34
Better surveillance and intelligence systems	35
New pest plants on the horizon	35
Corbicula surveys	36
Detecting Chilean flame creeper from a distance	37
Bright ideas and better ways	38
National biocontrol advances	38
CAN do attitude towards preventing spread of clams	39
Going digital with hazard identification	40

Part 3: Whakahaere momo Species management

Ngā kupu whakamārama Glossary



Agrichemical spraying

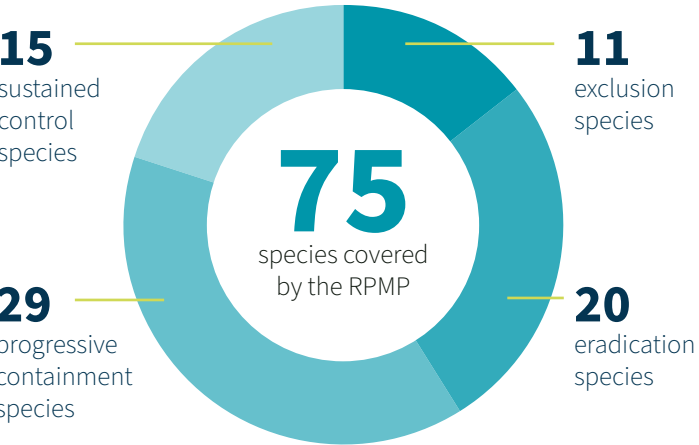
He tīmatanga kōrero

Introduction

This annual report summarises all operational work completed, and progress made, against the objectives of the *Waikato Regional Pest Management Plan 2022-2032* (RPMP) for the 2024/25 financial year (1 July 2024 to 30 June 2025).

It also highlights non-regulatory work undertaken by Waikato Regional Council (the council) aligned with the key regional priorities set out in the *Waikato Biosecurity Strategy 2022-2032*. An annual report is a statutory requirement under section 100B(2)(a) of the Biosecurity Act 1993. Financial information is provided in summary form only.

Key stats 2024/25



0 new exclusion sites found

11 new eradication sites found

76% of programmes are on track

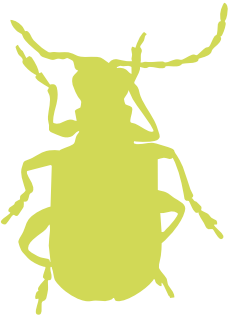
19,247km covered during pest plant control and surveillance

3391 properties inspected for RPMP pest plants



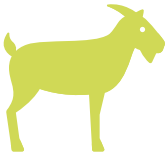
5 biocontrol releases:

- 2** tradescantia leaf beetle
- 2** tradescantia spot fungus
- 1** green thistle beetle



9415.5 hours of goat control

6194 goats culled



5687km walked for wallaby surveillance

722km drone flown for wallaby surveillance



59 'out of containment' sighting reports of wallaby

116,493ha of Priority Possum Control

987ha Hamilton Halo possum and rat control

673 hull inspections for unwanted marine organisms

22 community events attended

1252 individuals engaged with kauri protection VR

Enforcement

2 notices of direction



1 notice of intention to act on default

2 formal warnings

10 programme letters



107 non-programme letters

Incidents and requests for service

370 incidents received and assessed



561 requests for service



Web stats

>36,000

people visited pest hub on council website



>48,000

biosecurity webpage views



84.2% average engagement rate

2.05 minutes average time spent

Financial summary

Revised budget:

\$16,711,493

Actual expenditure:

\$14,337,746

Expenditure	Revised budget (\$)	Actual expenditure (\$)	Difference (\$)
Pest plants	6,462,781	5,124,043	1,338,738
Pest animals	10,248,712	9,213,703	1,035,009
Totals	16,711,493	14,337,746	2,373,747

Table 1: Summary of end of year expenditure

There is a \$2,373,747 variance from the original pest plants and animals budgets (Table 1); the pest plant programme had an underspend of \$1,338,738 and pest animal programme had an underspend of \$1,035,009.

In 2024/25, the drivers for variation of spend and completion of work programmes included the following.

- Weather extremes impacted programme delivery:
 - wet weather delayed direct control delivery by impeding access to alligator weed sites due to flooding and erosion
 - drought conditions created fire risks in forestry areas, impacting animal pest control and delaying pest plant growth cycles.
- Extended periods of staff vacancies during the ICM Directorate review reduced project management resources.
- Prioritising the spend of Ministry for Primary Industries' (MPI) funding received very late in the financial year over council funding for programmes, as MPI funding cannot be carried over. In several cases, we also received larger funding allocations than planned.
- Lack of contractor capacity and capability across some areas that require specialist skills and equipment.
- Project partners changing milestone dates requiring investment to be moved into subsequent financial years.
- \$640,000 of carry-overs for Priority Possum Control Areas (PPCA) in the pest animal programme, with all this work to be completed in the first quarter of 2025/26.

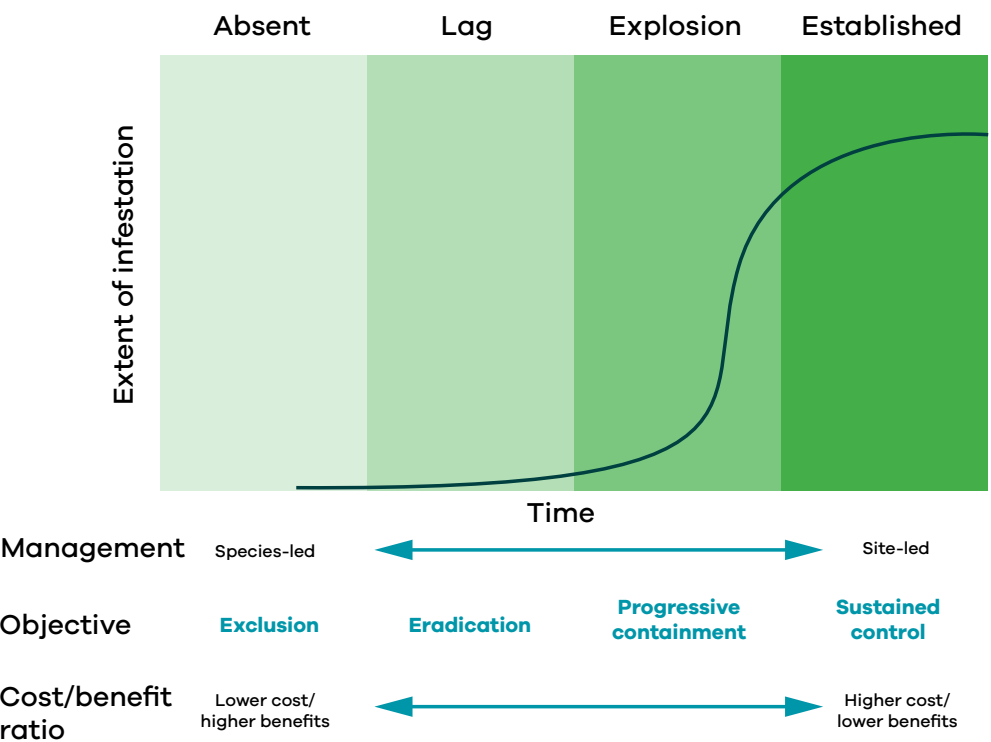
Additional funding was received in 2024/25 from:

- MPI
 - for the council's kauri programme (this was received late in the financial year, which meant we prioritised spending it as it cannot be carried over)
 - for the council's wallabies programme (as part of Tipu Mātoro) in the Waikato region (noting Toi Moana Bay of Plenty Regional Council holds the funds on WRC's behalf)
 - for the council's wilding conifer programme (also received late but able to be fully utilised)
 - for Caulerpa advocacy and education
 - for white bryony and Manchurian wild rice surveillance and control programme
- Land Information New Zealand (LINZ)
 - to manage RPMP pest plants around Lake Karāpiro
 - to manage infestations of wilding conifers on LINZ-managed land on the Coromandel Peninsula and at Waikato River geothermal sites where the council is undertaking or supporting wilding conifer control
- Waikato River Authority
 - as a contribution to the joint council/DOC/Te Riu o Waikato koi carp management programme
 - as a contribution to yellow flag iris control around Lake Waikare and Waikato River islands.

RPMP programmes

Pests are managed within five programmes depending on their effects, distribution, density, control methods available and cost:

- Exclusion programme
- Eradication programme
- Progressive containment programme
- Sustained control programme
- Site-led pest management programmes



The council achieves practical pest management objectives using the following approaches.

Service delivery

This is pest control that the council funds and undertakes, for example, for high threat, low incidence pest plants in a ‘pest-led’ management approach, or to protect specific values on private land in the region under a ‘site-led’ approach. The council may also provide control tools, including the sourcing and distribution of biological control agents.

Council inspection – monitoring/ surveillance

The council undertakes property inspections to determine where pests are present, and make sure RPMP rules are being adhered to. Monitoring is also undertaken to confirm the need for pest control (for example, pest animal trend monitoring) and that control targets have been achieved. Surveillance activities allow for new pest incursions to be promptly detected and appropriate responses initiated.

Requirement to act

The RPMP has a set of rules that require occupiers or other persons to act, for example, the requirement to report a pest or undertake pest control, prepare and submit a biosecurity management plan, or to not spread a pest. Every effort is made to encourage and assist occupiers to achieve voluntary compliance. Appropriate enforcement action is taken against occupiers who fail to comply.

Advocacy and education

The council provides practical biosecurity advice, education and awareness through its website (waikatoregion.govt.nz), factsheets, field days and its 24-hour freephone number (0800 800 401). The council also promotes industry biosecurity requirements and best practice and facilitates and commissions research on biosecurity issues.

Report format

This annual report should be read in conjunction with the *Waikato Regional Pest Management Plan 2022-2032*, the *2022/2032 RPMP Operational Plan* and the *Waikato Biosecurity Strategy 2022-2032*.

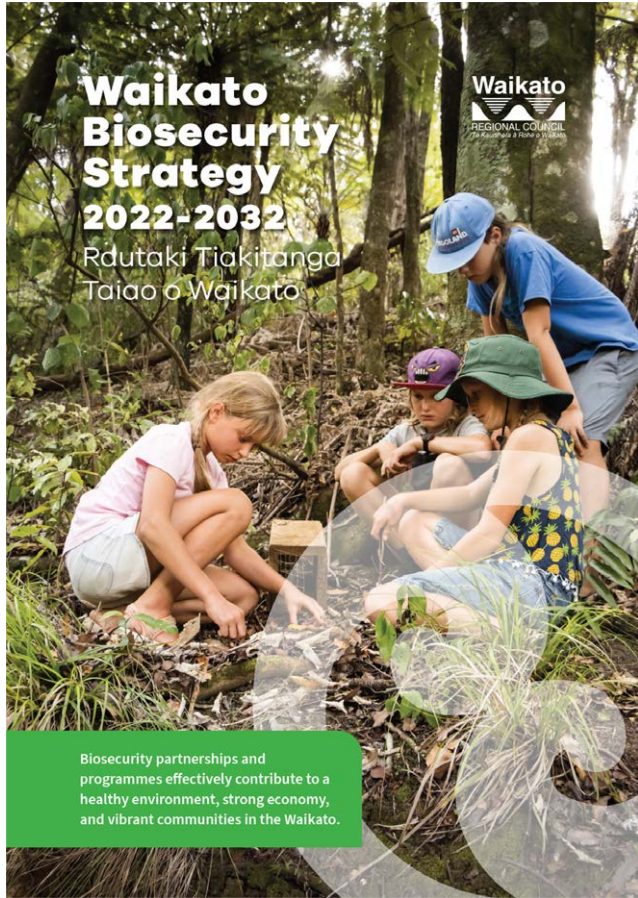
The implementation of the RPMP is undertaken by staff in the council’s pest plant and pest animal biosecurity teams and a range of pre-approved contractors.



**Waikato Regional
Pest Management Plan
2022-2032**

TŪTOHU MAHERE WHAKAHAERE
Ā-ROHEO WAIKATO MŌ NGĀ KĪREAREA

This report deals primarily with pest management projects under the RPMP pest management programmes. The objective(s) and outcome(s) for each management programme, and the status and results against key performance indicators in the Operational Plan for each species, is included in this annual report.



Biosecurity partnerships and programmes effectively contribute to a healthy environment, strong economy, and vibrant communities in the Waikato.

A framework for working well under the Biosecurity Act

Over the last few years, Waikato Regional Council has led the way in aligning how all regional councils should operate when working under the Biosecurity Act 1993.

This has included the development and production of an Authorised Person’s Training Manual and an e-learning training module for staff and contractors undertaking their functions, powers and duties lawfully under the Act.








Kauri leaf litter.

Part 1: Ngā whakamārama o te hōtaka whakahaere kīrearea Pest management programme reporting

This section provides an overview for each pest management programme, including the objective and outcome of each programme. It also includes the status ratings of the management of each pest species within the programmes as follows.

Status	Description
	On track – pest management programme is considered on-track to meet RPMP pest management programme objectives.
	At risk – pest management programme is considered at risk of not meeting some of the RPMP pest management objectives. ¹
	More input required – pest management programme did not meet any RPMP pest management objectives.

¹ Explanations for individual species status is provided under Part 3 'Species Pages'. Programmes may not meet their RPMP management objectives for a range of reasons including severe weather events that impact on a season's pest control operations by limiting site access and contractor availability.

Exclusion programme

The exclusion programme covers pests that the council has opted to be the lead agency, or partner, in managing.

Most of these pests are present outside of the Waikato region, or have recently been eradicated from it, and have the potential to establish here or expand their range and become a problem.

Objective	Over the duration of this plan, preclude the establishment of pests in the exclusion programme within the Waikato region to prevent adverse effects and impacts as defined in the RPMP.
Outcome	No pests in the exclusion programme are established in the region.

Pest plant species	Status	Known infestations within the region	Infestations discovered 2024/25
Broom corn millet	●	0	0
Chilean needle grass	●	0	0
Freshwater eel grass	●	2	0
Fringed water lily	●	0	0
Horsetail (field/common)	●	2	0
Kudzu vine	●	0	0
Marshwort	●	2	0

Pest animals	Status	Animals reported or confirmed
Wallaby: Bennett's wallaby Brush-tailed rock wallaby Parma wallaby ² Swamp wallaby	●	0

² Since the current RPMP became operative in 2022, it has been confirmed via genetic testing that parma, in addition to dama wallaby, are present amongst known populations of wallaby within the containment area which extends into the Waikato region.



Horsetail

Eradicating eel grass!

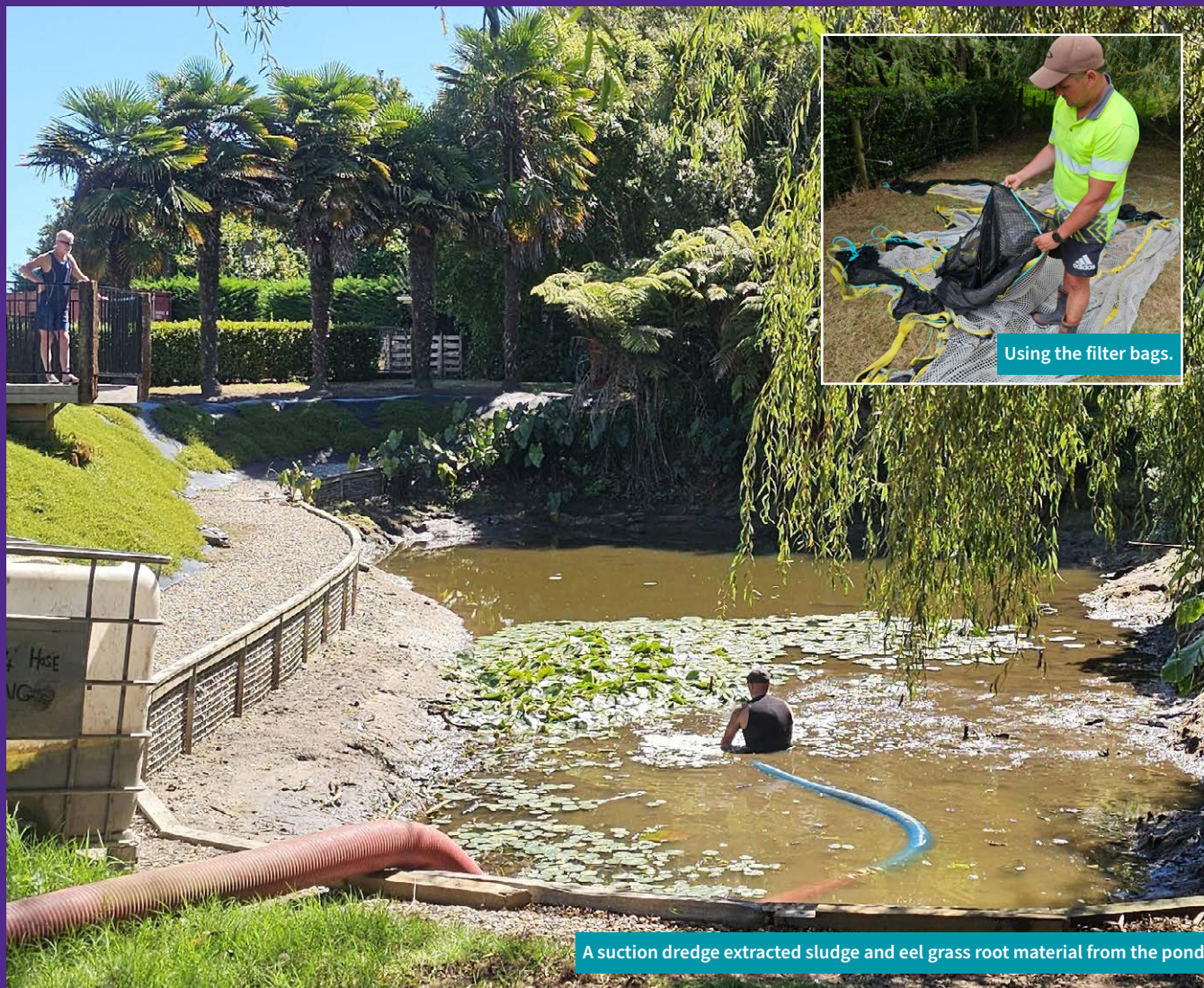
Case study

Freshwater eel grass is an invasive submerged, perennial aquatic plant included in the exclusion programme of the RPMP. With leaves that can grow to more than 3 metres long, it forms dense beds of vegetation that can displace native plants and block dams, waterways and drains, leading to flooding. Once established in a waterbody, eel grass can spread rapidly by sending out runners which produce new plants at frequent intervals. To date, it has only been found at two sites in the region, with both sites the target of eradication efforts.

One of the eel grass sites is a created pond near Te Kōwhai village in the Waikato district. Council pest plant officers have been trying unsuccessfully to control the infestation there since 2017 by using herbicide application and the physical removal of above ground plant matter. However, these attempts resulted in extensive re-growth of eel grass throughout the pond.

So, this season, we tried a new strategy. First, the pond was dewatered. We pumped out all the water through purpose-made filter bags to ensure no eel grass escaped! Then, using a section dredge, we extracted approximately one metre of sludge and eel grass root material from the empty pond until the hard bottom was reached. This sludge was then dewatered and filtered in a specially retrofitted shipping container. The pond was then lined and refilled with water.

We'll be monitoring the pond over the coming season in the hope that this time the eel grass has met its match!



A suction dredge extracted sludge and eel grass root material from the pond.

Eradication programme

The eradication programme is used to manage pests that the council considers can be eradicated from the region over the period of the RPMP due to their low density and/or distribution.

The council has a lead role in the management of these pests through advocacy and education, inspection and service delivery. Comprehensive programmes of work are developed for all eradication pests. These programmes are high priority. Preventing eradication pests from becoming more widely established in the region will have huge benefits to the region's social, economic, cultural and environmental values.

Objective	Over the duration of the RPMP, reduce the level of infestation of eradication pests within the Waikato region to zero density to prevent adverse effects and impacts as identified in the RPMP.
Outcome	All known or new pest infestations are controlled to zero density within the duration of this RPMP

Pest plants	Status	Number of sites	Area managed (ha)	Area of plant cover (m ²)
African feathergrass	●	20	307	70.4
Cathedral bells	●	22	69.8	72
Chilean flame creeper	●	5	23.4	336
Evergreen buckthorn	●	See species page for break down in results.		
Horse nettle	●	2	40	0
Horsetail (rough)	●	13	11.8	71
Knotweed (giant and Japanese/Asiatic)	●	21	33	256
Mile-a-minute	●	24	12.9	266
Nassella (fine stemmed needle grass/ Mexican feather grass)	●	7	2.1	8.3



Cathedral bells

Pest plants	Status	Number of sites	Area managed (ha)	Area of plant cover (m ²)
Nassella tussock	●	6	15.5	57
Noogoora bur	●	14	343.5	3,686
Purple loosestrife	●	4	1.8	11
<i>Rhododendron ponticum</i>	●	4	13.7	11
Sagittaria/arrowhead	●	7	1,259	10
Senegal tea	●	6	158.8	562.7
Spartina (common cordgrass/smooth cordgrass)	DOC is the lead management agency for most spartina sites in the Waikato region. It is working towards eradication of spartina in some sites (e.g. Raglan harbour where no spartina has been found for a number of years) and continued surveillance and control in others (e.g. Coromandel harbours). The council contributes financially towards the programme.			
Thistle (variegated)	●	5	1,404	100,001
Water poppy	●	4	9	500
Totals		164	3,705ha	105,418.4m²

Pest animals	Status	Confirmed rookeries	Number of active nest sites	Active nest sites controlled	Nest sites abandoned (due to weather events)
Rook	●	2	2	2	2



Rhododendron ponticum

Japanese knotweed – a persistent pest plant challenge!

Case study

Japanese knotweed is widely recognised as one of the world's most invasive pest plants. With deep, resilient rhizomes, it is notoriously difficult to eradicate, and has the potential to displace native vegetation and damage infrastructure by undermining building foundations. A quick online search will reveal the extent of its impact, particularly in countries like the United Kingdom.

In the Waikato region, Japanese knotweed is classified an eradication programme pest in the RPMP, with 21 known sites. To control it, pest plant officers have been using the specialist herbicide UniMaz® with notable success. Infestation sizes have been significantly reduced, and several sites have now been completely eradicated.

However, UniMaz® is a niche product with limited demand in New Zealand, so is now being discontinued. This development poses a significant risk to our knotweed eradication programme and serious challenges for ongoing control efforts. The team now need to explore alternative solutions to ensure we can maintain the recent gains in managing this challenging invasive species.



Japanese knotweed seedling in a paddock.



Flowering Japanese knotweed.

The last rook!

The number of rooks in the region has been reduced to extremely low numbers. But that doesn't mean they will no longer be a problem, or that their numbers won't rise again, and for this reason we need all eyes on the sky and people reporting sightings to help us eradicate them.

This year, we undertook a review of our rook programme, and presented on rook eradication at the 19th Australasian Vertebrate Pest Conference. One outcome of the review is we'll be ramping up our rook communications targeting the areas where rooks have been known to frequent.

Rooks can roam up to 40 kilometres, but will most often return to favoured home areas. Historic rookeries cannot be disregarded, either, even after many years. We have learnt that the likelihood of rooks being in a completely new area is low, so this year, prior to our spring rook surveillance, we'll be putting up signs along minor roads in rook 'hot spot' areas and posters in rural/farm stores in the vicinity of those key areas.

We hope this will generate interest from the local landowners, raise awareness of the impact rooks have had on farming in the past, and lead to an increase in accurate rook sightings. In the past, taking a blanket regionwide communications approach has resulted in time spent following up on inaccurate sightings. As is well documented, the cost of finding and eliminating the last few of any pest is always the most expensive.

Case study

Rooks



Why are we looking for rooks?

- They have the potential to cause thousands of dollars worth of damage to crops, especially emerging maize, pumpkins, potatoes and walnut trees.
- They damage pasture and crops by tearing up the ground when searching for grubs, exposing bare soil to wind erosion and establishment of weeds. The damage can be similar to that caused by pigs.

Why do we need your help?

- Rooks were introduced to New Zealand in the late 1800s, and became established in their hundreds of thousands by the early 1900s, causing significant damage to crops and pastures.
- Over time, our eradication programme has successfully reduced them to very low numbers in the Waikato region.
- Rooks can establish large numbers relatively quickly. If left unchecked, our farmers will once again be facing the issues of the past.



Report a rook!

0800 800 401

rook@waikatoregion.govt.nz



For more information visit waikatoregion.govt.nz/rooks



A rooks poster earmarked for rural/farm stores.



Rook

Progressive containment programme

The progressive containment programme is used to manage pests that are well established, but which can be feasibly reduced in geographic distribution and thereby impacts, in all or part of the region.

It is appropriate for the council to manage some of the pests in the progressive containment programme (for example, giant gunnera, alligator weed and climbing spindleberry), rather than rely solely on voluntary action, because:

- successful containment of these species requires co-ordination of action at a regional scale
- the benefits of the control of many of these pests accrue to a wider community than those directly affected by the presence of the pests on their property.

For some pests in the progressive containment programme, control is the occupier's responsibility to control (for example, control of lantana and chocolate vine). Occupiers may also need to produce biosecurity management plans if planning subdivision or land development activities where pest plants like alligator weed are present. The council provides advice and information on the identification, impacts and, where appropriate, the control of the progressive containment pest species.

Objective	Over the duration of the plan, contain and where practicable progressively reduce the geographic distribution or extent of progressive containment pests within all or specific parts of the Waikato region to pre-2022 levels to reduce further adverse effects and impacts as identified in the RPMP.
------------------	---

- | | |
|----------------|--|
| Outcome | <ul style="list-style-type: none"> • Reduction in extent and density of these pests. • Areas that are clear of these pests will remain so. |
|----------------|--|

Pest plants	Status	Number of operational sites	Total area of operational sites (ha)	Pest plant cover (m ²)
Alligator weed	●	218	24,374	220,608
Banana passionfruit (Taupō and Rotorua districts)	●	6	97	60
Boneseed	●	36	1,338.3	816
Climbing spindleberry	●	90	3,030.5	3,425
Darwin's barberry	●	2	3,355.5	6,314
Giant gunnera	●	5	18	41.1



Giant gunnera

Pest plants	Status	Number of operational sites	Total area of operational sites (ha)	Pest plant cover (m ²)
Golden dodder	●	29	260	3,861
Mexican waterlily	●	21	50	1,294
Moth plant (Taupō and Rotorua districts)	●	0	0	0
Old man's beard	●	82	2,732	1,708
Velvetleaf	●	91	7,15.9	214
Wild kiwifruit	●	10	1	190
Woolly nightshade (Taupō and Rotorua districts)	●	3	513.5	487
Yellow flag iris	●	102	16,442.5	8,375
Totals		695	52,212ha	247,393m²

Pest animals	Status	Public sightings reported	Total area of wallaby indicator dog and drone surveillance	Direct control
Dama wallaby (outside containment area)	●	59	50,736.4ha covered 6,409km walked or flown (drone)	>495 wallabies shot



Velvetleaf

Mitigating pest plant spread during land development

Case study

The potential for pest plants to be spread during land development has always been a concern in the Waikato region, particularly via soil movement and poor machinery hygiene. Pest plant species like alligator weed and Japanese knotweed are at high risk of spread via plant fragments and seed-setting species like noogoora burr and velvetleaf from development activities.

The risk of spread is heightened during site preparation and construction, where machinery and soil are frequently moved within and between sites. An unfortunate example occurred in Rototuna, Hamilton, in the early 2000s, where alligator weed-infested soil was moved during housing development. Remnants of the resulting infestations remain today and continue to be the source of further spread requiring costly control.

To address this issue, the council's RPMP requires that development sites with pest plant infestations have weed hygiene plans. These plans aim to reduce the risk of spread through mitigation measures like:

- washing down machinery before it leaves the site
- preventing the removal of infested soil
- managing contaminated soil on-site.

The number of development sites in the region that require weed hygiene plans has been increasing. They're put in place for roading, housing, school, and retirement village developments, especially around the city margins.

Example: Whatukooruru Drive, Hamilton

The construction of Whatukooruru Drive, in southern Hamilton, passed through a historic alligator weed site. To mitigate the risk of spreading alligator weed, Hamilton City Council and Schick Civil Construction implemented a weed hygiene plan that included:

- pulling back and stockpiling infested soil during construction
- reusing the soil on road verges for easier monitoring and control
- enforcing strict machinery washdown protocols.

This approach demonstrates how proactive planning and thorough hygiene measures can effectively reduce the risk of spreading a pest plant during construction – a real win for biosecurity in our region.



Sustained control programme

The sustained control programme is used to reduce the impacts of well established pests on biodiversity and economic values, and their spread to other properties.

This includes to neighbouring properties and areas where control is already being undertaken. The programme also includes preventing spread from transport corridors, cycleways and quarries. The council’s role is generally to respond to a complaint from a compliant occupier, who wants an adjoining neighbouring property to undertake control to prevent spread across a shared boundary.

The council will work with neighbour(s) to help them comply with RPMP rules, providing advice and information, and taking enforcement action if necessary. All quarries within the region have received a letter updating them on their responsibilities in relation to sustained control species in the new RPMP.

Objective	<ul style="list-style-type: none">Over the duration of the RPMP, prevent the spread of sustained control pest plants to neighbouring properties where those pest plants are being actively managed. Ensure transport corridors and quarries reduce the risk of sustained control pest plants being spread around the region.Over the duration of the RPMP, sustainably control common brushtail possums within priority possum control areas and across the Waikato region to minimise adverse effects and impacts as identified in the RPMP and their spread to neighbouring properties.Over the duration of the RPMP, sustainably control feral rabbits to level 4 or below on the Modified McLean Rabbit Infestation Scale 2012 where they have been identified as having adverse effects on environmental, production, cultural and amenity values in the Waikato region, and to reduce their impacts on neighbouring properties.Over the duration of the RPMP, sustainably control magpies and common and German wasps within the Waikato region where they present a risk to public health to minimise adverse effects and impacts as identified in the RPMP.
Outcome	<ul style="list-style-type: none">Impacts of these pests are managed to an acceptable level.The spread of these pests across boundaries are managed.Strategic investment in areas where it will support meaningful outcomes.

Good neighbour rules

Sustained control programme pests in particular have good neighbour rules associated with them in the council’s RPMP.

These rules support landowners/occupiers who are undertaking work to control these pests, by requiring neighbours to support that work. The exact nature of the rule depends on the characteristics of the pest, what the land is being managed for and the values it impacts. For example, in the case of gorse, the requirement is to control infestations of it within 20 metres of a shared boundary, where a neighbour is managing it to protect pastoral, forestry or environmental values.

This helps to ensure that pest control efforts are not undermined by reinfestation from neighbouring properties. They promote shared responsibility and coordinated action, together helping to protect productive land, native ecosystems, and community wellbeing.



Gorse

Priority possum control programme

Case study

The council undertakes maintenance possum control in priority possum control areas (PPCA) covering over 550,000 hectares. HALO sites are controlled regularly, particularly for rats and possums. Control operations undertaken by council contractors are required to achieve $\leq 5\%$ RTC¹ in PPCA and $\leq 5\%$ RTI² in HALO blocks.

Work in this programme complements pest animal control undertaken by the Department of Conservation, iwi, local councils, community groups and landowners across the region. To identify when maintenance control is required within PPCA, the council undertakes trend RTC monitoring to determine possum population levels. When a PPCA has a trend result above the 5 per cent residual trap catch (RTC) index threshold, this triggers the need for maintenance control. Control is generally undertaken on a three-to-four-year cycle depending on the RTC results achieved and trend monitoring results overtime. Trend and performance (post-control) monitoring results are presented in graphs on [page 22](#).

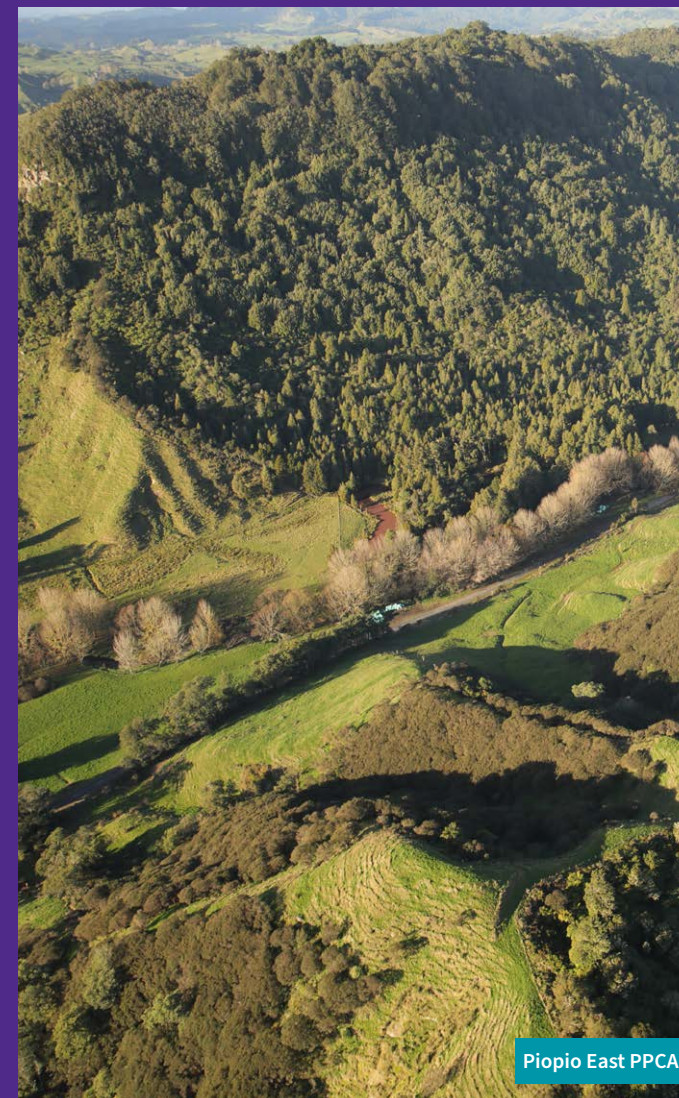
Objective

Minimising the adverse effects and impacts caused by possums on economic and environmental values within priority possum control areas (PPCA) and prevent their spread to and impacts on neighbouring properties where they are being actively managed.

KPIs

- All PPCA ground control operations achieve a mean 5% Residual Trap Catch (RTC), and aerial control operations achieve a mean 3% RTC within the contract timeframes.
- Annual HALO ground control operations are completed by 30 September.
- Maintenance possum control is carried out to best practice standards and in accordance with relevant legislation.

- 1 The residual trap-catch (RTC) index is a method of determining relative possum density. Lines of 10 leg-hold traps, spaced 20 metres apart, are set for three consecutive nights in random locations within the treatment area, before and after control. The number of lines used is determined by the size of the management area. The standard performance target commonly set for a reduction in possum densities is an RTC of $< 5\%$ (i.e. less than 5 possums caught for every 100 trap-nights).
- 2 The rodent tracking index (RTI) is a method of determining relative rodent (rat) abundance. It uses lines of tracking tunnels about 50 metres apart, with 10 tunnels per line.



2024/25 PPCA and HALO operations

PPCA – post-control % RTC

- *Ngaroma 1 – 3.18% RTC
- *Tiroa – 0.48% RTC
- *Matira Farmland – 3.10% RTC
- *Waikāretu – 1.53% RTC
- *Ōpārau – 0.48% RTC
- *Pirongia West Buffer – 1.11% RTC
- Whenuakite Farmland (deferred from 23/24) – 1.44% RTC
- Ngutunui – 0.26% RTC
- Piopio East Bush – 0.00% RTC
- Piopio West – 4.57%
- Mangakino – 2.20% RTC

Hamilton HALO (1,435 ha)

- Johnstone's Block – 1.25% RTI
- Hope Bush – 0.43% RTI
- Pukemako – 0.00% RTI
- Te Miro – 1.67% RTI
- Tirohanga – 0.00% RTI

DOC/WRC collaborative operations

- Hauhungaroa Bush – private land
North 0.83% RTC
South 0.00% RTC

Key

- * Control occurred in 23/24 with results reported in 24/25.
- ◆ Control occurred in 24/25 but operation has not been finalised – results will be reported in 25/26.
- + Carried over from 24/25 with results to be reported in the 25/26 Annual Report.

2025/26 PPCA and HALO proposed operations

PPCA – post-control % RTC

- Onewhero – 2.05% RTC◆
- Piopio East Farmland – 1.68% RTC◆
- Whitehall/Te Miro – 2.56% RTC◆
- Whareorino Farmland – 2.76%◆
- Whangapē – 0.81% RTC◆
- Ngaroma 2 – 3.19% RTC◆
- Pukekawa – TBC+
- Rotowaro – TBC+
- Nukuhakari 1 Farmland – TBC+
- Port Waikato Farmland North
- Te Kohanga Farmland
- Glen Murray
- Pirongia North Buffer
- Waipa Punui 2
- Nukuhakari 2
- Waotu
- Arohena 1
- North Taupo
- Waikite Valley Farmland 2B

Hamilton HALO (617ha)

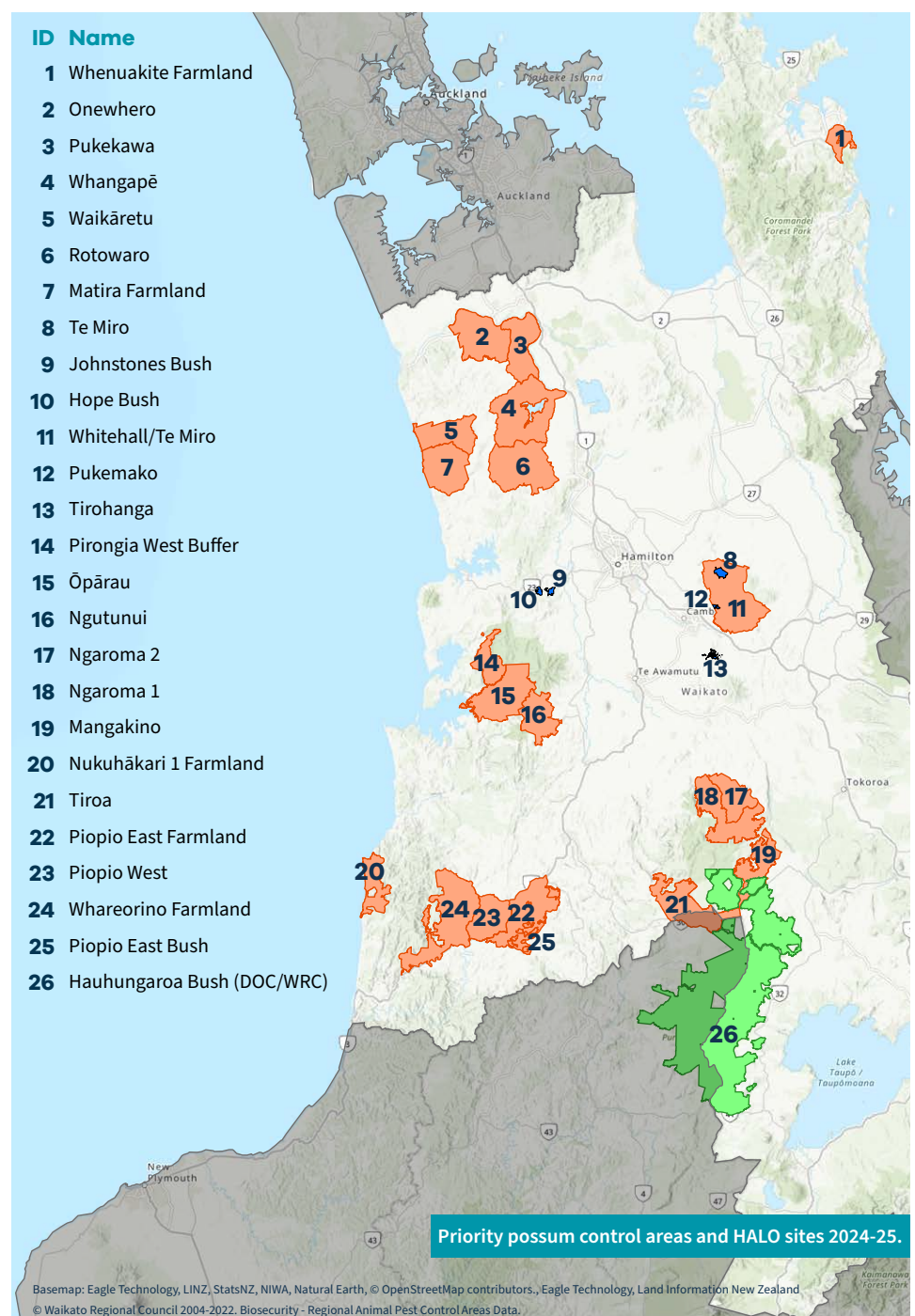
- Pukemako
- Te Miro
- Tirohanga

DOC/WRC collaborative operations

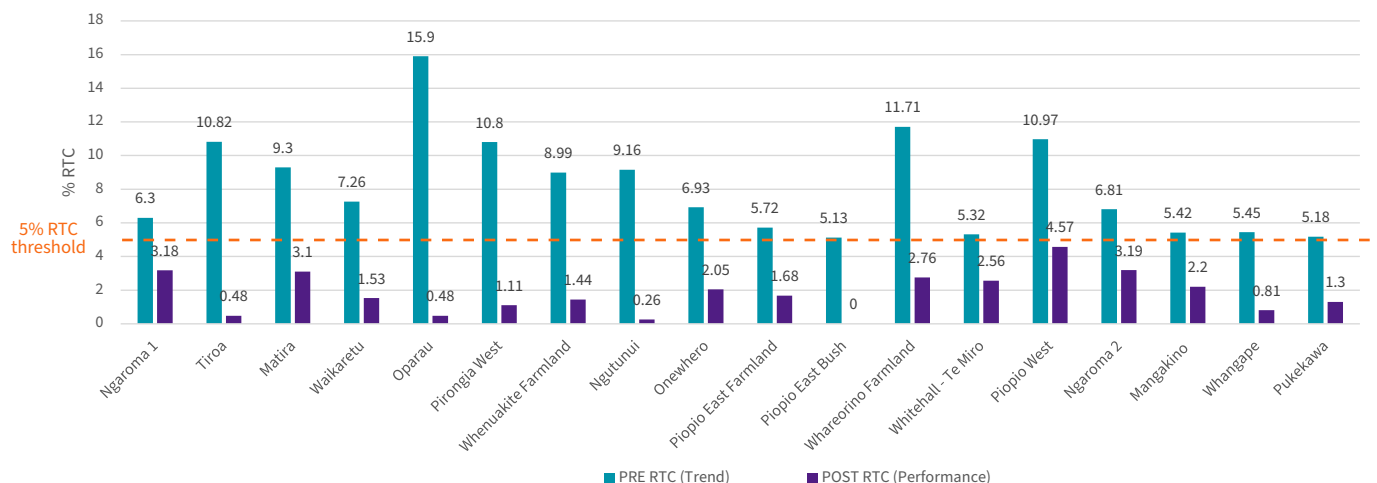
- Mount Pirongia Bush – private land
- Otahu Bush – private land

DOC/WRC/Tipu Mātoro collaborative operations

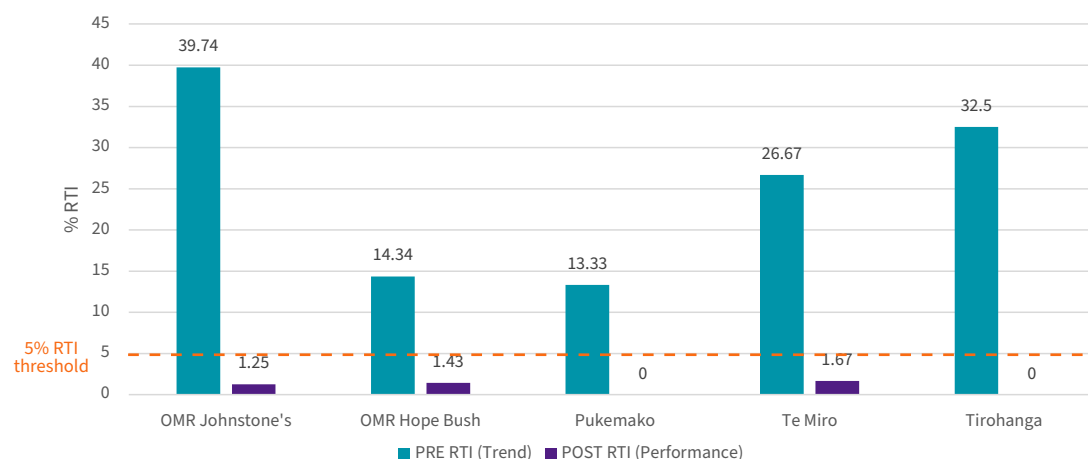
- Te Kopia/Paeroa Range (deferred from 24/25)



Priority Possum Control Area (PPCA) 2024/2025 Trend and Performance RTC monitoring results



HALO Blocks 2024/2025 Trend and Performance RTI monitoring results



Auditing

A selection of PPCA are audited each year using the council's auditing standard operating procedures, as follows.

- All aerial operations are audited.
- Every pest animal contractor is audited at least once every year.
- New pest animal contractors are audited on their first control.
- Any breaches identified in council audits are resolved by following SOP guidelines, within the timeframes of each PPCA project.

A total of 23 audits were completed in the 2024/25 financial year, including:

- 18 audits of ground control operations (10 operational and nine decontamination audits) in PPCA and HALO areas
- two audits of aerial control operations completed by council staff; one in the PPCA programme, one in the rook programme
- three audits of the council's operational performance monitoring (result/trend RTC/RTI).

Audits are undertaken to identify areas for improvement in the delivery of the PPCA or HALO programmes. Contractors are always notified of any issues or breaches identified, with follow up by council to ensure contractor processes and procedures are modified accordingly or improvements made. Our contractors exhibit a continuing commitment to health and safety practices in a high-risk industry, with all identified issues addressed and resolved this financial year.

Wilding Conifer Programme

Case study

The council's Wilding Conifer Control Programme on the Coromandel Peninsula has focused on three main areas this financial year: Whangapoua (two sites), Kuaotunu Peninsula (11 sites) and Whitianga (nine sites) covering a total of 1678.8 hectares. Work has occurred on both private and public conservation land, via contractors, community groups or landowners themselves. Depending on the nature of the sites, control has been achieved through either drill and fill, or felling. At some of the sites, control has been occurring over a number of years, reflecting the long-term commitment needed to tackle invasive wilding conifers.

The 2024/25 programme was funded by the council, MPI and LINZ, with a combined budget of \$325,564. Funding from LINZ covered control work undertaken on LINZ land on the Kopu Hikuai Road. MPI's funding contribution to the programme was significantly less than in previous years, with the council increasing its contribution to ensure that the gains made in the programme to date are not lost.

The Wilding Conifer Control Programme has also instigated, or is supporting, the following projects.

- Development of the Plantell app to record all historic and current wilding conifer control sites across the Coromandel and Central North Island areas (whether WRC, DOC, private landowner, LINZ or forestry control activities).
- GIS satellite and AI mapping programme of all wilding conifers on priority sites within the region.
- Development of a wilding conifer priority site report for the Taupō area.
- New wilding conifer signage.
- Production and filming of an Opera Point wilding conifer control collaboration video (funded by MPI).
- Production and filming of Coromandel wide wilding conifer control promotional video (to be funded by WRC).

Opera Point Reserve – Whangapoua

Opera Point Reserve on the northern head of the Whangapoua Harbour is an important ecological and historical site that includes a pā. It is the focus of combined restoration efforts that began in 2021 by the Whangapoua Community Association, DOC and local iwi under the banner of the Opera Point Partnership (OPP). OPP's aim is to:

Preserve and enhance Opera Point Historic Reserve as a safe and attractive destination for residents and visitors to explore the heritage/archaeological features, protect the conservation values and enjoy the recreational opportunities that it provides.

To support this mahi, the council is undertaking control of the heavy infestation of wilding conifers there. Stage one was completed in 2024/25 and involved the drill and fill of all accessible trees. Stage two is programmed for delivery in 2025/26 and will see the remaining trees felled. Controlling these wilding conifers will make it safer to visit the area and ensure they don't fall and damage the archaeological features and tracks within the reserve.



Site-led programmes

Site-led pest management is about preserving the values of a place, rather than targeting a specific pest species.

Three site-led programmes have been identified in the RPMP:

- the Hūnua Ranges Pest Management Area (programme administered by Auckland Council)
- Wetlands
- Project Yellow.

The pests targeted under a site-led programme vary, depending on the effects of pests on the site’s values.

Wetlands site-led programme

There are 24 pest plants and four pest animals (all turtles) included within the wetland site-led programme. These pests have the potential to impact wetland environments. If a wetland site meets the site-led RPMP criteria, then there are rules in the RPMP to support occupier or community-group led wetland restoration work. To date there are no wetland site-led programmes in the Waikato region.

Objective	Over the duration of the plan, the impacts of the pests listed in table 14 and 15 of the RPMP in wetland sites of high ecological value, or high value to the community or occupiers, are minimised.
Outcome	Community groups and stakeholders are supported in minimising the adverse effects of specific pests on the values of identified sites.



Opuatia Wetland

Project Yellow site-led programme

Project Yellow targets three yellow-flowered, nitrogen-fixing pest plants: broom, gorse and tree lupin/yellow bush lupin.

Nine organisations, including Waikato Regional Council, work collaboratively to achieve the vision of protecting the unique natural environment, iconic vistas and cultural significance of the Desert Road area from these invasive pest plants.

In 2024/25, the council engaged experienced contractors to undertake ground control of these invasive legumes across multiple areas in the Desert Road. Hundreds of plants were successfully removed. Emphasis this year was put on finding and controlling outlying plants to limit further spread.

Objective	Over the duration of the plan, control of the pest plants listed in table 16 of the RPMP will be undertaken so that the environmental, social, cultural, amenity and recreational values of the Central North Island Desert Road tussocklands are protected from the impacts of these pests.
Outcome	Community groups and stakeholders are supported in minimising the adverse effects of specific pests on the values of identified Desert Road tussocklands.

Activity	Cost
Ground control – Desert Road	\$4,995.90
Total 2024/25 spend	\$4,995.90

Project Yellow partners:

- Department of Conservation
 - Genesis Energy
 - Horizons Regional Council
 - Lake Rotoaira Forest Trust
 - New Zealand Defence Force
- Transpower
 - Waikato Regional Council
 - Waka Kotahi NZ Transport Agency
 - Ngā Waihua o Paerangi (Ngati Rangi)

Mapping lupins!

With the focus of Project Yellow on pest plants with bright yellow flowers, remote sensing via aerial imagery is an effective way of mapping their distribution and density. This helps to guide decisions and foster efficient strategies, with the project on track to meet its goals of significantly reducing these invasive legume populations.

In 2014, the location of lupin infestations were mapped from aerial photographs to guide control work and allow tracking of the programme’s progress. In 2024, at peak lupin flowering time, the area was again photographed to determine changes over time.

The results show that core infestations have either been removed or now have lupin at lower densities, while there are a number of outlier infestations that have established or become denser. This information will help identify control and surveillance targets for 2025 and beyond.

Analysis of the aerial photos also found that broom was at peak flowering at the same time as lupin, meaning that going forward the same aerial imagery can be used to monitor changes in both species over time.





Benthic sled sampling.

Part 2: Ētehi atu mahi tiakitanga taiao Other biosecurity activities

The 2022-2032 *Waikato Biosecurity Strategy* sets out the council's blueprint for ensuring we operate and maintain a collaborative, cohesive and comprehensive biosecurity system within the Waikato region over the next 10 years.

The strategy, which is non-statutory, integrates the council's regulatory (RPMP) and non-regulatory biosecurity functions (all other biosecurity activities such as monitoring and surveillance, research, incursion responses and collaborative action).

Strategic goals and key regional priorities are outlined to guide the delivery of our wider regional biosecurity activities.

Our strategic regional priorities are:

- Maintaining effective leadership and governance
- Working together as a region
- Valuing and building on our investments
- Better surveillance and intelligence systems
- Bright ideas and better ways

Biosecurity work relating to these regional priorities are highlighted in this section of the annual report.

Our strategic regional priorities



Effective leadership and governance



The council undertakes a range of actions to provide effective leadership and governance for regional biosecurity.

Preparing for bird flu

A highly pathogenic strain of avian influenza (HPAI caused by the H5N1 virus) has been spreading around the globe since 2020. It has caused high numbers of deaths in poultry (chickens and turkeys), waterfowl (ducks, geese and swans), shorebirds (godwits, stilts and plovers) and seabirds (gulls and terns). It has also spilled over to more than 60 species of mammal, including marine mammals, companion animals and livestock. Human cases are rare and generally the result of close contact with an infected bird or animal.

New Zealand's geographical isolation has protected us from HPAI to date, but we cannot rely on that remaining the case.

In 2023, H5N1 spread rapidly down through South America to the South Atlantic sub-Antarctic islands and the Antarctic peninsula. It is now present on sub-Antarctic islands in the Indian Ocean and is expected to be brought by migratory birds to New Zealand within the next two years.

Once it reaches New Zealand, it is expected to establish in the wild bird population, meaning it cannot be eradicated.



HPAI is expected to establish in wild bird populations in New Zealand.

In preparation for HPAI arriving in New Zealand, MPI, DOC, the Ministry of Health (MOH) and Health New Zealand | Te Whatu Ora are working with councils and industry on a One Health approach. This approach aims to:

- reduce the impact on native species
- reduce the impact on the commercial poultry sector
- maintain supply of poultry meat and eggs to the domestic market and access to overseas markets where possible
- protect human health.

After discussion with central government, it became clear that regional councils are in a good position to coordinate a One Health approach regionally to ensure information is effectively disseminated to landowners/managers of public spaces (parks and reserves) where people could encounter sick/dead birds.

We are contributing to the preparedness programme by providing advice and support from a regional sector perspective. We are also co-ordinating a HPAI Liaison Group of local territorial authorities (TAs), DOC and MOH staff within the region. The aim of this group is to ensure TAs have:

- up-to-date information on HPAI and how to respond if it arrives in New Zealand
- plans in place for managing bird deaths within high public usage parks and reserves they manage
- information available to give to the public when HPAI arrives in New Zealand.

The liaison group meet regularly, and information updates are distributed as they become available.

Tackling wallabies

Pest animals like wallabies don't recognise borders – so teaming up with our regional neighbours to tackle them isn't just sensible, it's essential! To this end, we work collaboratively with Bay of Plenty Regional Council (BOPRC) under the Tipu Mātoro National Wallaby Eradication Programme banner to control wallaby towards containment and eradication in the North Island. We are represented at all levels of the programme, including research project design and implementation, governance and management, and operational delivery. Strengths of this way of working include consistent application of nationally developed best practice and guidelines, shared comms, resources and contractor capacity, and delivery of successful cross boundary operations. In pursuit of our goals, 2024/25 saw some significant gains made in the programme, especially in critical areas where wallaby can potentially spread into the Waikato. This included removing more than 495 wallabies from the Waikato region in the last financial year.



Thermal image of wallabies grazing.



Wallaby control involves night shooting.

Working together as a region



The council undertakes a range of actions to promote and facilitate everyone working together to achieve regional biosecurity outcomes.

Maungakawa project

A Winstone Aggregate biodiversity initiative is supporting Ngāti Haua to undertake long-term pest control and cultural monitoring in ngahere within their rohe. This includes in Maungakawa, an area of tawa-dominated ngahere that has long benefited from council-funded possum control.

Winstone Aggregate's led the 2024 possum and rat control project that was undertaken by Rentokil Rural - EcoFX.

Our monitoring contractors, Qualmons Ltd, undertook pre- and post-control possum residual trap catch (RTC) monitoring to determine the operation's success: pre-control 5.43% RTC, post-control 1.28% RTC.

Ngāti Haua, with support from RMA Ecology, established a cultural monitoring framework as a baseline for the ngahere's current state.

Incorporating mātauranga Māori and ecological monitoring methods, this framework will help inform what work is required going forward to protect and enhance this culturally and ecologically rich area.

***Maungakawa is one of four North Island sites where Winstone Aggregates is partnering with mana whenua to undertake long term pest control as part of their Positive Biodiversity strategy. Further detail can be found on Winstone's website.**



Maungakawa project stakeholders at the initiative's launch.

Summer advocacy

Check Clean Dry

To get people to 'do the right thing', sometimes you need to tell them what that is! This is definitely true in the biosecurity space, where not everyone is aware of the issues but we all have a role to play in stopping the spread of pests and reducing their impacts. This summer, we had a team of enthusiastic students working at locations along the Waikato River sharing the 'Check Clean Dry' message to water users attending events and recreational activities. Check Clean Dry is an important message that applies to any activity that has the potential to move water and pests within and between waterbodies.



On the Coromandel

Our biosecurity staff, sometimes in collaboration with DOC staff, shared key terrestrial, marine and freshwater biosecurity messages at public events on the Coromandel Peninsula over the summer. We attended the Whangamatā evening market, the Mercury Emergency Services Festival in Whitianga, the Keltic Fair in Coromandel and the Cooks Beach Carnival. The team, based in our WRC branded gazebo with a kauri themed backwall, answered questions, gave out comms material, and ran fun 'biosecurity' competitions with branded items as prizes. They promoted kauri protection, Weedbusters, marine biosecurity and the new Aotearoa Species Classifier app, which is a great tool to help anyone identify both native and invasive plant and animal species.

We also had a team of enthusiastic Kauri Protection ambassadors working on the Coromandel Peninsula this summer. Located at four key holiday spots, in Whangamatā, Whitianga, Cooks Beach and Coromandel town, they took every opportunity to engage with and educate people on the importance of good hygiene practices to protect kauri. We want to ensure everyone makes kauri protection second nature!

Having a presence at events and locations raises the council's profile and gives the public an insight into the mahi we are doing to protect the environment. It also provides an opportunity to have conversations with the public, highlight the biosecurity challenges we are facing in changing times, and bring them along on the biosecurity journey.



Cooks Beach Carnival.

Moth plant comp

This year we partnered with Hamilton City Council to run a competition as a new approach to raising awareness of the pest plant moth plant. The 'Pods for Prizes' competition, which ran from 1 March 2025 to the end of April, encouraged teams and individuals in Hamilton Kirikirōa to collect as many moth plant pods as possible for collection and safe disposal. A single pod can contain thousands of wind-borne seeds that travel many kilometres – so every pod removed counts! Competitors went into a draw for a range of great prizes, including Hamilton Zoo passes, pest control traps and gardening tools. More than 7000 pods were removed from the city, with teams from Fraser High and St Columbus School collecting the most. This successful competition will now become an annual event, and there is a plan next year to include a new category of the longest moth plant vine!



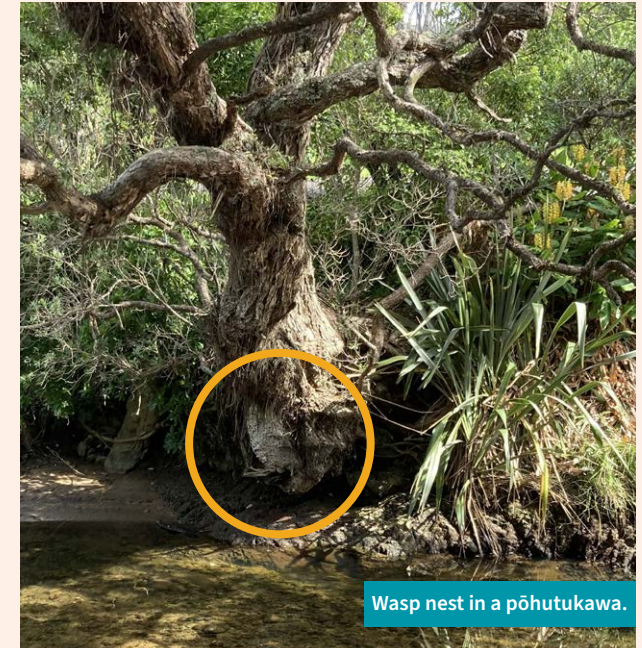
More than 7000 pods were removed during the competition.



Moth plant growing on a fence.

Wasp control

Wasps are a widespread and almost year-round issue in some parts of the region. Milder winters mean their nests may not experience annual mortality but rather persist and become very large. Our RPMP rule for German or common wasps require landowners or occupiers to control nests where they pose a risk to human health. We receive a number of complaints and inquiries about wasps every year and provide advice and information to landowners on how best to control them. This year's warm dry summer created perfect conditions for wasps to flourish, and we received 40 per cent more inquiries or complaints than the previous year. This kept local authorities like Thames Coromandel District Council very busy controlling nests in their parks and on footpath and roadside areas. Their prompt responses and effective control work made it safer for everyone using those public spaces. We also met our responsibility as a landowner, undertaking control of two wasp nests that members of the public identified on regional council land: one in Thames and the other close to Tirau.



Wasp nest in a pōhutukawa.

Tackling Cuscuta

The parasitic pest plant golden dodder (*Cuscuta campestris*) is a serious threat to New Zealand's native biodiversity and agricultural sector. We work closely with DOC to tackle infestations of it and reduce the risk of further spread in the Waikato region, with DOC operating on public conservation land while we take responsibility for neighbouring private land.

It was a busy year as we continued to survey for and control golden dodder in wetlands, around lake margins and on a handful of private properties. Some new sites were found, and all known sites were controlled.

Surveillance was mainly carried out by helicopter, but we also had WRC and DOC staff and contractors surveying areas on the ground. Using the same contractors makes the job easier to co-ordinate. Both aerial and ground control methods were used to control golden dodder in areas where it was found. Aerial surveillance has shown that our spray operations were successful at most sites, with only a small amount of golden dodder still growing around Lake Whangapē and within the Whangamarino Wetland.

We held fortnightly meetings attended by WRC and DOC staff, and occasionally also contractors and representatives from Fish & Game. At these meetings we discussed updates and future work, and shared information as well as ideas about how we can do things better to achieve the best outcomes in the future. The lessons learned will help us achieve further success in the coming season.



Golden dodder

New find

In March 2024, golden dodder was detected for the first time in the Kopuatai Peat Dome wetland, an internationally important RAMSAR site in the Hauraki Plains. The dodder infestation was discovered by DOC staff during routine predator trapline checks through conservation land managed by Waikato Regional Council as part of the Waihou-Piako flood scheme. The bright yellow spaghetti-like stems were obvious among the green vegetation. Although its presence was limited to seven "castellations", or patches of infestation, an urgent response was actioned given golden dodder's potential to be so invasive.

Initial control was achieved via herbicide application to destroy the host plants and disrupt their lifecycle. However, due to concerns about the large volume of dodder seeds likely present in the topsoil and the risk of their dispersal during a flood, more robust containment measures were also implemented.

A physical control solution was developed in which the top 10 centimetres of infested soil was excavated and buried in nearby trenches. Strict hygiene protocols were followed to avoid cross-contamination. This included machine and boot cleaning procedures in designated areas and the controlled movement of staff and machinery to prevent seed transfer between the castellations.

Several months post-intervention, we had promising results. Regrowth of golden dodder has only been observed at low density outside the excavated areas, suggesting the physical control method was effective in reducing the soil seedbank. This success has not only reduced the need for ongoing chemical control but also lowered the risk of further spread by recreational users such as trampers and duck shooters.

The results highlight the value of early detection, inter-agency collaboration, and tailored control strategies in managing biosecurity threats within sensitive wetland environments.



Infested soil being excavated and buried.

Valuing and building on our investments



The council undertakes a range of actions to protect regional investment into biosecurity programmes.

Bird survey shows tūi continue to thrive!

The HALO programme began in 2007 with the aim of increasing tūi numbers in Hamilton through:

- pulsed, intensive control of rats and possums in key forest sites within a 20-kilometre radius of the city
- the planting of key food source plants within the city to ensure they have flowers and nectar all year round.

Council contractors have undertaken regular, intensive pest control within the surrounding forests, while Hamilton City Council's Nature in the City programme focuses on restoring and establishing native habitat within the city, with a target of 10 per cent native vegetation by 2050.

Manaaki Whenua Landcare Research has undertaken regular bird surveys in the city since 2004, initially as an indicator of progress towards environmental sustainability in the city. These surveys have shown what most residents will have noticed: the HALO programme has been very successful, with tūi now common in the city year-round.

Fifteen years on, the latest bird survey in 2024 showed tūi numbers have continued to increase, with the highest number recorded in 'green' areas (amenity parks and vegetated gullies): mean count of 1.27 tūi per five-minute bird count. There is also an overall trend of increasing riroriro (grey warbler) and welcome swallow (warou) between 2004 and 2024. The survey also recorded sightings of rare visitors, kārearea (New Zealand falcon), kākā and kererū.



National Interest Pest Response

There are nine species of pest plant included in the MPI National Interest Pest Response (NIPR) programme. Two of these, Manchurian wild rice (*Zizania latifolia*) and white bryony (*Bryonia cretica*), are present in the Waikato region. We deliver species-led programmes for both species on behalf of MPI.

White bryony

Pest plant white bryony is targeted for eradication under the NIPR programme. The cucumber-like vine, which flowers in spring/summer, forms persistent branching underground tubers that must be dug up and removed as part of the control work. Some tubers can weigh over 15 kilograms!

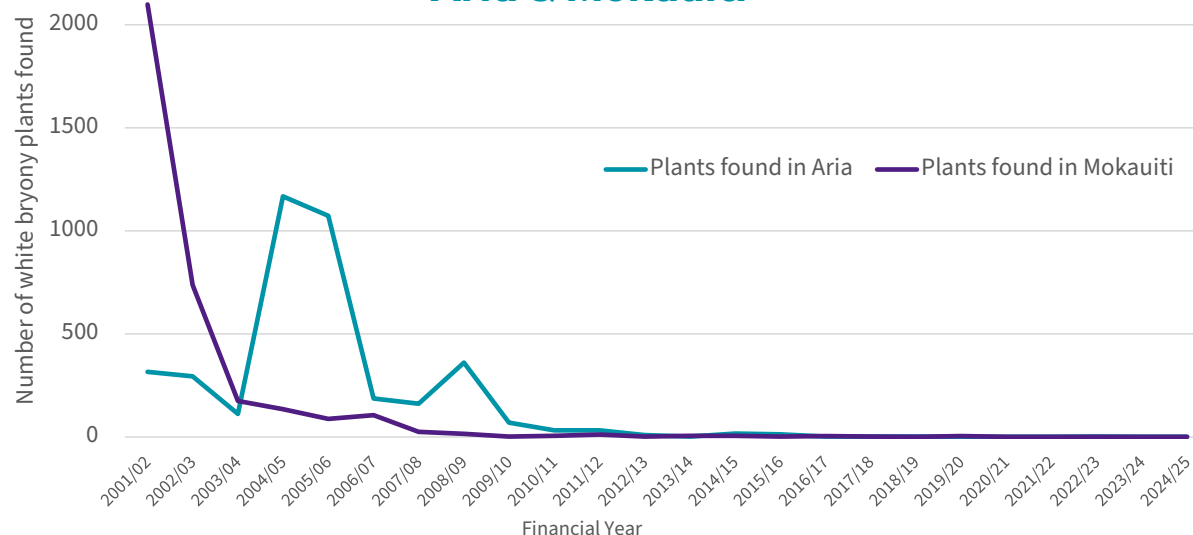
The support we give MPI in this species-led programme includes:

- managing the direct control of, and surveillance for, white bryony at sites in Aria and Mokauiti
- providing staff resources for contract management and reporting services
- providing advice and information on the threats of white bryony to affected land occupiers and any other interested parties.

When the white bryony eradication programme began in the Aria and Mokauiti sites in 2001, plants numbered in the thousands. Since then, the number of plants controlled annually has dramatically reduced and continues to trend downwards (see graph).

In the 2024/25 season, council pest plant contractors covered over 437 kilometres in surveillance across both sites. No evidence of any white bryony was found, making this the second consecutive year that no plants were found in either area.

Number of white bryony plants found per year in Aria & Mokauiti



White bryony flower.



White bryony tubers removed from the Aria site about 10 years ago.

Better surveillance and intelligence systems



The council undertakes actions to improve surveillance and intelligence in regional biosecurity, ensure the right information is available to the right people, and to add confidence to biosecurity decisions and actions.

New pest plants on the horizon

Emerging threats from new and existing pests are always on our radar. Our biosecurity team actively monitors for them and liaises with our regional counterparts, especially in regions where new pest plants are already becoming a problem.

Two key new threats to the Waikato come from **sea spurge** (*Euphorbia paralias*) and **Madagascar ragwort** (*Senecio madagascariensis*), both of which have established infestations in Northland.

Sea spurge is a coastal weed that invades sand dunes, displacing native vegetation. It spreads via ocean currents and previously appeared in the Waikato on the west coast near Aotea Harbour, where it was eradicated. However, given its means of spread, future incursions are likely.

Madagascar ragwort is a toxic pasture weed that poses a serious risk to livestock, especially cattle and horses. Recognised as a weed of national significance in Australia, it thrives in low-fertility soils and drought-damaged pastures, producing thousands of seeds. Confirmed to be present in New Zealand in about 2022, established plants in Northland are proving difficult to eliminate.

Both these invasive species highlight the need for early detection, public education and awareness, and coordinated control efforts when it comes to new pest plant species. Continued vigilance is essential to help protect the Waikato's natural environment and economy.



Corbicula surveys

Biosecurity New Zealand (BNZ) approached our biosecurity team to design and implement a benthic sled survey programme to help map the extent of invasive gold clam (*Corbicula* species) spread within the Waikato River. This programme uses a small 'benthic sled' towed behind a boat along the riverbed, gathering material from the benthos (the communities that live on or near the bottom of the river) to see if any clams are present. Our sled design was based on one used by Earth Sciences New Zealand (formerly NIWA) to study clam populations in their known range in the Waikato River. So far, our biosecurity team has surveyed several sites from just downstream of Taupō, down to Lake Whakamaru. Thankfully, no clams have been found there to date.

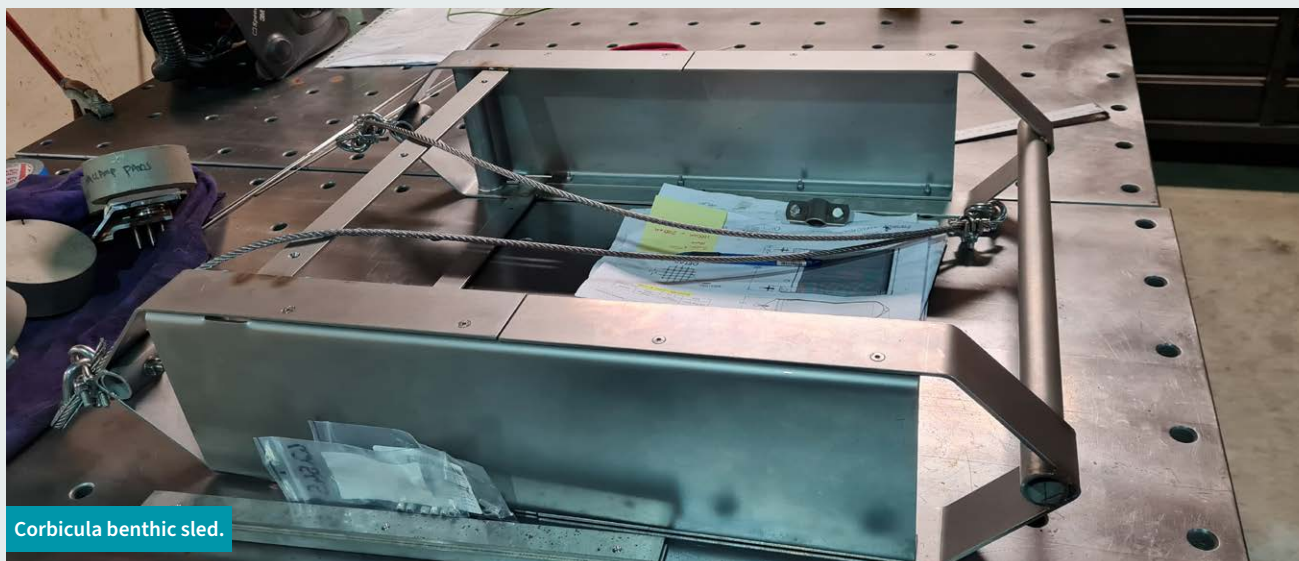
This work was done in collaboration with local mana whenua, who the team approached for feedback and guidance around sampling in the Waikato River. This ensured proper protocols were followed prior to work commencing, such as karakia, but also to provide the team with valuable knowledge on local wahi tapu sites and areas to avoid. Kaitiaki were present at Lake Ōhakuri boat ramp to observe, assist with the mahi and learn about our sampling processes.



We're helping to map the extent of invasive clams in the Waikato River.



Processing material gathered during the survey.



Corbicula benthic sled.

Detecting Chilean flame creeper from a distance

Chilean flame creeper (*Tropaeolum speciosum*) is a bird-dispersed pest plant that we actively manage as an eradication species on private properties surrounding Pureora Forest. Currently, three distinct infestation patches have been identified, with the two most distant sites separated by more than two kilometres. This fact, coupled with the many hectares of unsurveyed suitable habitat in between, made it extremely likely that Chilean flame creeper was much more prevalent than known.

In Pureora, Chilean flame creeper is often found on the edge of native vegetation, growing vigorously through dense, tall blackberry. Historically, surveillance efforts were limited to ground-based perimeter checks or costly helicopter surveys, which posed significant limitations – particularly in detecting the creeper in steep gullies or dense vegetation. The small leaves and flowers, each less than five centimetres in diameter, also make it difficult to spot from a helicopter.

We reasoned that Chilean flame creeper's intolerance to shade, and its vivid red flowers, would make it an ideal candidate for drone-based surveillance. Unlike helicopters, which are restricted in how close they can fly to the ground, drones can operate at lower altitudes, enabling better detection.



Chilean flame creeper flowers.

Over four days in January 2025, we flew a drone from known patches of Chilean flame creeper to finally check out the areas that had previously been inaccessible. A total of 814 images were taken within four hours of drone flight time, of which 61 were found to contain the pest plant. The images were of such high-quality that we were even able to identify the vine from its foliage alone, without any bright red flowers present. Based on these results, we have more than doubled the total known infestation area.



Chilean flamer creeper can be seen growing over and smothering tree ferns.

The adoption of drone technology has significantly enhanced our surveillance capabilities of Chilean flame creeper. The method allows for faster and more comprehensive coverage of the landscape, resulting in the identification of infestations in previously inaccessible areas, and shows the value of integrating drone technology into our pest plant surveillance programme. The next challenge is how do we tackle these new sites!

Bright ideas and better ways



The council undertakes actions to encourage innovation in regional biosecurity.

National biocontrol advances

Moth plant beetle in city

The vigorous strangling vine moth plant has a new South American nemesis – the jewel-like moth plant beetle, *Freudeita cupripennis*. We released this beetle – the first biocontrol agent to be released against moth plant in New Zealand to date – in Hamilton this year, following initial releases at sites in the Bay of Plenty and Northland in December 2019. Before these releases, a comprehensive programme of host testing was carried out by Manaaki Whenua Landcare Research to evaluate the safety and efficacy of the beetles. The moth plant is mainly impacted by the beetle's larvae. Living underground, they feed on the roots of the plant, often leading to its death. Adult beetles also cause some damage to the leaves. The best time to look out for these tiny weed warriors is from late September to March, when the metallic adults are active on the leaves, stems and flowers of moth plant.



Moth plant beetle

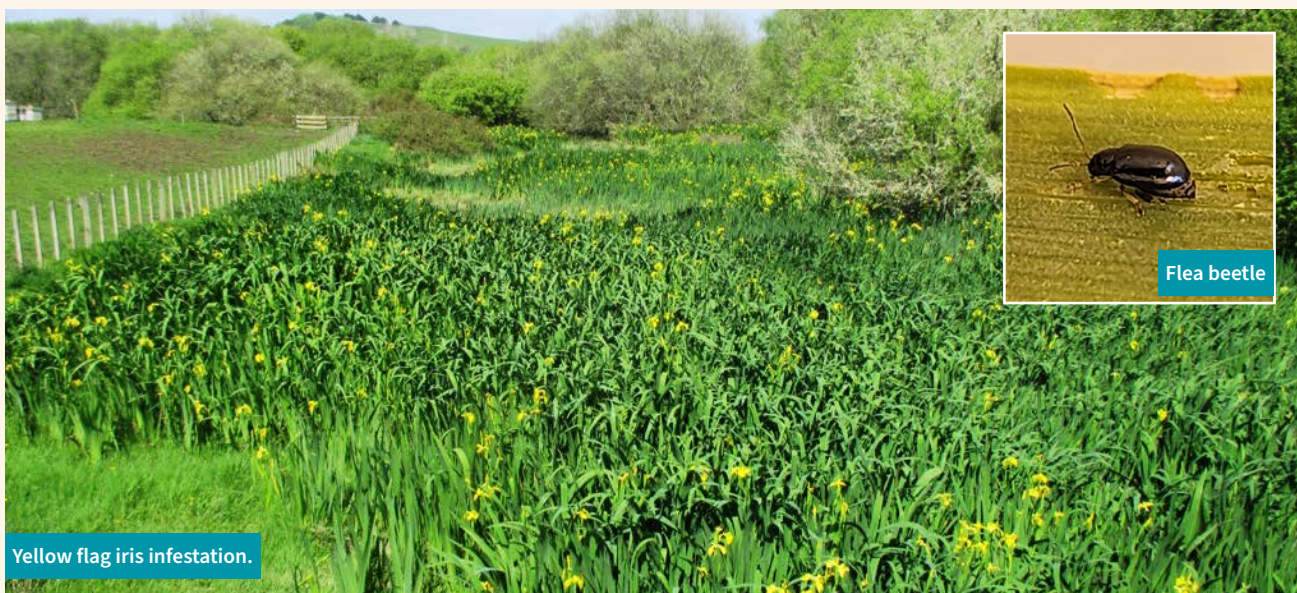
Natural enemy alert for wetland invader

Yellow flag iris (*Iris pseudacorus*) is a widespread, invasive pest plant of damp pasture and wetland areas across New Zealand and in many other countries. Its aggressive spread poses a significant threat to native wetland ecosystems and low-lying farmland. We undertake a multi-front battle against it at key sites, via herbicide control and habitat restoration.

Now, a promising new tool may be on the horizon: biocontrol using a flea beetle (*Aphthona nonstriata*) from the pest plant's home range in Africa. Although not yet released in

New Zealand, Manaaki Whenua Landcare Research, through the Bio Collective and led by Waikato Regional Council, has in conjunction with Rhodes University in South Africa been researching this beetle for the past five years. Early results suggest it could be a safe natural enemy of yellow flag iris to have in this country.

Before deployment, the beetles must undergo stringent host testing to ensure they won't impact our native *Iris* species. There will also be iwi and public consultation before approval by the Environmental Protection Authority for their release. Hopefully, this flea beetle will become a valuable addition to the pest management toolbox against yellow flag iris in years to come, offering more sustainable control of this persistent invader.



Yellow flag iris infestation.

Flea beetle

CAN do attitude towards preventing spread of clams

The invasive species gold clam (*Corbicula fluminea*) has now been confirmed to be present in over 200 kilometres of the Waikato River from Lake Maraetai to Port Waikato.

There are biosecurity rules in place to stop the spread of golden clam through a mechanism under the Biosecurity Act called a Controlled Area Notice (CAN). A CAN is in force for the lower Waikato River, from the Whakamaru Dam to Port Waikato, to mitigate the movement of water and equipment out of the river to prevent the spread of clams to other waterways. It was amended in November 2024 to include a table of treatment options.

New water tank in Rangiriri

We have biosecurity contractors who work in the lower Waikato CAN area, controlling pest plants such as alligator weed and yellow flag iris along the river margins and adjacent terraces.

In the past, they have used river water to fill their spray tanks. However, this is no longer possible under the CAN restrictions, and because gold clams are unwanted organisms.

A practical solution was needed to ensure we could comply with the CAN restrictions but still deliver our pest plant programme.

We set up a 25,000-litre water tank on council land in Rangiriri near the river, which we fill by tanker using fresh water drawn from outside the CAN.

The new water tank is now being regularly used by contractors and council staff to fill spray tanks and for boat and equipment washdown onsite. Job done!

Ski boat washdown

One of the challenges with the Biosecurity NZ CAN in place on the lower Waikato River was the Bridge2Bridge event in November last year.

Ballast water is a high risk pathway, with clam larvae able to hitch a ride in the water that can remain in the ballast tanks of boats when they move to other waterbodies. Our freshwater biosecurity team came up with a promising new tool that enabled competing ski boats to secure a permit from Biosecurity NZ to move from the Waikato River to the Waihou and Piako rivers for the Twin Rivers event with minimal risk of spreading gold clams.

The team worked with the boat owners, Biosecurity NZ staff, boat experts and plumbers to provide a treatment option for ballast water. The treatment was based on Earth Sciences New Zealand (formerly NIWA) studies that showed clam larvae exposed to water heated at 50 degrees Celsius for five minutes had a 100 per cent mortality rate.

With funding from Biosecurity NZ, a treatment device prototype was created which they affectionately named the “Tieman 1.0”. It delivered water at a temperature of 60 degrees Celsius to the ballast tanks of the boats, which was then left for five minutes to kill any clam larvae that might have been present.

Most of the tanks had capacity to hold about 150-200 litres of water, so it took about 16 minutes to fill a tank.

The prototype development drew on a team member’s previous career as a carpenter, his aquatic ecology background and a bit of Kiwi (and Dutch) ingenuity. It proved effective at cleaning the ballast tanks, with the added bonus of costing significantly less to build than anticipated.

Earth Sciences New Zealand is currently investigating how our prototype can be improved and used commercially. It’s early days, but it’s looking to be a promising new tool to add to our arsenal for the prevention of spreading clams.



Treating a ballast tank using the prototype device.

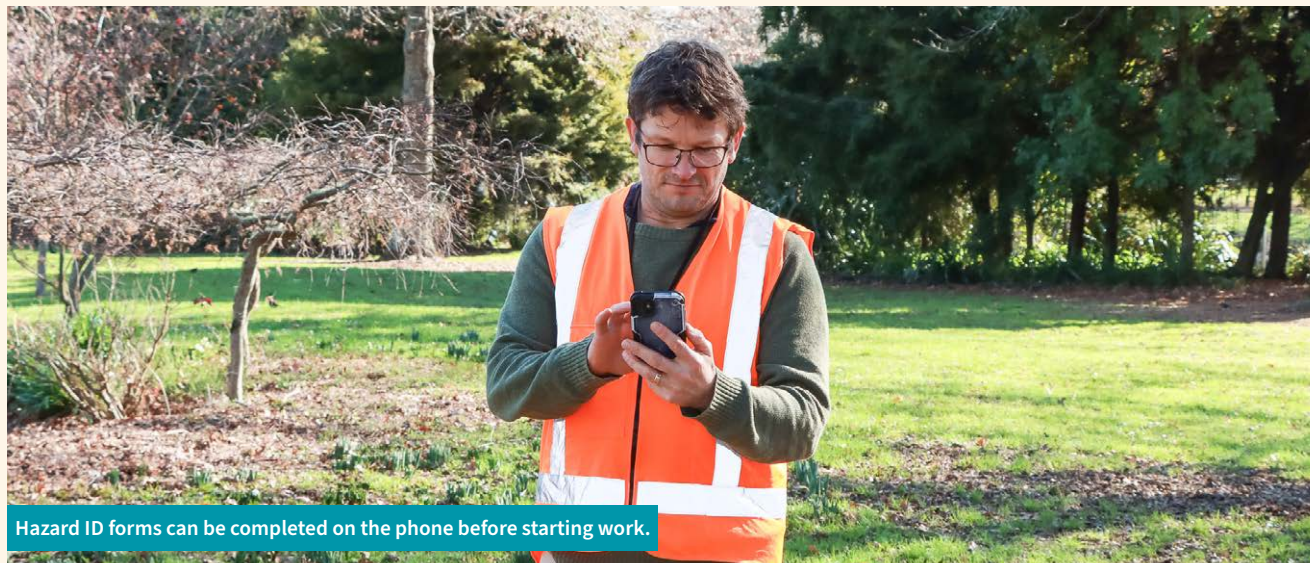
Going digital with hazard identification

Traditionally, contractors conducting pest plant control operations at sites around the region have completed Health and Safety Hazard Identification (Hazard ID) forms using paper-based methods.

As part of our drive for continuous improvement and focus on health and safety, our Hazard ID forms have now gone digital!

The problem with paper Hazard ID forms are:

- they are inefficient, and prone to loss or inconsistent storage
- they are time consuming to analyse, which is made more challenging by inconsistent storage
- it's hard to find historical hazard information for contractors and biosecurity officers.



Hazard ID forms can be completed on the phone before starting work.

Our digital forms, now part of the ArcGIS Field Maps app, streamline the process and improve data accessibility. This solution enables:

- **mobile form submission** – contractors can now complete Hazard ID forms directly onto their phones before starting work
- **data integration** – submitted forms are automatically uploaded to a dashboard, allowing for better access and analysis
- **improved site awareness** – contractors and biosecurity pest plant officers can view previous Hazard ID submissions for a site on their phones, enhancing situational awareness and safety planning.

The benefits are:

- *efficiency* – reduces administrative burden and speeds up data processing
- *accessibility* – centralised, real-time access to hazard data for contractors and biosecurity pest plant officers
- *safety* – enhances hazard visibility and supports proactive risk management.



Tackling an urban pest plant infestation.



German wasp.

Part 3: Whakahaere momo Species management

The following pages provide a summary of the status and progress of the management of each pest species against the key performance indicators and objectives of the *Waikato Regional Pest Management Plan 2022-2032* and *Biosecurity Operational Plan 2022-2032*.

Understanding the data

An **operational site** is an area that we actively monitor for pest plant management.

Infestation parent points are an area of infestation, and there may be many of these within an operational site.

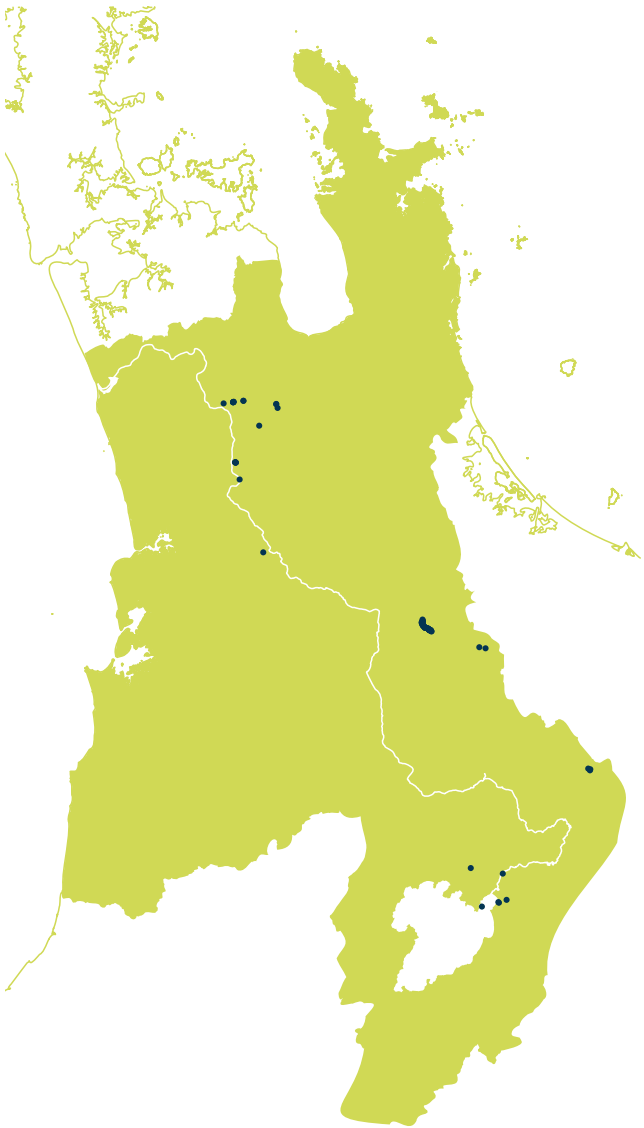
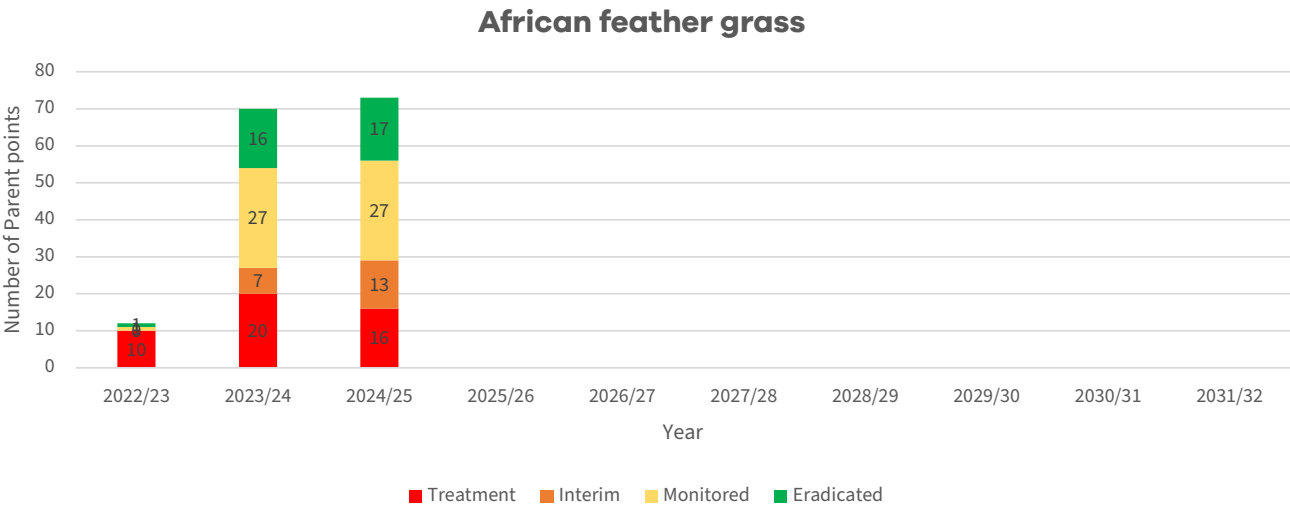
Each infestation parent point is given a management status, as follows.

- | | |
|--------------------|--|
| Treatment: | The infestation parent point has live foliage. Control work (physical/chemical) is undertaken/treatment applied. |
| Interim: | The infestation parent point has no present green foliage. NOTE: When an area has no green foliage for more than two consecutive years, it moves to the 'monitored' status. Absence of foliage is assessed twice a year, and if foliage is detected then the area defaults back to treatment status. |
| Monitored: | The infestation parent point being monitored has had no green foliage for 2-10 consecutive years and is not yet considered 'eradicated'. Absence of foliage is assessed annually and if foliage is detected then the area defaults back to 'treatment' status. |
| Eradicated: | An infestation parent point where the pest plant has been completely removed, i.e. no live foliage has been recorded for at least 10 consecutive years (although this is species specific). |

African feather grass (*Cenchrus macrourus*)

RPMP classification	Area	Programme status
Eradication	Whole of region	On track

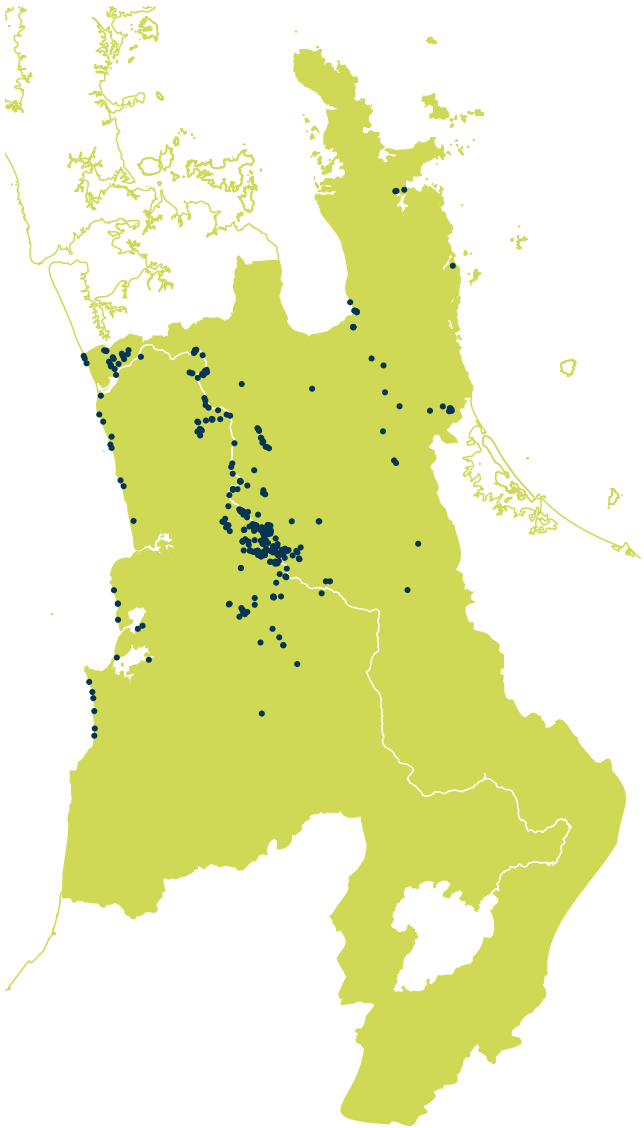
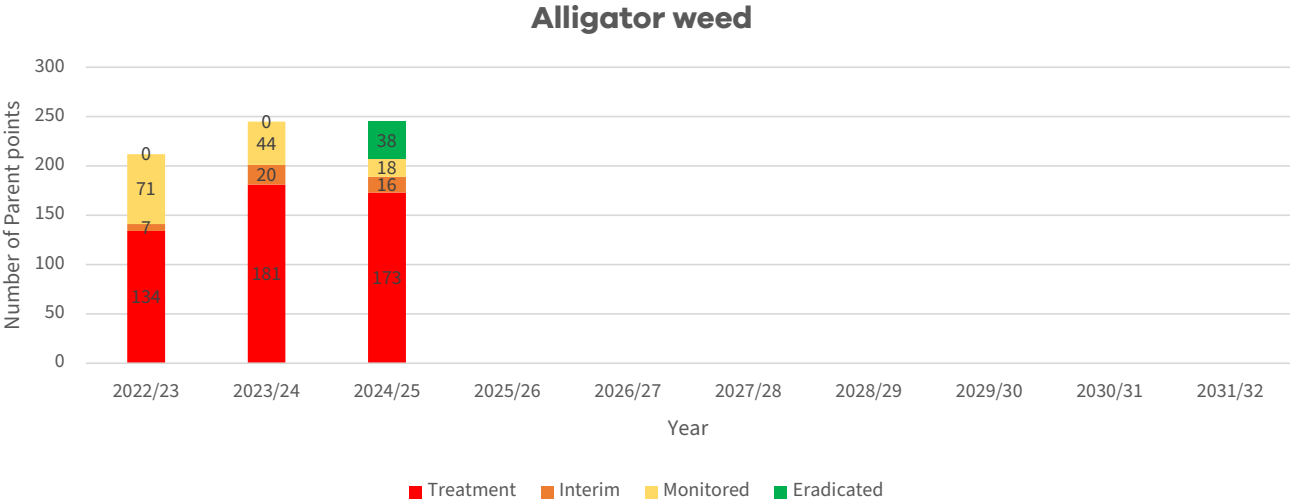
Programme summary	Results
Number of operational sites	20
Total area of operational sites	307ha
Infestation parent points	73
Pest plant cover	70.4m ²
Comments	The number of operational sites has stayed the same but the total infestation area within those operational sites has decreased dramatically. This is due to another year of successful control, and data captured in Plantell improving. This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Alligator weed (*Alternanthera philoxeroides*)

RPMP classification	Area	Programme status
Progressive containment	Whole of region	At risk

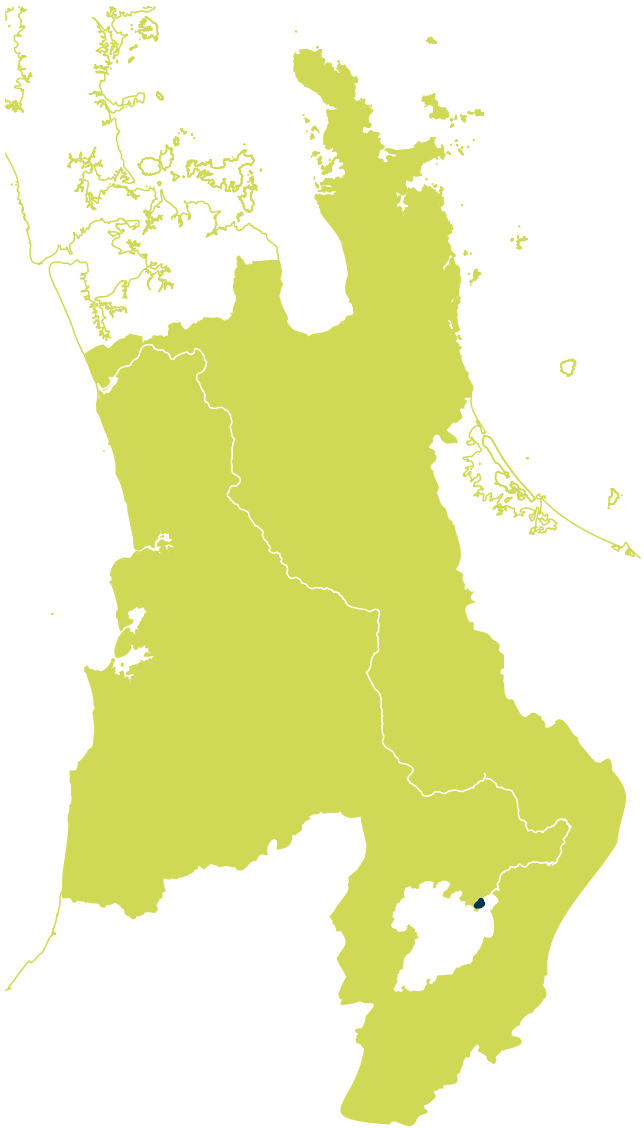
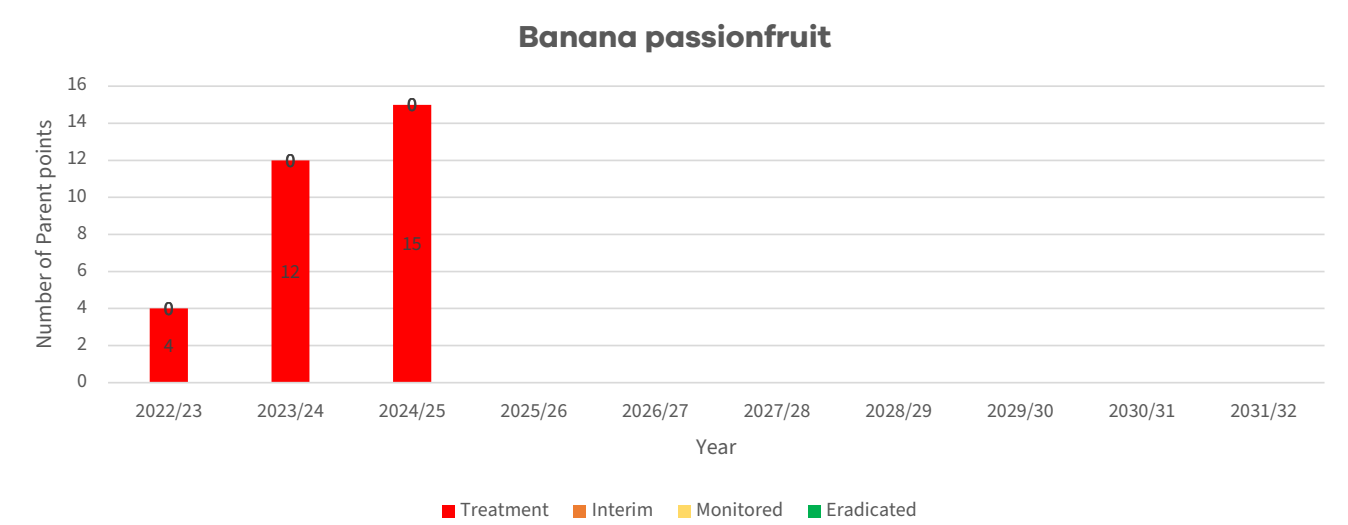
Programme summary	Results
Number of operational sites	218
Total area of operational sites	24,374ha
Infestation parent points	245
Pest plant cover	220,608.5m²
Comments	Alligator weed is one of our region’s most significant pest plants. Not all sites have received the service delivery required this financial year to meet all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> . However, the known amount of infestation area has reduced which is a positive.



Banana passionfruit (*Passiflora tripartita*)

RPMP classification	Area	Programme status
Progressive containment	Taupō and Rotorua districts	On track

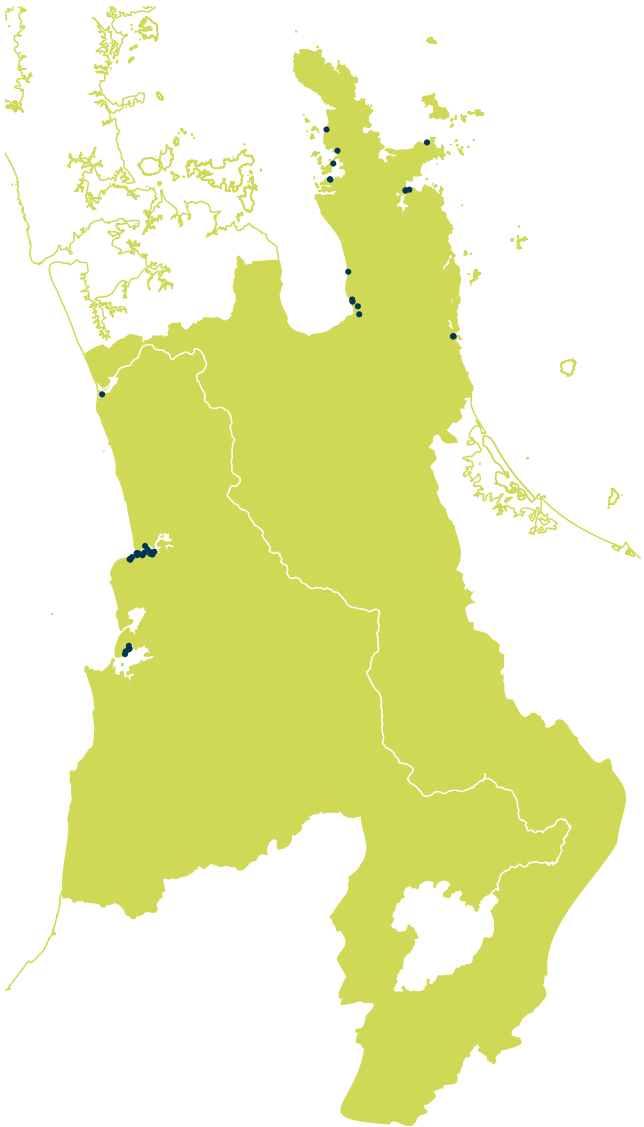
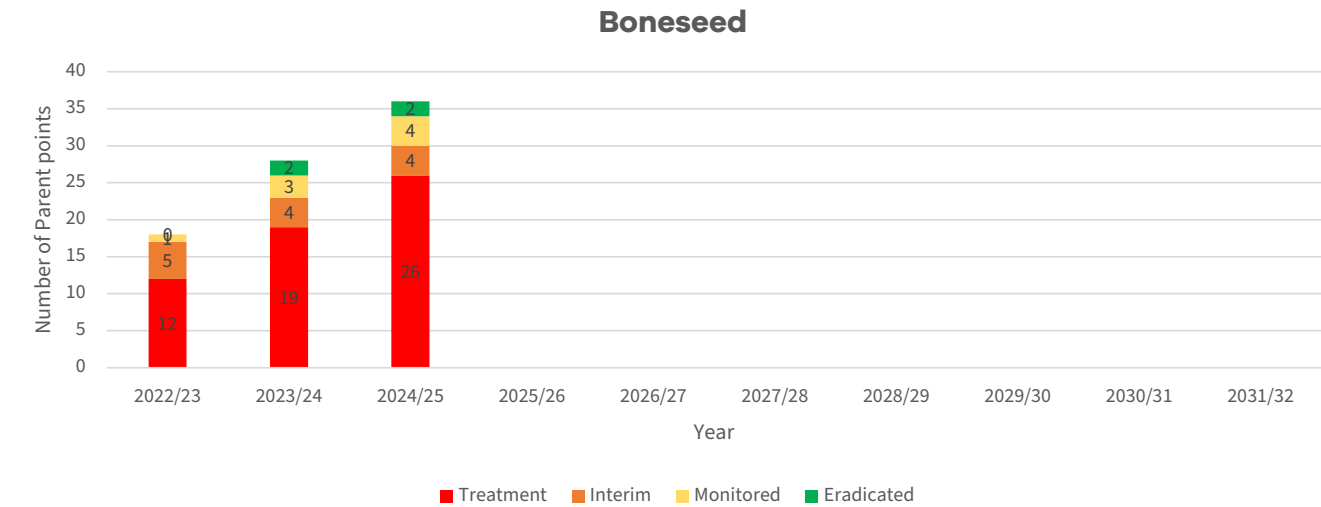
Programme summary	Results
Number of operational sites	6
Total area of operational sites	97ha
Infestation parent points	15
Pest plant cover	60m ²
Comments	This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Boneseed (*Chrysanthemoides monilifera*)

RPMP classification	Area	Programme status
Progressive containment	Whole of region	On track

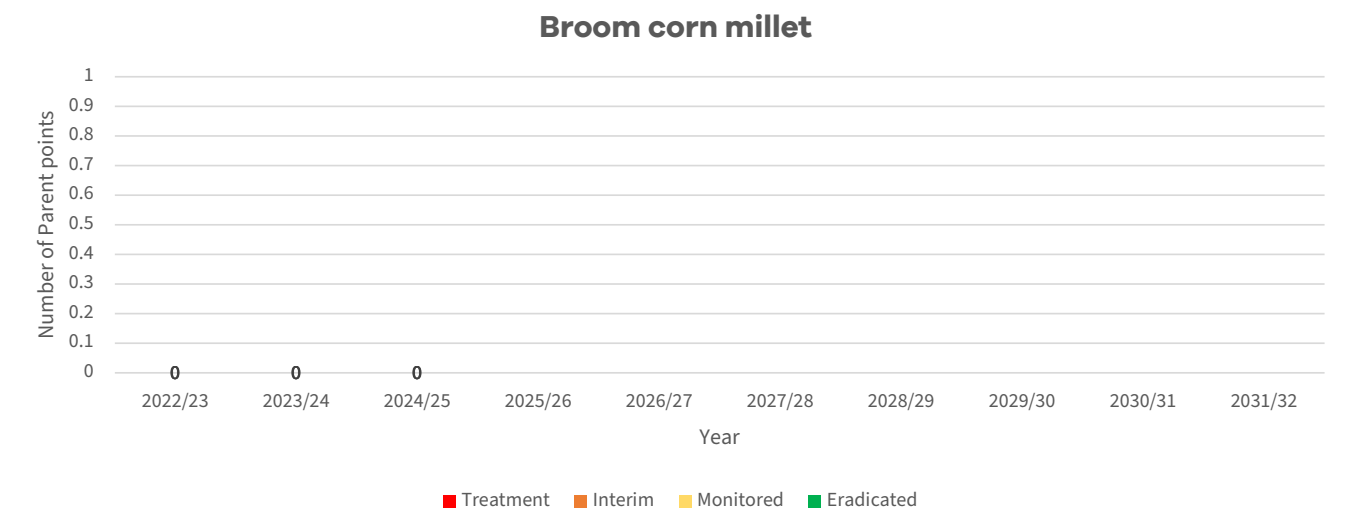
Programme summary	Results
Number of operational sites	36
Total area of operational sites	1,338ha
Infestation parent points	36
Pest plant cover	816m²
Comments	This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Broom corn millet (*Panicum miliaceum*)

RPMP classification	Area	Programme status
Exclusion	Whole of region	On track

Programme summary	Results
Number of operational sites	0
Total area of operational sites	0
Infestation parent points	0
Pest plant cover	0
Comments	This programme has met all Key Performance Indicators included in the <i>Waikato Biosecurity Operational Plan 2022-2032</i> .

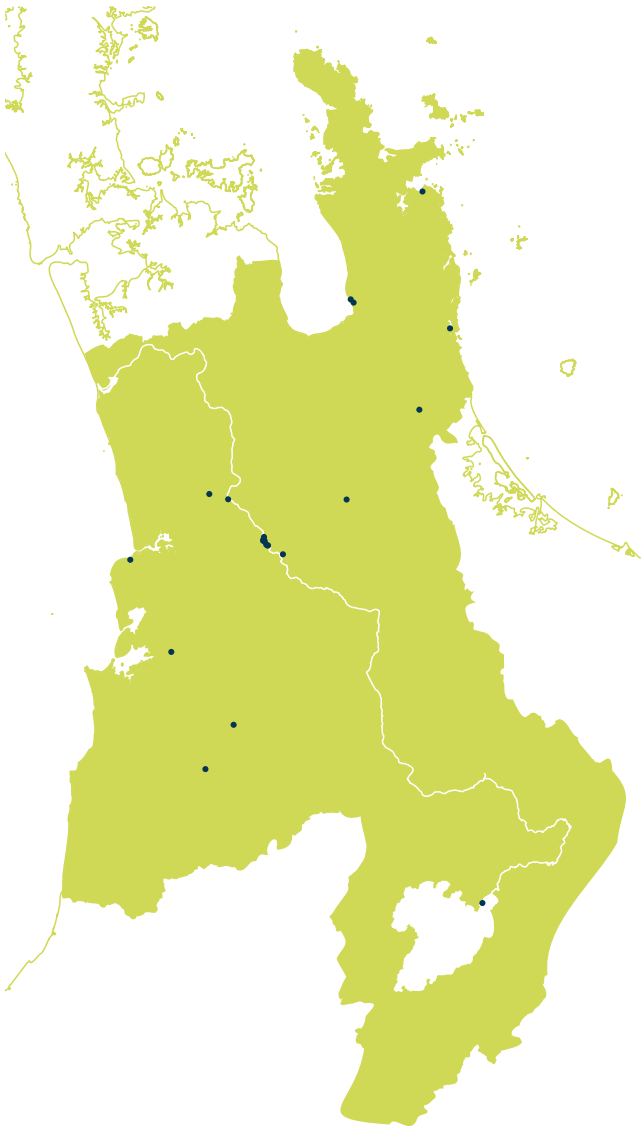
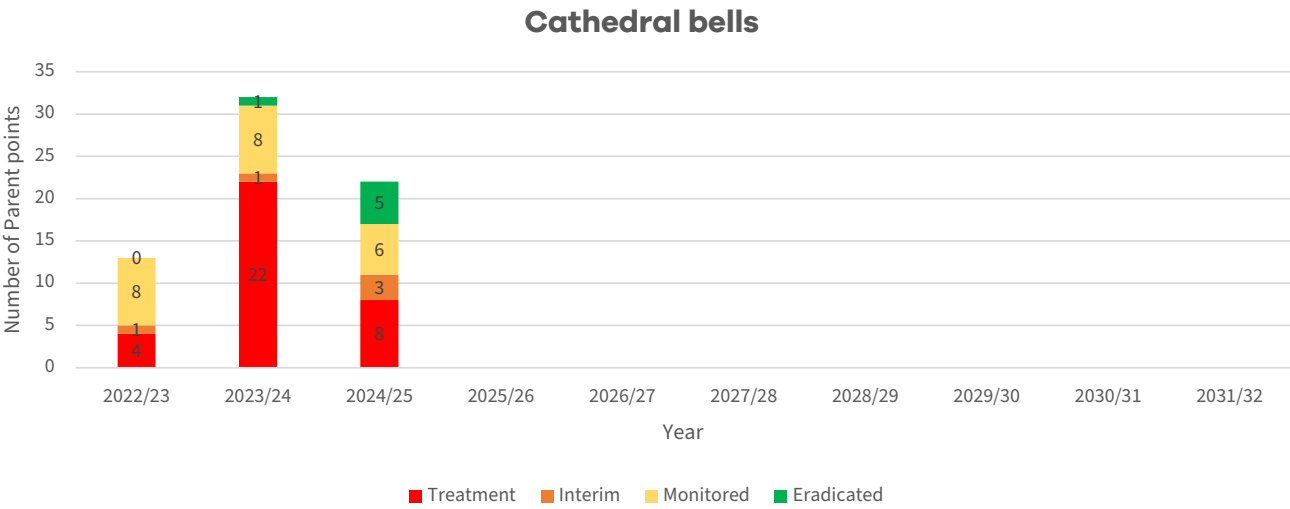


Broom corn millet

Cathedral bells (*Cobaea scandens*)

RPMP classification	Area	Programme status
Eradication	Whole of region	On track

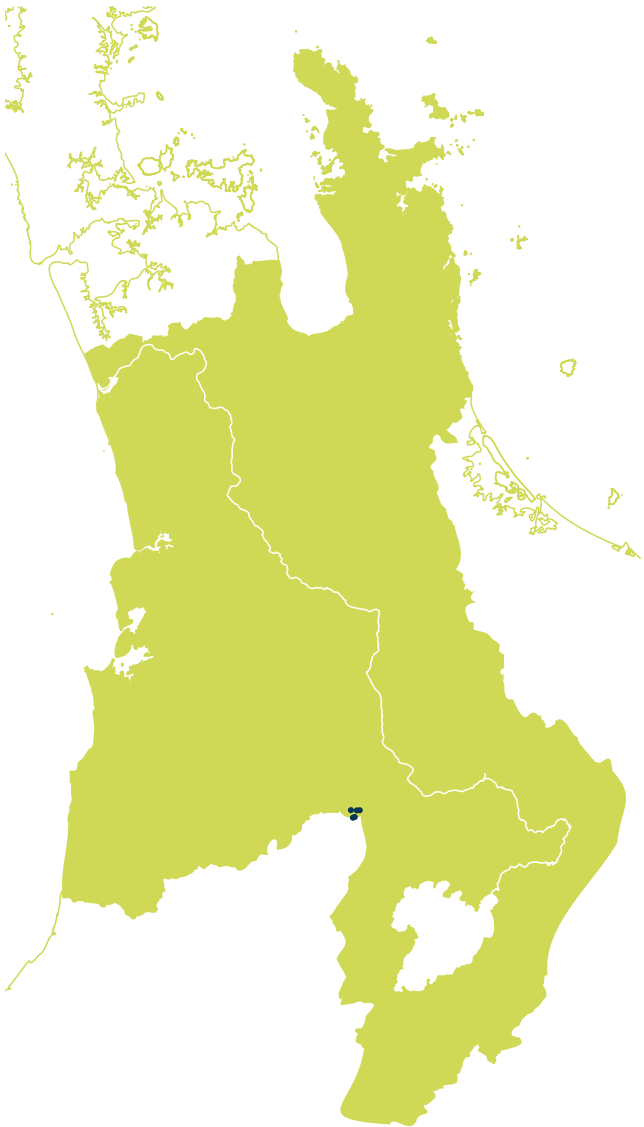
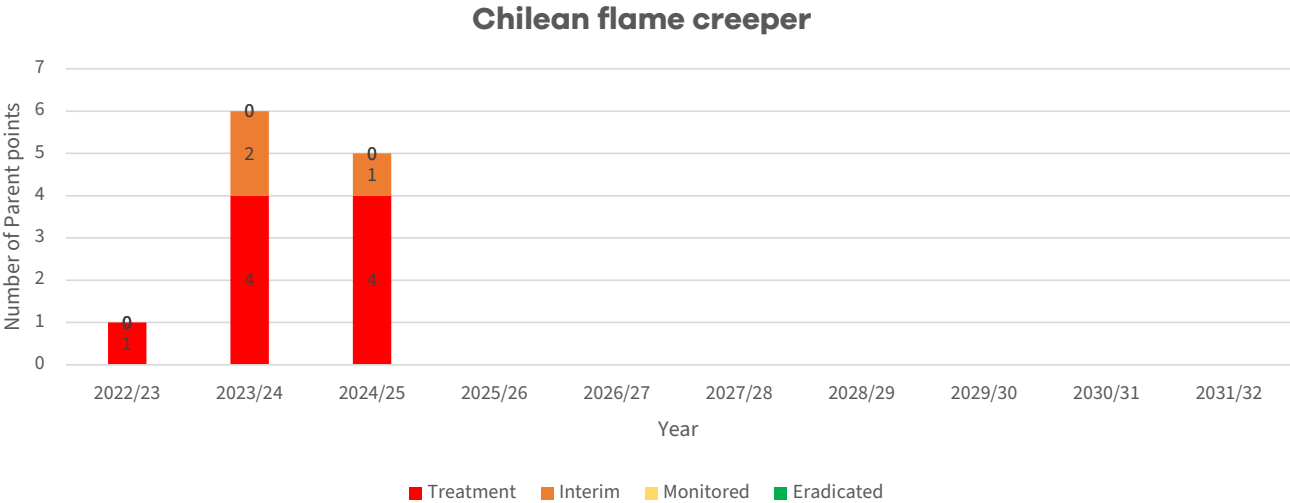
Programme summary	Results
Number of operational sites	22
Total area of operational sites	69.8ha
Infestation parent points	22
Pest plant cover	72m ²
Comments	This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> . The drop seen this year in infestation parent points is due to a tidy up of historic data.



Chillean flame creeper (*Tropaeolum speciosum*)

RPMP classification	Area	Programme status
Eradication	Whole of region	At risk

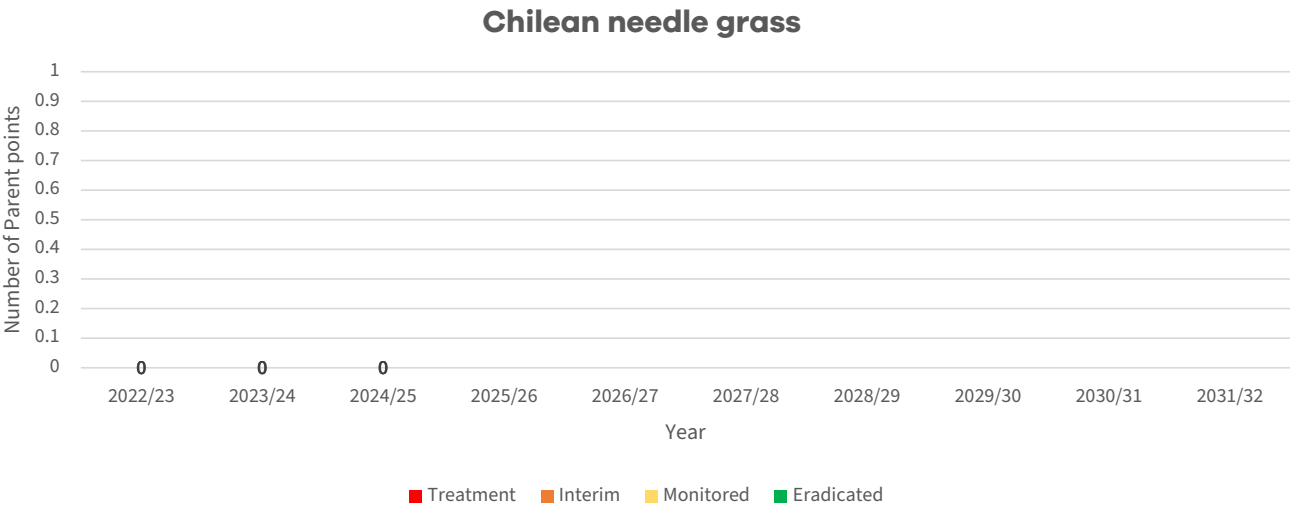
Programme summary	Results
Number of operational sites	5
Total area of operational sites	23.4ha
Infestation parent points	5
Pest plant cover	336m²
Comments	The infestation area for this species has increased, due largely to better surveillance of difficult to reach areas using a drone (Detecting Chilean flame creeper from a distance, page 37). This programme has not met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> as there are newly identified areas that didn't receive the required control. More active surveillance and contractor control in 2025/26 will be undertaken to get this programme on track.



Chilean needle grass (*Nassella neesiana*)

RPMP classification	Area	Programme status
Exclusion	Whole of region	On track

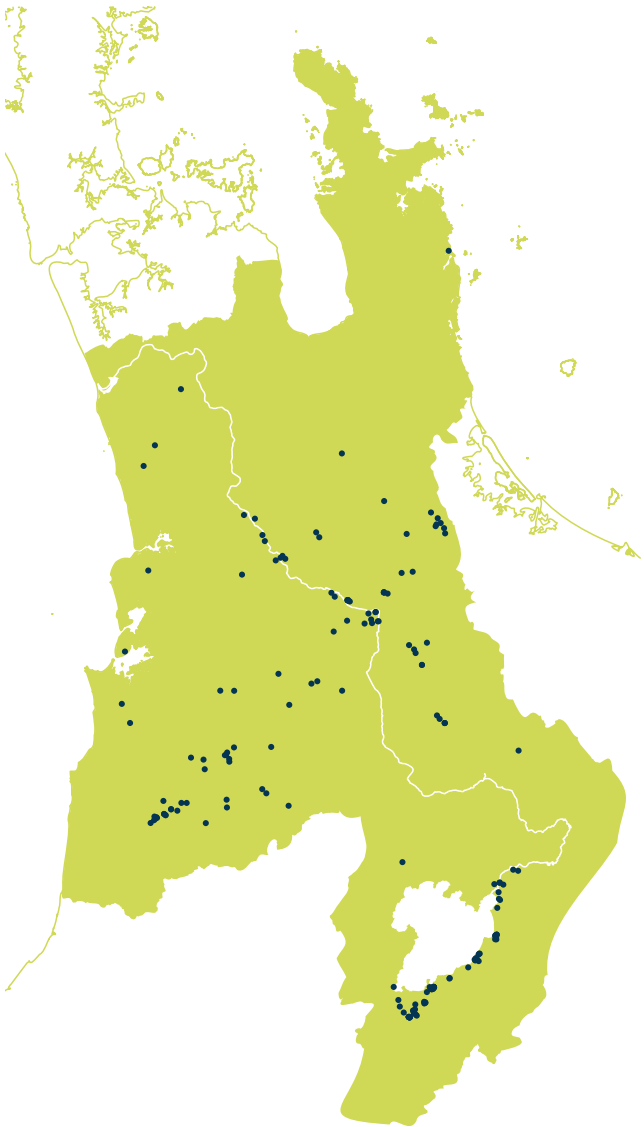
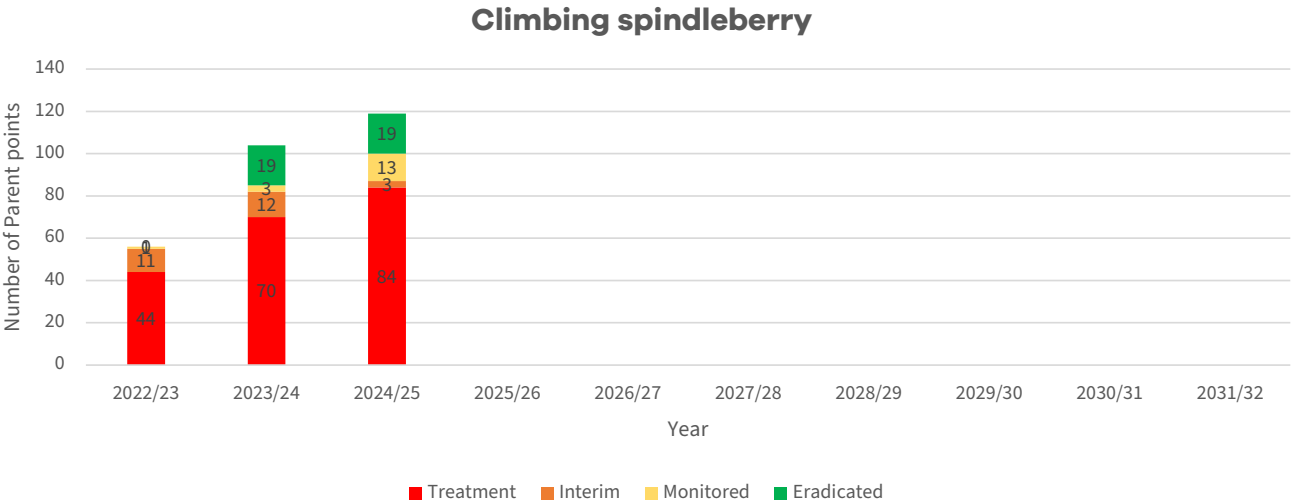
Programme summary	Results
Number of operational sites	0
Total area of operational sites	0
Infestation parent points	0
Pest plant cover	0
Comments	This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Climbing spindleberry (Celastrus orbicularis)

RPMP classification	Area	Programme status
Progressive containment	Whole of region	At risk

Programme summary	Results
Number of operational sites	90
Total area of operational sites	3,030.5ha
Infestation parent points	120
Pest plant cover	3,425m²
Comments	Not all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> have been met. Climbing spindleberry is a significant pest plant in the Waikato region. Due to the large number of climbing spindleberry sites in the region, not all sites are able to be visited annually. A subset of sites are prioritised for surveillance and control each year.



Common brushtail possum (*Trichosurus vulpecula*)

RPMP classification	Area	Programme status
Sustained control	Priority Possum Control Areas (PPCA) Whole of region – Good Neighbour Rule	On track

Programme summary	Results
Number of enquiries/complaints received	● IRIS – 16
Number of properties requiring Good Neighbour Rule enforcement	● None required.
PPCA & HALO areas controlled	● 116,493ha ● PPCA control operations – 11 ● Hamilton HALO control operations – 5 ● DOC/WRC collaborative operation – 1
Number of operations that met RTC or RTI ¹ targets	100% of control operations completed, met or were well below their RTC/RTI performance targets.

1 The residual trap-catch (RTC) index is a method of determining relative possum density. Lines of 10 leg-hold traps, spaced 20 metres apart, are set for three consecutive nights in random locations within the treatment area, before and after control. The number of lines used is determined by the size of the management area. The standard performance target commonly set for a reduction in possum densities, is an RTC of < 5% (i.e. less than 5 possums caught for every 100 trap-nights).

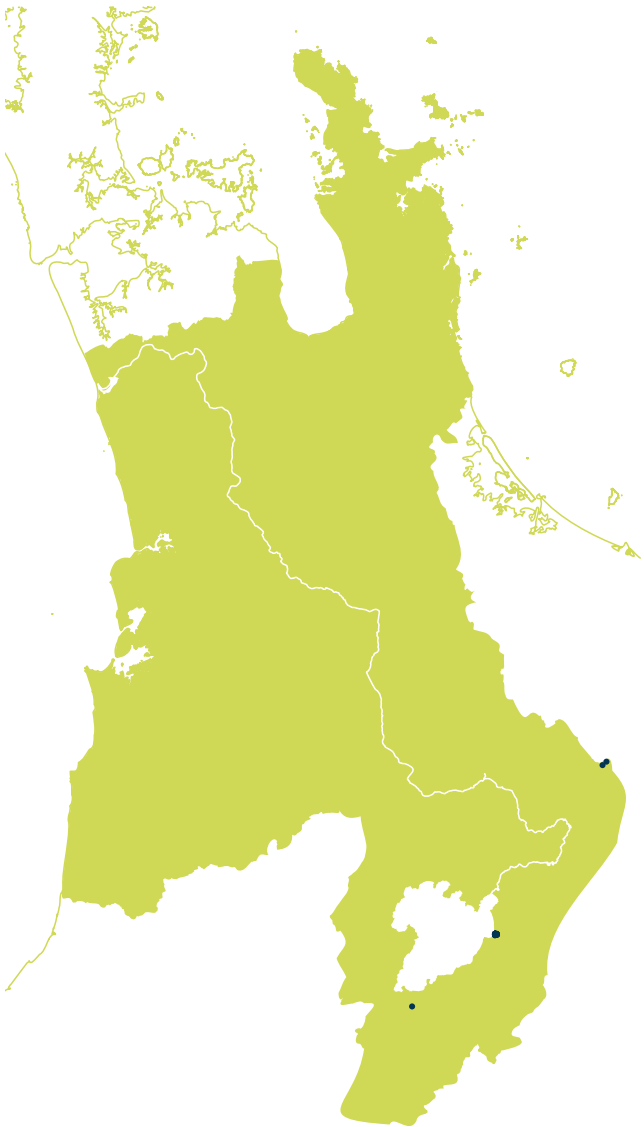
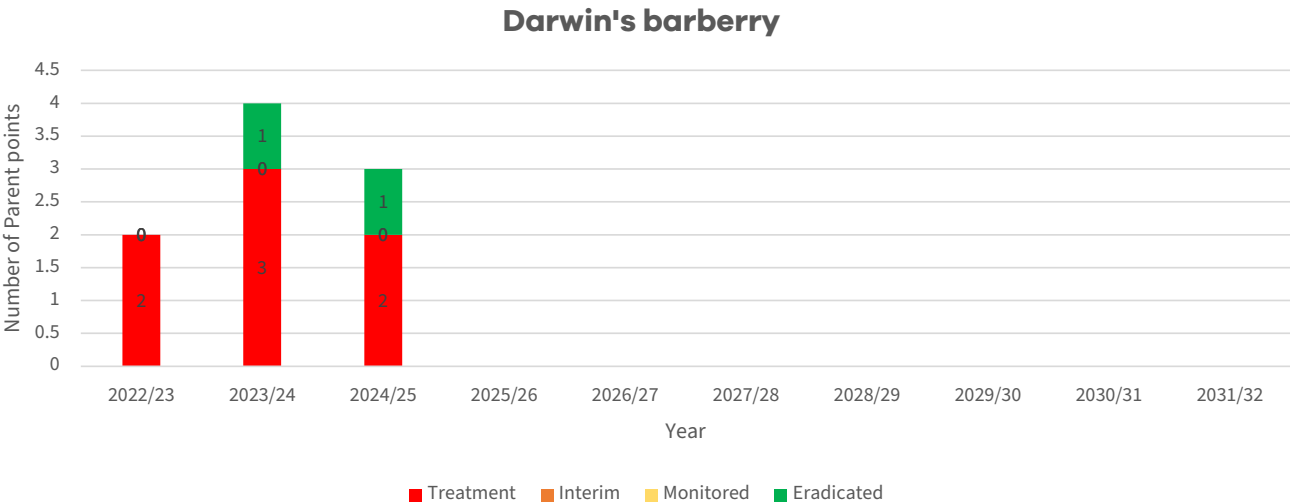


Common brushtail possum

Darwin's barberry (*Berberis darwinii*)

RPMP classification	Area	Programme status
Progressive containment	Whole of region	At risk

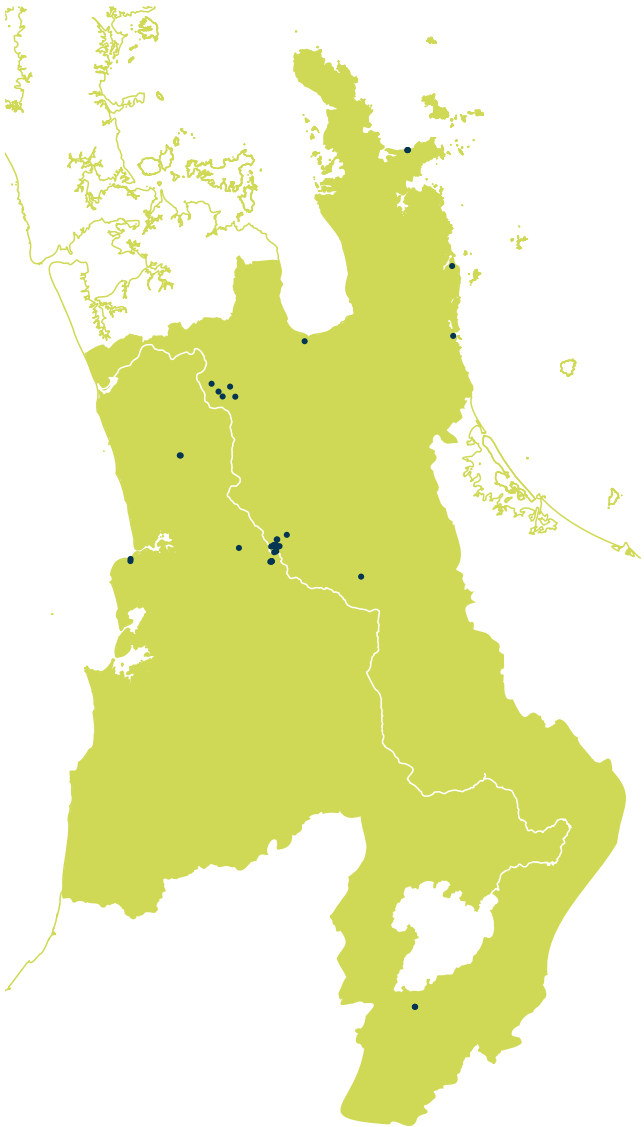
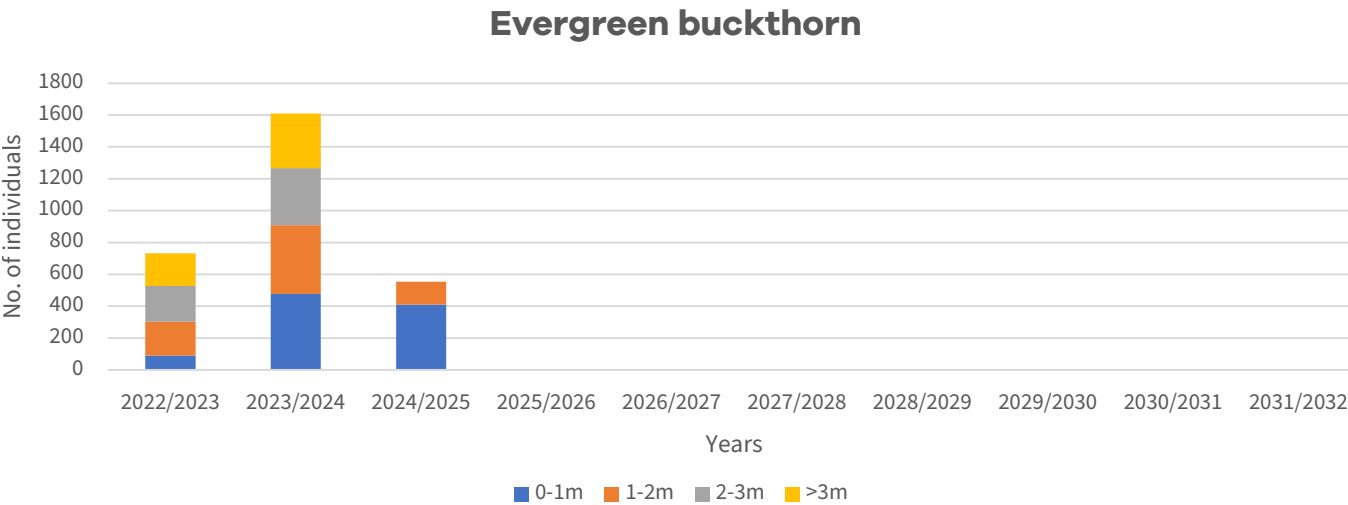
Programme summary	Results
Number of operational sites	2
Total area of operational sites	3,355.5ha
Infestation parent points	3
Pest plant cover	6,314m²
Comments	<p>This programme has not met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i>.</p> <p>A clear management plan outlining roles and responsibilities for this species is still a work in progress.</p>



Evergreen buckthorn (*Rhamnus alaternus*)

RPMP classification	Area	Programme status
Eradication	Whole of region	On track

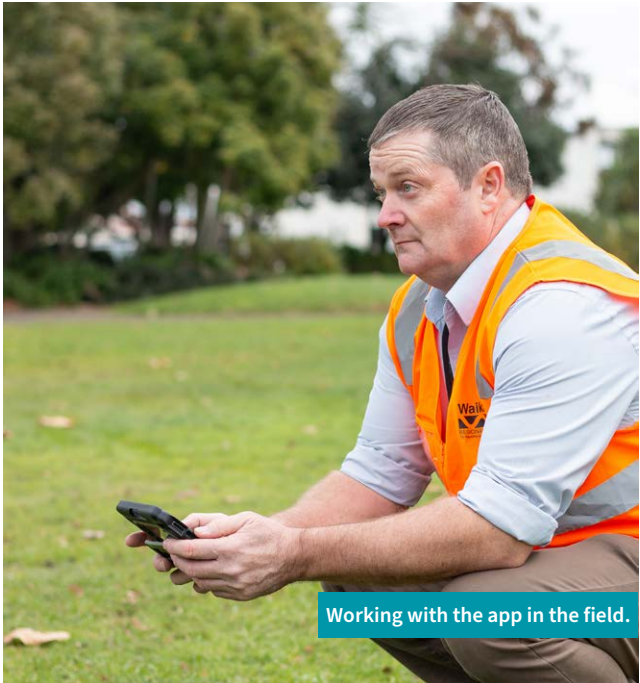
Programme summary	Results
Number of operational sites	● 3,156
Total area of operational sites	● 7,177ha
Total plants controlled	● 554
Comments	<p>Most of the evergreen buckthorn surveillance and control work was carried out in Hamilton City, lower Waikato, and Coromandel Peninsula, with a small proportion occurring in the Taupō area.</p> <p>Evergreen buckthorn data is captured in size classes. This allows for targeted planning of required follow up monitoring and control.</p> <p>This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i>.</p>



Feral rabbit (*Oryctolagus cuniculus*)

RPMP classification	Area	Programme status
Sustained control	Whole of region	On track

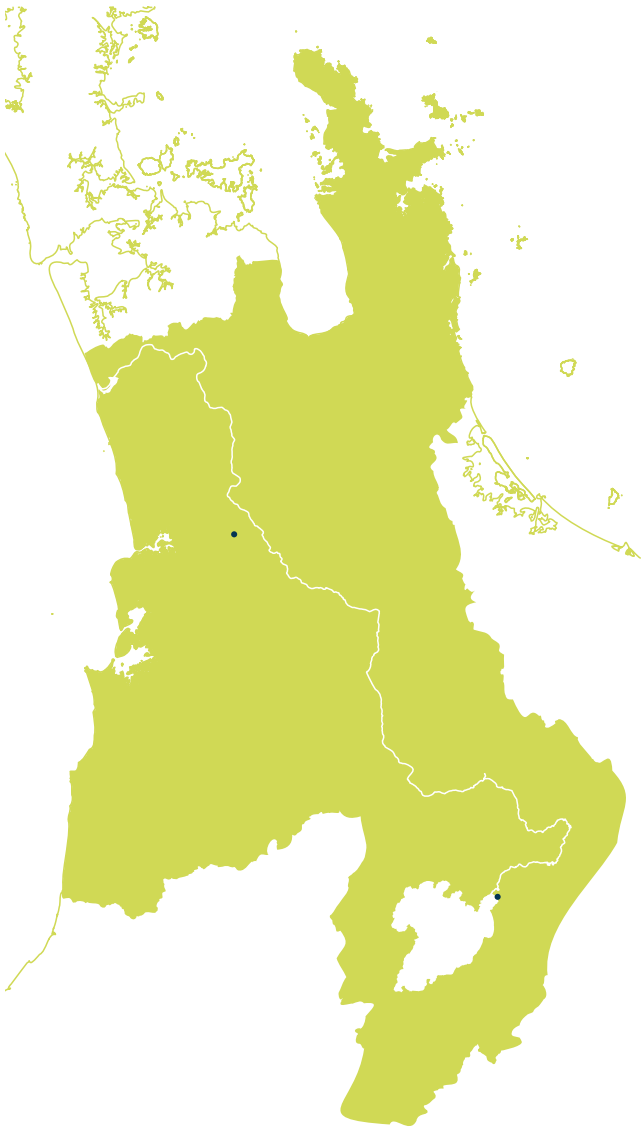
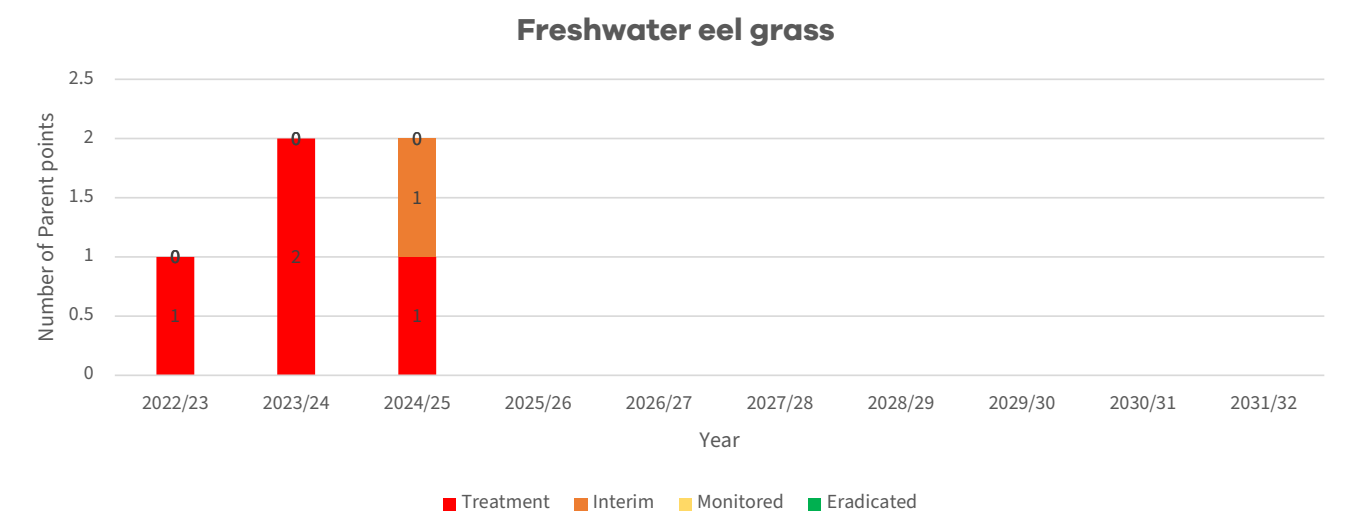
Programme summary	Results
Number of enquiries/complaints received	<div></div> IRIS enquiries – 21 <div></div> IRIS complaints – 3
Site inspections undertaken	<div></div> 5
Enforcement actions taken	<div></div> None required
Service delivery undertaken	<div></div> None
Comments	<ul style="list-style-type: none">• The council’s Rabbit Site Assessment Tool was utilised when undertaking site inspections.• Awareness and education material was sent out or delivered to surrounding landowners in areas where high feral rabbit numbers were observed during the site inspections.• Council Rabbit Factsheet updated.• Council signed an updated Rabbit Management Plan with DOC and Taupō District Council, which defines how and where the need to undertake rabbit control to meet their good neighbour obligations under the RPMP.• Support and advice given to a community-led and delivered control rabbit control trial operation in Omori/Kuratau where feral rabbits are an ongoing and sometimes significant issue.



Freshwater eel grass (*Vallisneria australis*)

RPMP classification	Area	Programme status
Exclusion	Whole of region	On track

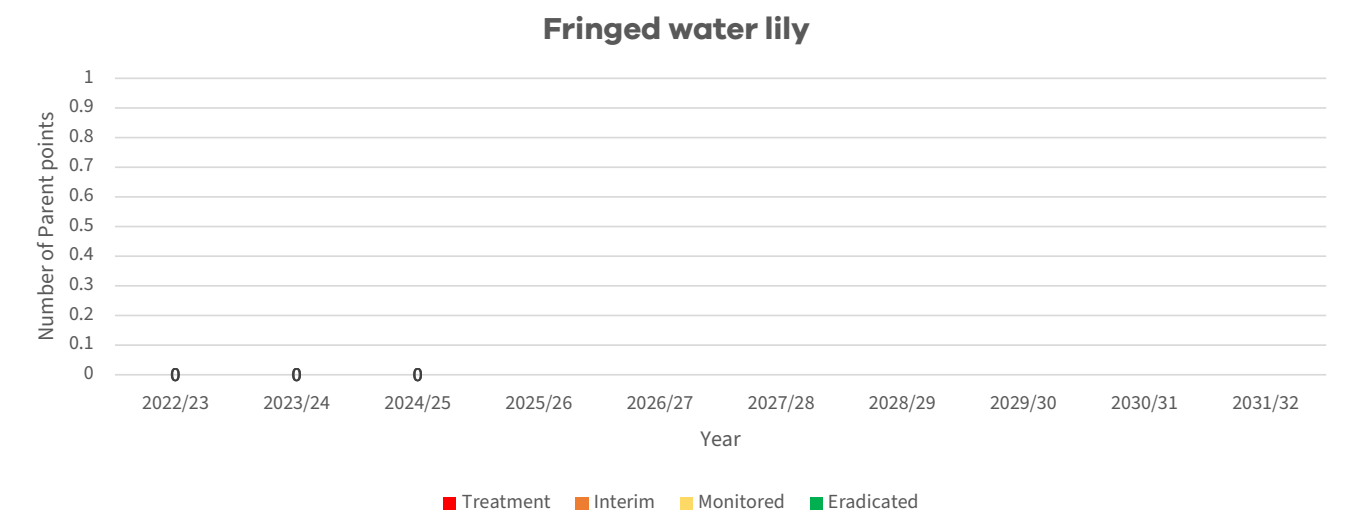
Programme summary	Results
Number of operational sites	2
Total area of operational sites	0.2ha
Infestation parent points	2
Pest plant cover	4m ²
Comments	<p>This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i>.</p> <p>(<i>Eradicating eel grass, page 11.</i>)</p>



Fringed water lily (*Nymphoides peltata*)

RPMP classification	Area	Programme status
Exclusion	Whole of region	On track

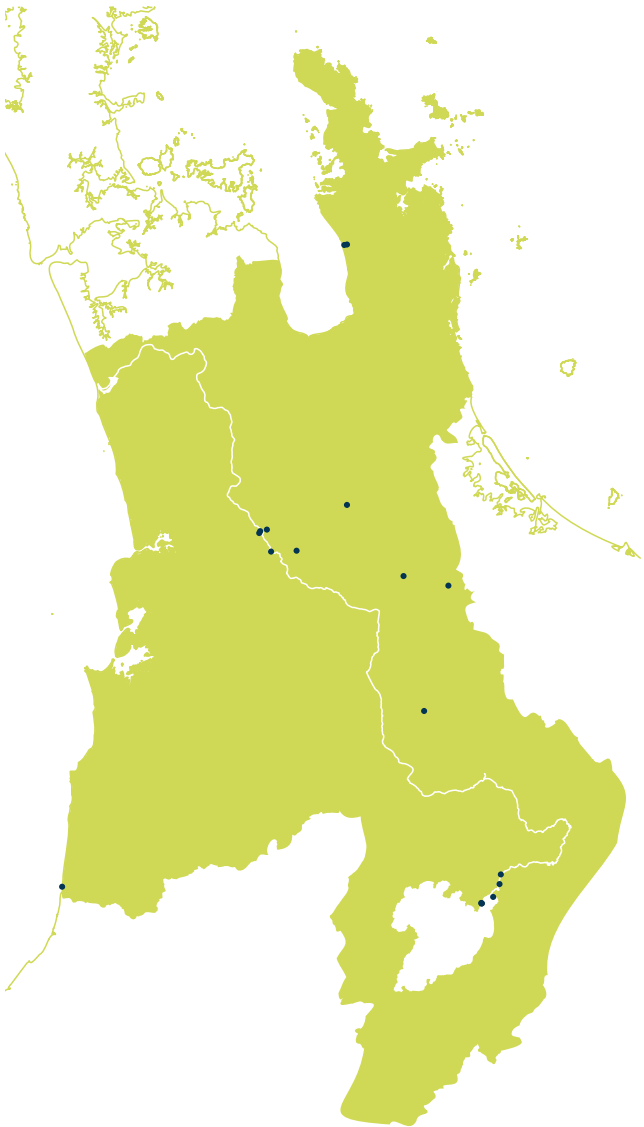
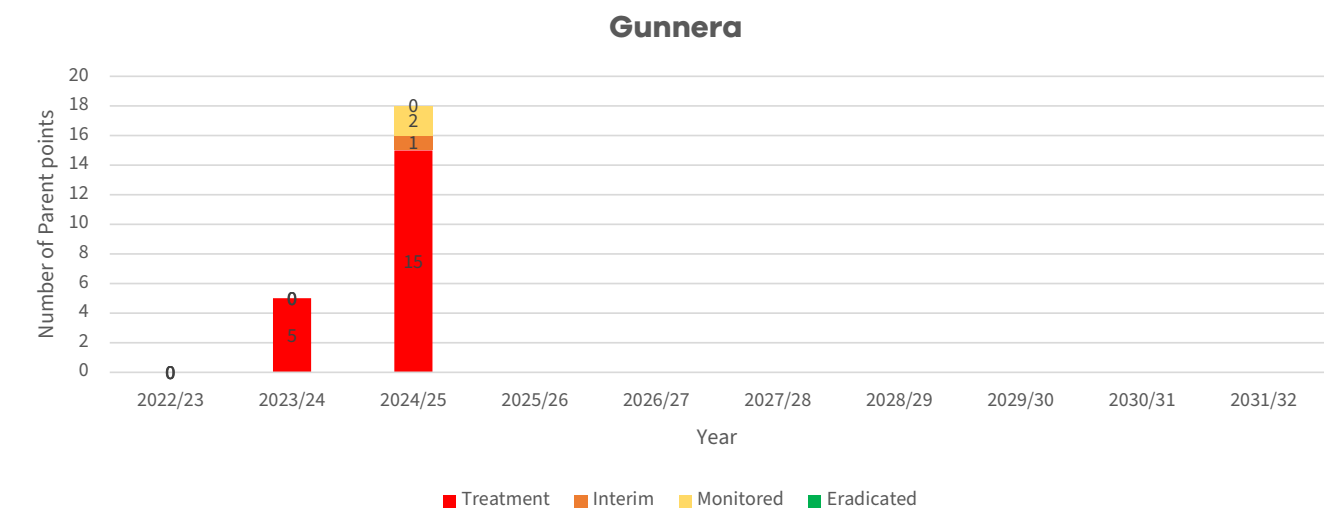
Programme summary	Results
Number of operational sites	0
Total area of operational sites	0
Total infestation parent points	0
Pest plant cover	0
Comments	This programme has met all Key Performance Indicators included in the <i>Waikato Biosecurity Operational Plan 2022-2032</i> .



Giant gunnera (*Gunnera tinctoria*, *Gunnera manicata*)

RPMP classification	Area	Programme status
Progressive containment	Whole of region	On track

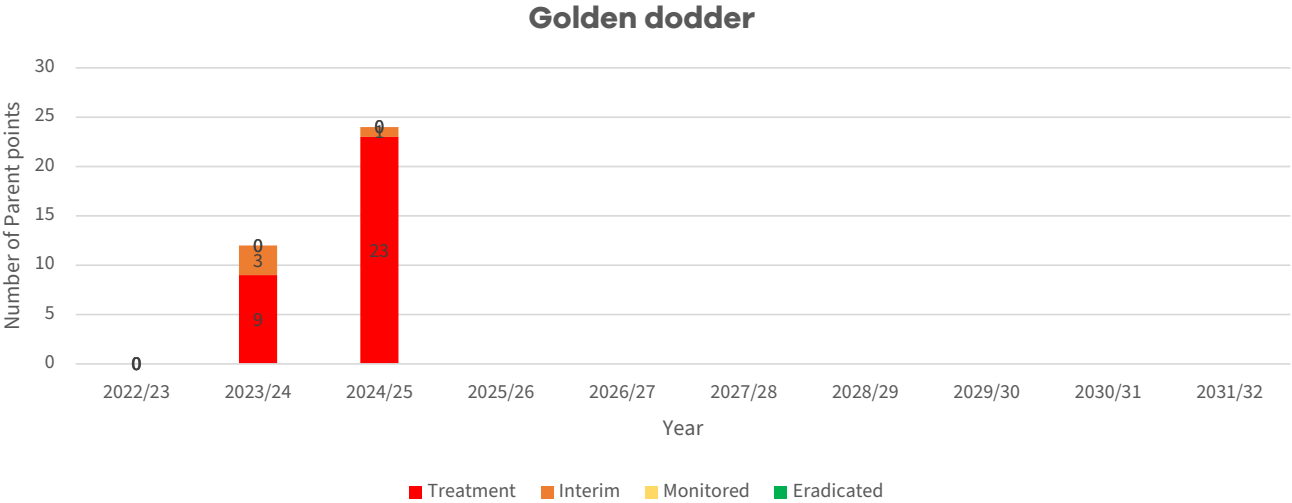
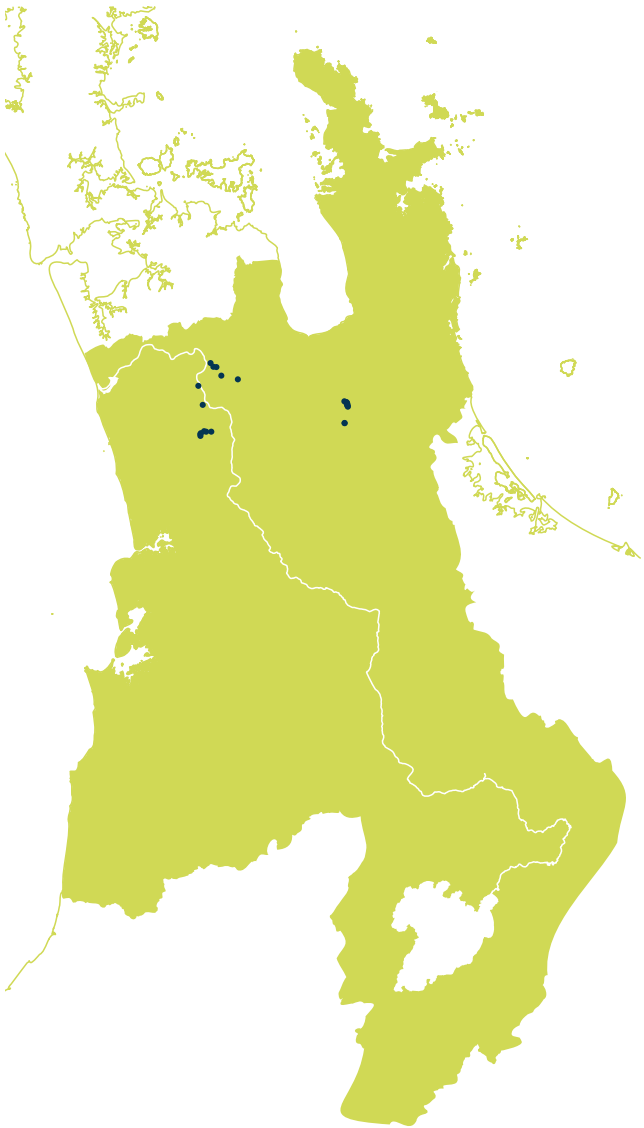
Programme summary	Results
Number of operational sites	5
Total area of operational sites	18ha
Total infestation parent points	18
Pest plant cover	41.1m ²
Comments	<p>Thirteen new sites of giant gunnera were identified this year through proactive, targeted surveillance.</p> <p>Further targeted surveillance is needed to meet all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i>.</p>



Golden dodder (*Cuscuta campestris*)

RPMP classification	Area	Programme status
Progressive containment	Whole of region	On track

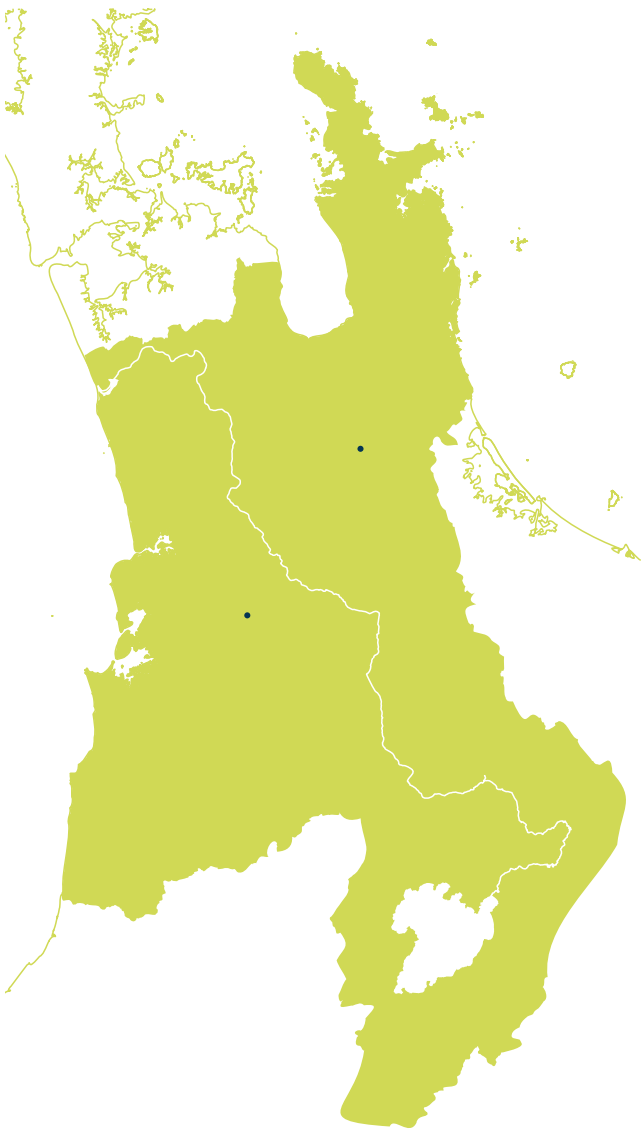
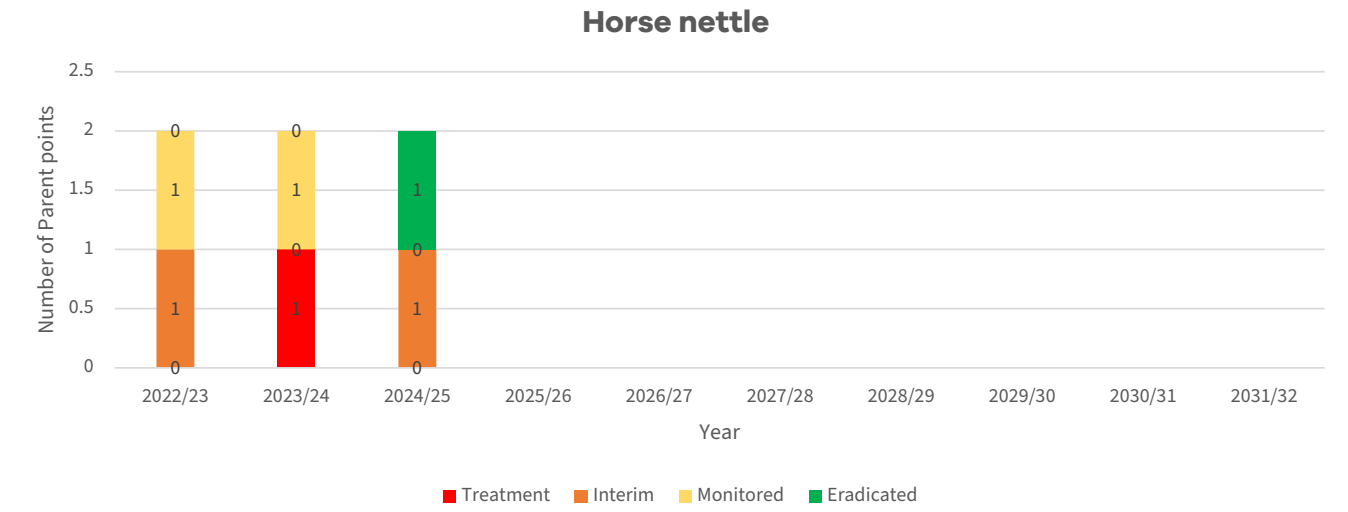
Programme summary	Results
Number of operational sites	29
Total area of operational sites	260.4ha
Total infestation parent points	24
Pest plant cover	3,861m ²
Comments	<p>Chemical and manual control has been undertaken at all known golden dodder sites; Kopuatai peat dome wetland (Tackling Cuscuta, page 32), Lake Whangape and within the Whangamarino Wetland.</p> <p>WRC worked with DOC to identify golden dodder sites and ensure service delivery was carried out as required to meet all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> in the new financial year.</p>



Horse nettle (*Solanum carolinense*)

RPMP classification	Area	Programme status
Eradication	Whole of region	On track

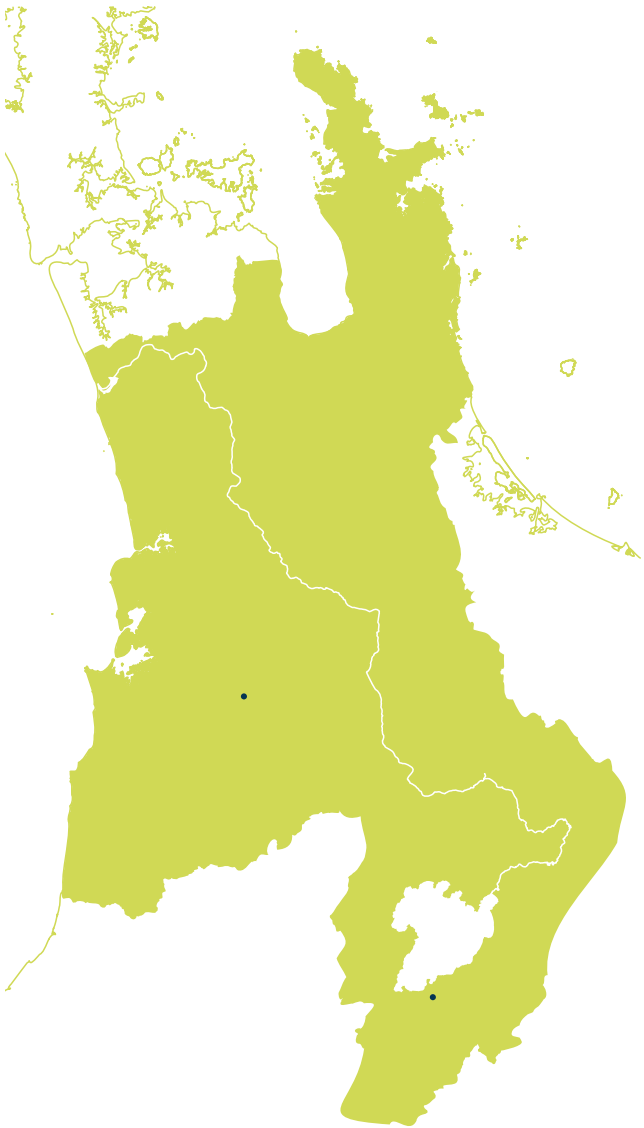
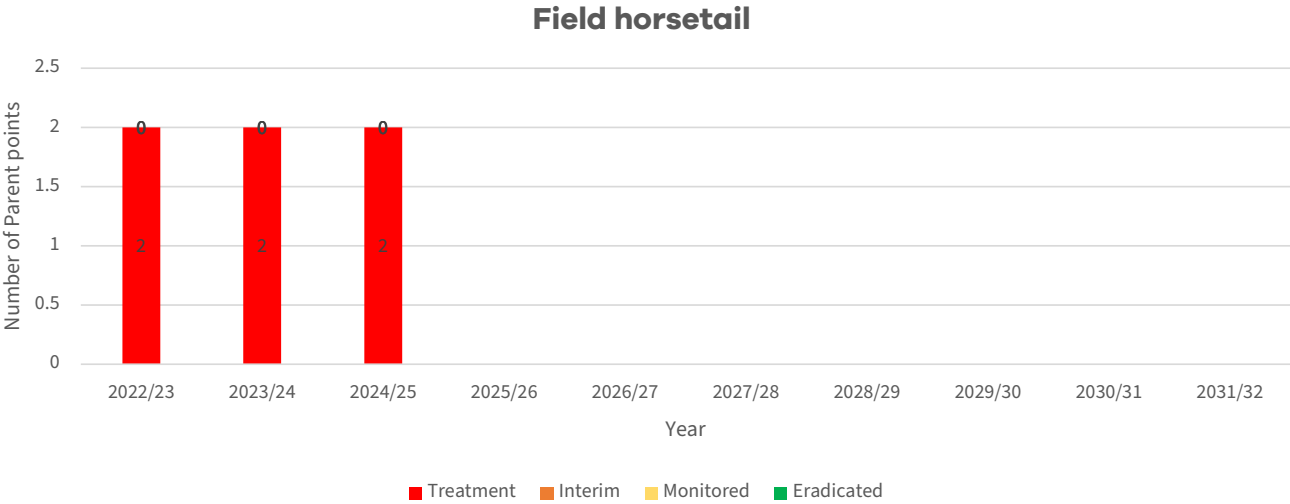
Programme summary	Results
Number of operational sites	2
Total area of operational sites	40ha
Total infestation parent points	2
Pest plant cover	0m ²
Comments	This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Field horsetail (*Equisetum arvense*)

RPMP classification	Area	Programme status
Exclusion	Whole of region	On track

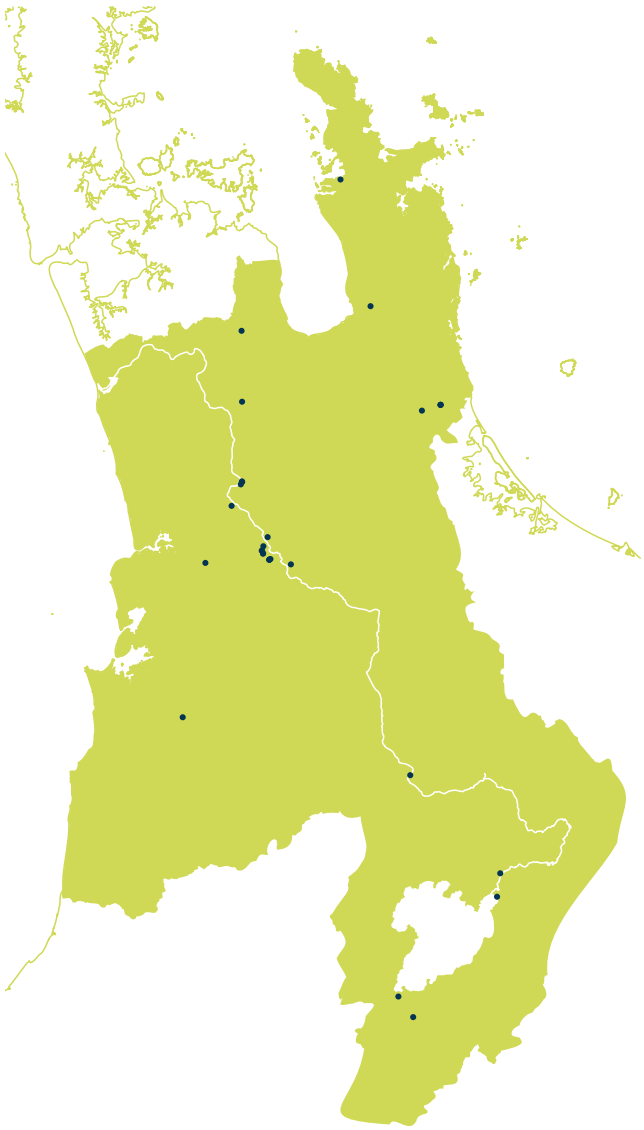
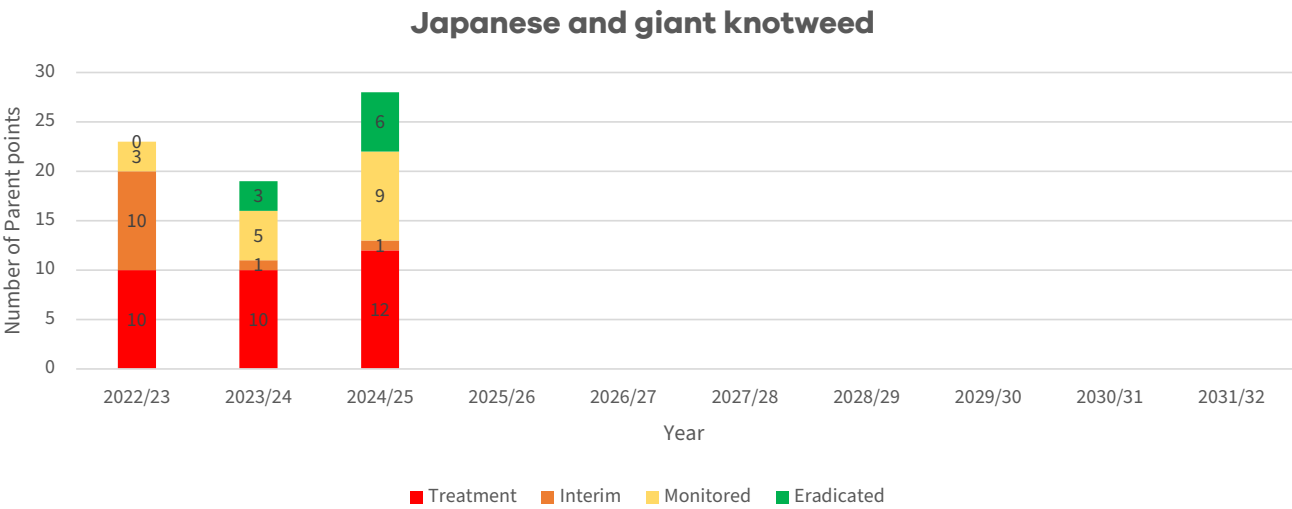
Programme summary	Results
Number of operational sites	2
Total area of operational sites	0.7ha
Total infestation parent points	2
Pest plant cover	0m ²
Comments	<p>The two known field horsetail sites in the region are still being actively managed, with biannual surveillance and control of any plants located towards the goal of eradication.</p> <p>This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i>.</p>



Knotweed (giant and Japanese/Asiatic knotweed) (*Fallopia sachalinensis* and *Fallopia japonica*)

RPMP classification	Area	Programme status
Eradication	Whole of region	On track

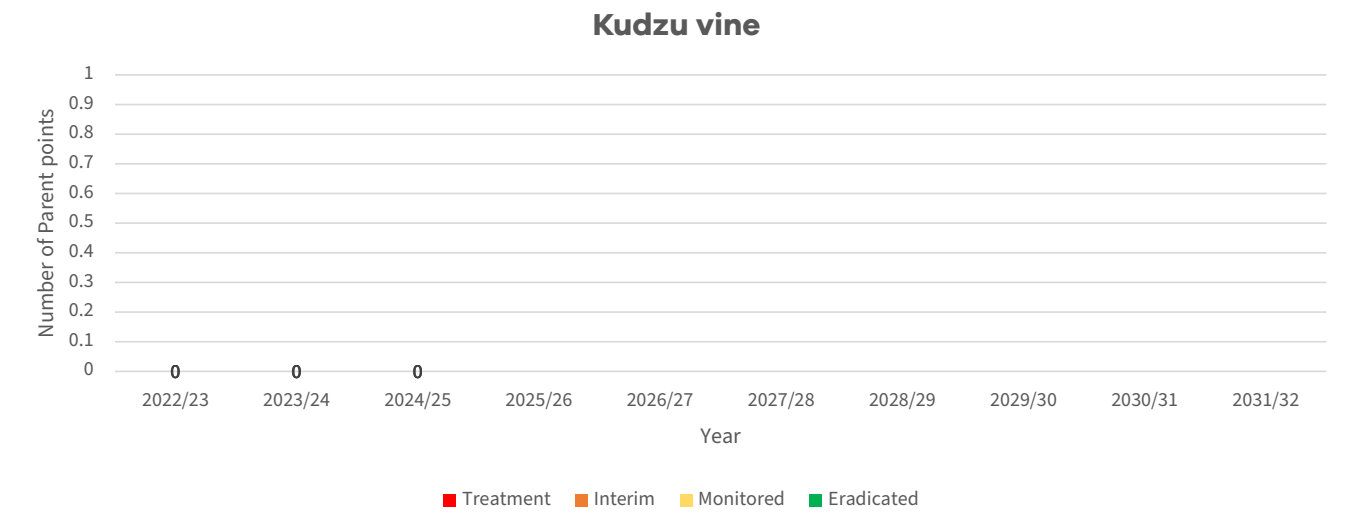
Programme summary	Results
Number of operational sites	21
Total area of operational sites	33ha
Total infestation parent points	28
Pest plant cover	256m²
Comments	This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Kudzu vine (*Pueraria lobata*)

RPMP classification	Area	Programme status
Exclusion	Whole of region	On track

Programme summary	Results
Number of operational sites	0
Total area of operational sites	0
Total infestation parent points	0
Pest plant cover	0
Comments	With infestations of vigorous, invasive vine present in the Auckland region and western Bay of Plenty, vigilance in the Waikato is required to ensure it doesn't establish here. This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Magpie (*Gymnorhina tibicen*)

RPMP classification	Area	Programme status
Sustained control	Whole of region (human health)	On track

Programme summary	Results
Number of enquiries/ complaints received	● IRIS – 8
Site visits undertaken	● 2
Verbal requests for action made	● 3
Enforcement actions taken	● 0
Service delivery undertaken	● 0
Comments	<ul style="list-style-type: none">Public safety concerns for magpies relate to swooping attacks during the breeding season.Occupier responsibly for controls. Council provides advice and information to landowners to support control of mapies where they are nesting and causing a threat to human health and safety.Some city and district councils have magpie trapping programmes and install warning signage during spring.

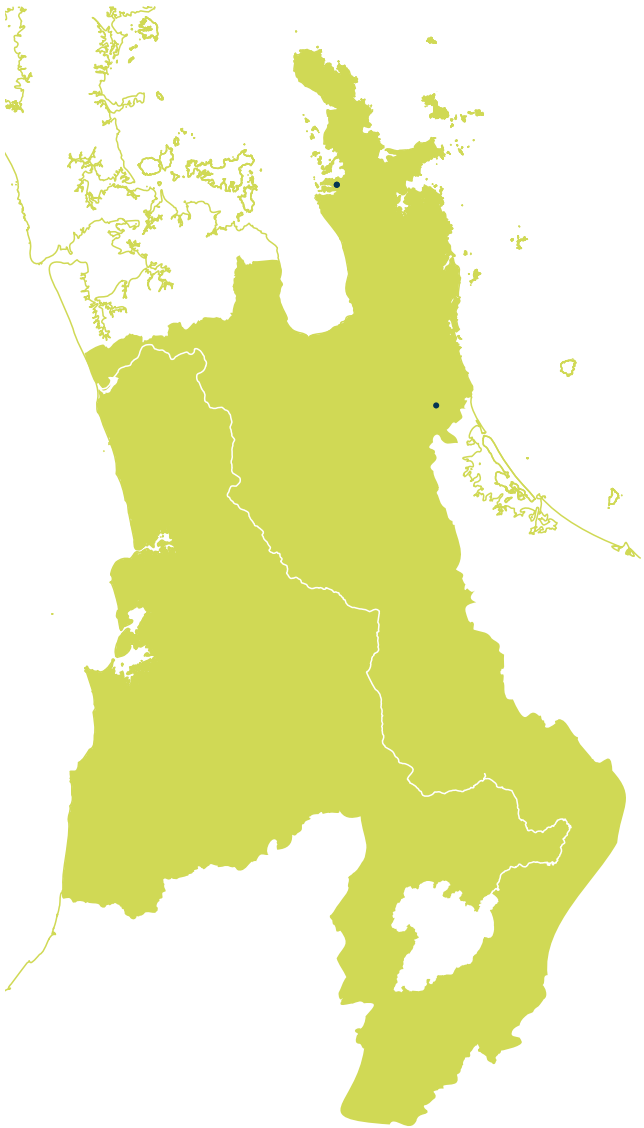
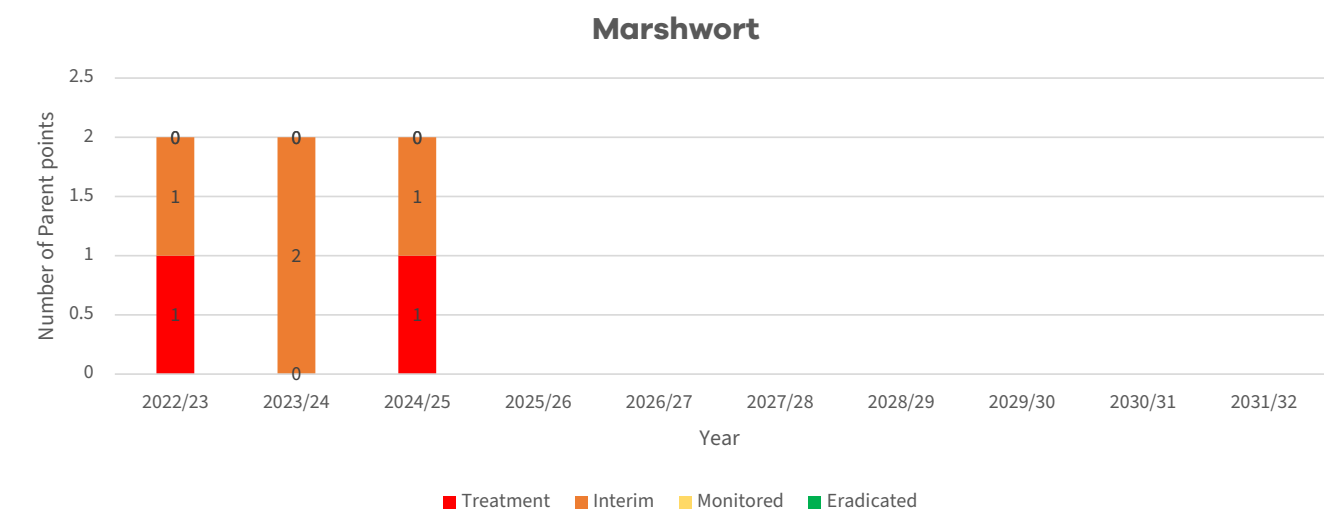


Magpies are extremely territorial mainly during spring when they will actively defend their nests. They can be a nuisance during this time, mostly via their swooping, especially towards children and cyclists who pass near to where they are nesting. To avoid being swooped, change route to avoid a nesting area, or stay calm and keep moving if a magpie approaches. If on a bike, dismount and walk the bike quickly out of the magpie’s territory.

Marshwort (*Nymphoides geminata*)

RPMP classification	Area	Programme status
Exclusion	Whole of region	On track

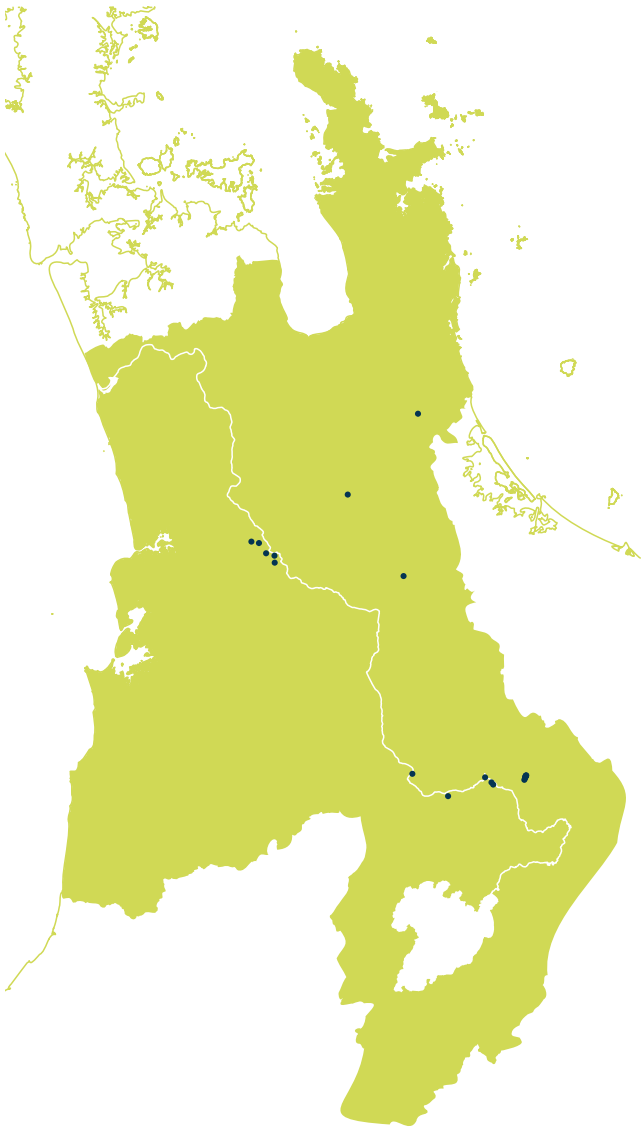
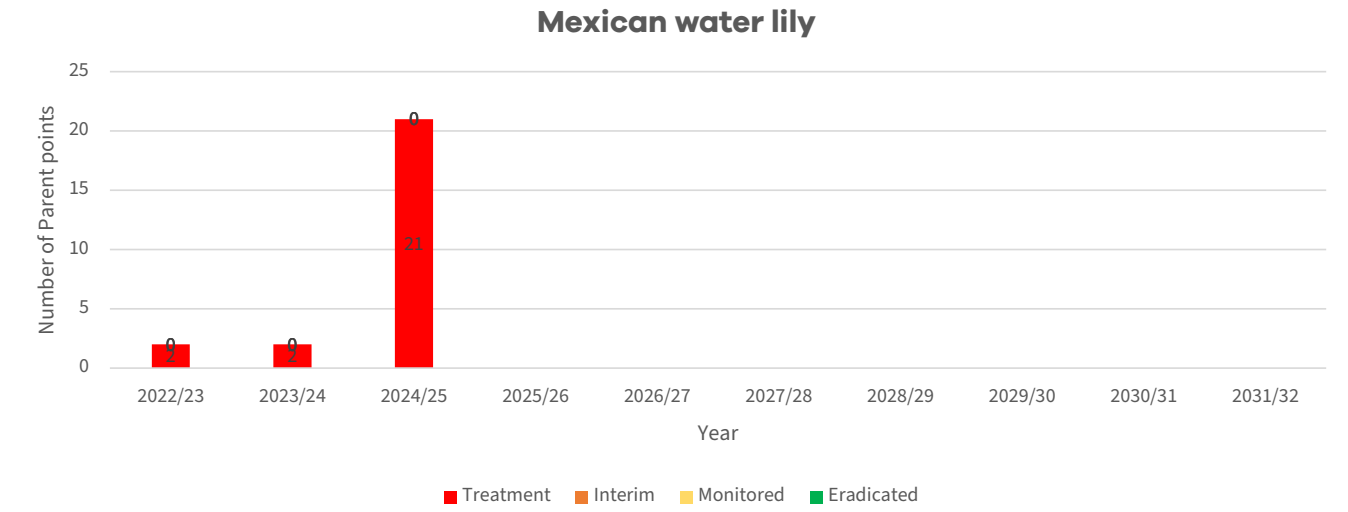
Programme summary	Results
Number of operational sites	2
Total area of operational sites	0.4ha
Total infestation parent points	2
Infestation area	2m ²
Comments	This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Mexican water lily (*Nymphaea mexicana*)

RPMP classification	Area	Programme status
Progressive containment	Whole of region	On track

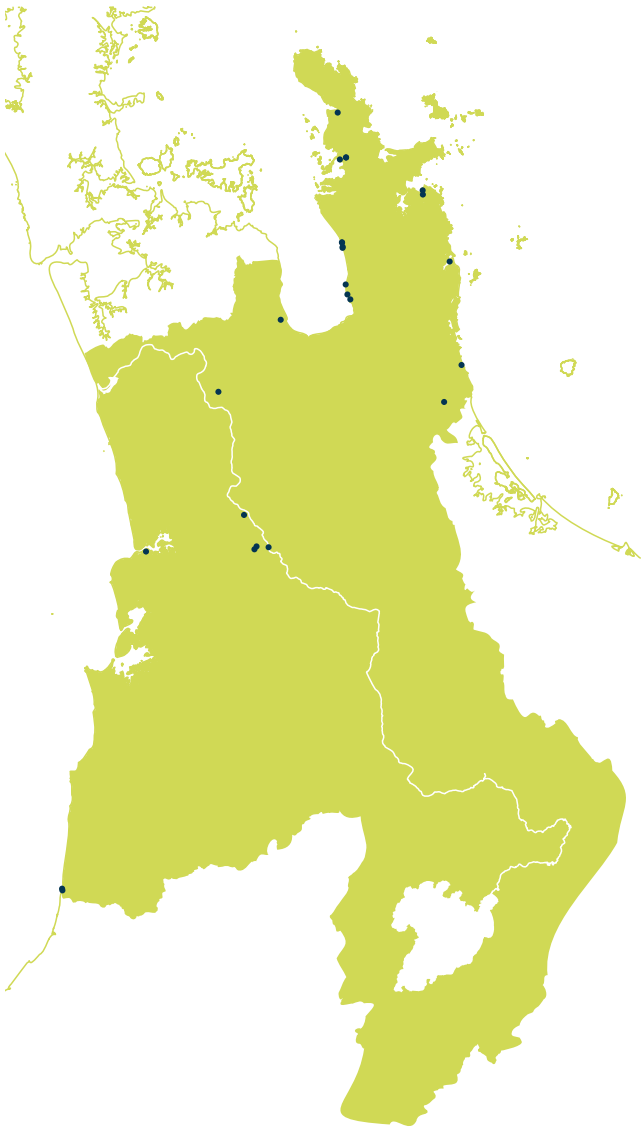
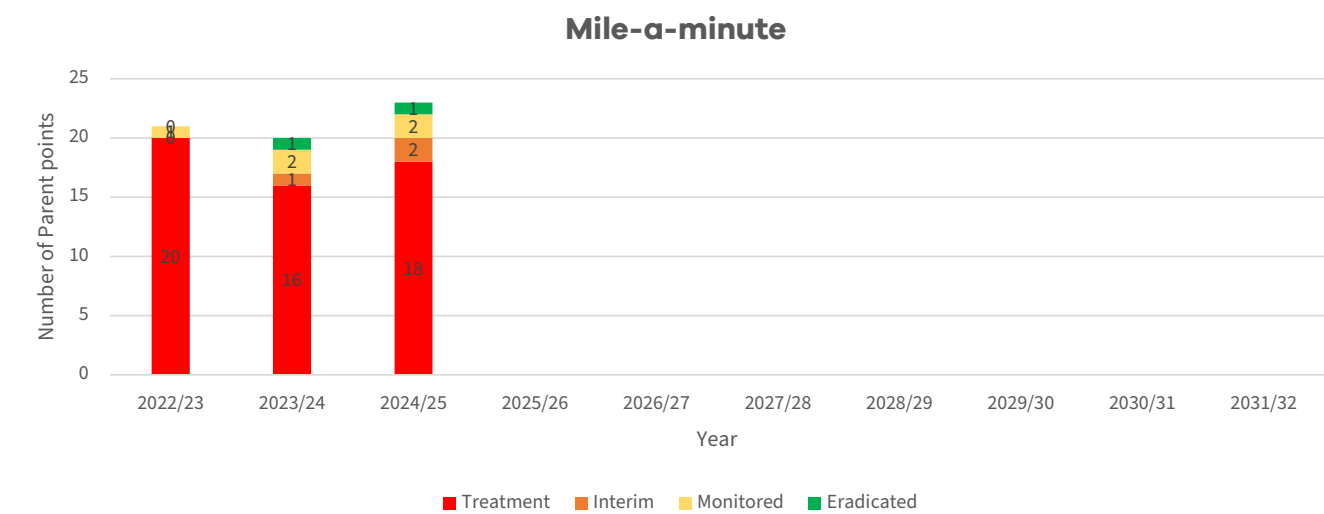
Programme summary	Results
Number of operational sites	2
Total area of operational sites	50ha
Total infestation parent points	21
Infestation area	1,294m²
Comments	Nineteen new sites of Mexican water lily were identified this year through proactive, targeted surveillance. This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Mile-a-minute (*Dipogon lignosus*)

RPMP classification	Area	Programme status
Eradication	Whole of region	On track

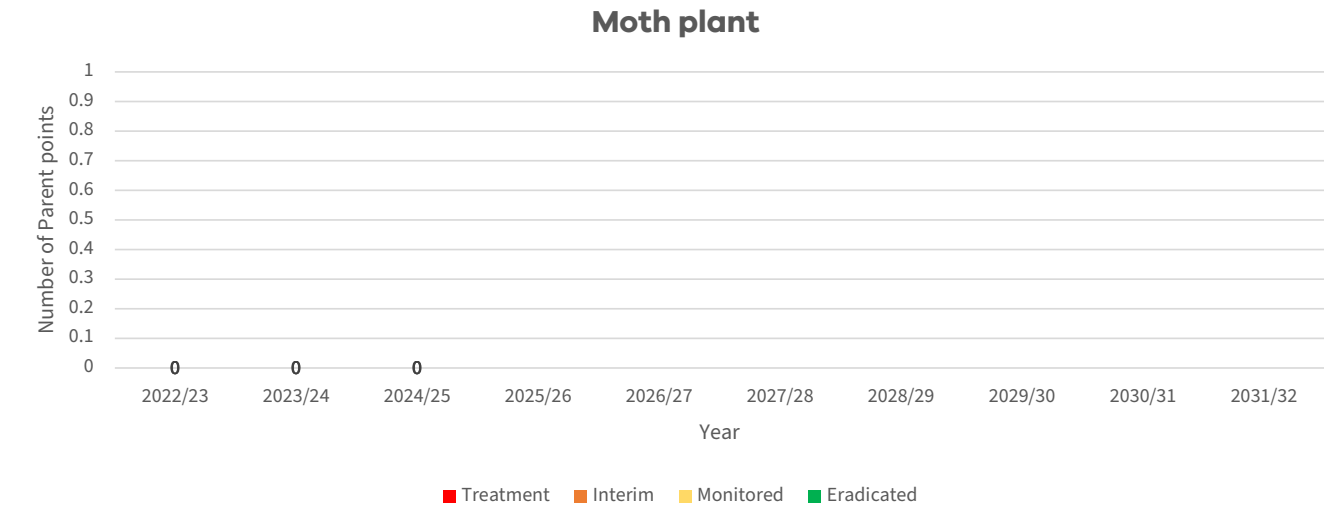
Programme summary	Results
Number of operational sites	24
Total area of operational sites	12.9ha
Total infestation parent points	23
Infestation area	266m ²
Comments	This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Moth plant (*Araujia hortorum*)

RPMP classification	Area	Programme status
Progressive containment	Taupō and Rotorua districts	On track

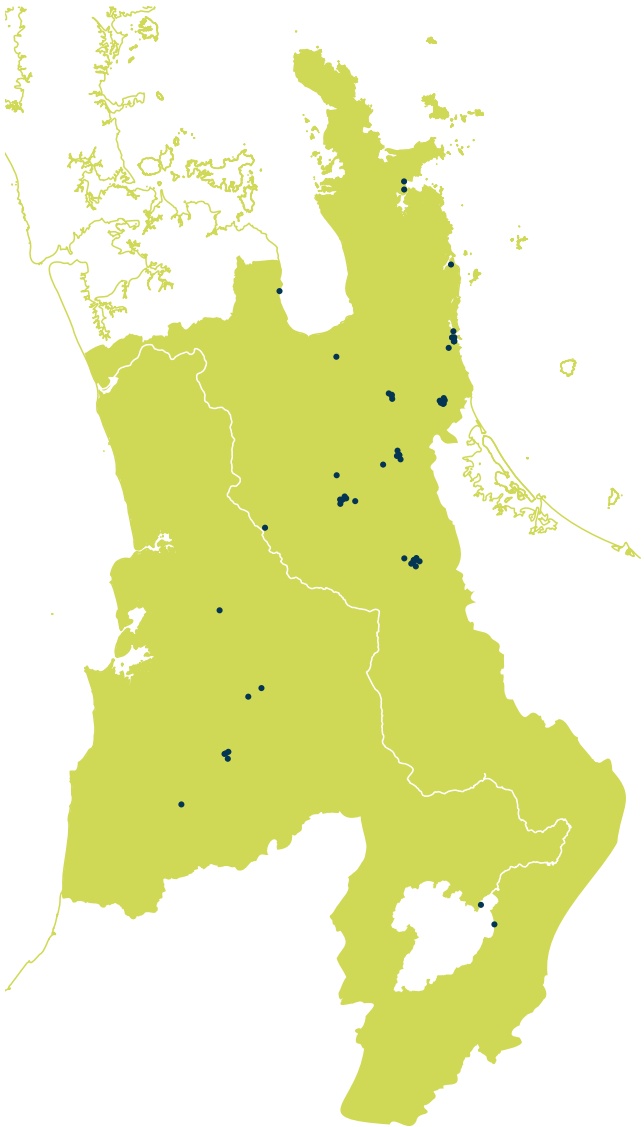
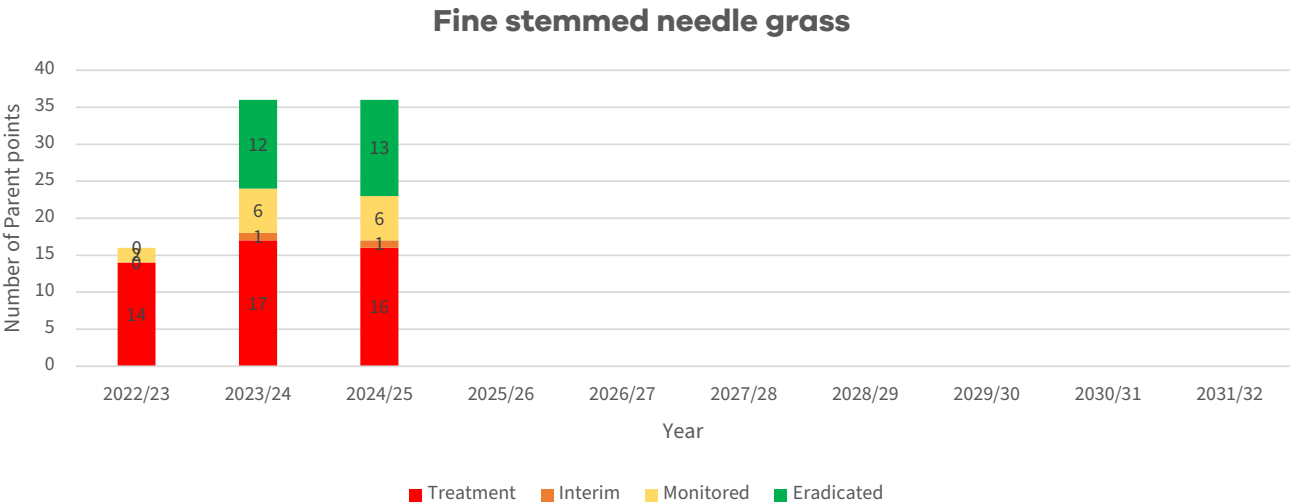
Programme summary	Results
Number of operational sites	0
Total area of operational sites	0
Total infestation points	0
Pest plant cover	0
Comments	<p>This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i>. Moth plant is a sustained control pest plant for the rest of the Waikato region outside the Taupō and Rotorua districts, therefore statistics for this species outside those districts are reported on under the key statistics section. A successful moth plant awareness campaign was undertaken with Hamilton City Council (Moth plant comp, page 31.)</p>



Nassella/Fine stemmed needle grass/Mexican feather grass (*Nassella tenuissima*)

RPMP classification	Area	Programme status
Eradication	Whole of region	On track

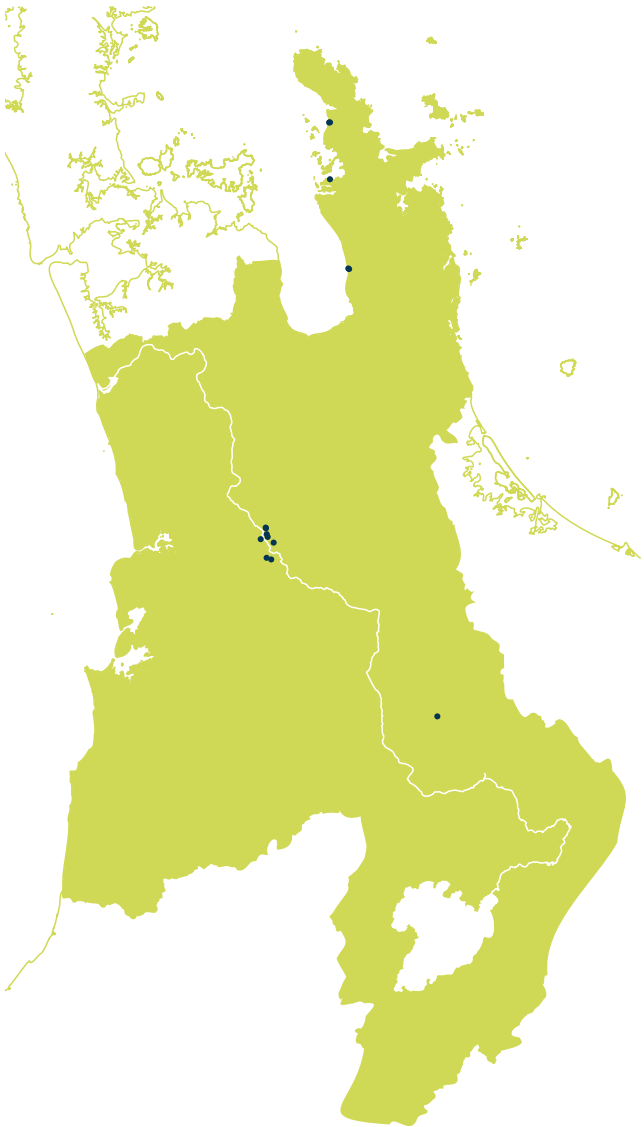
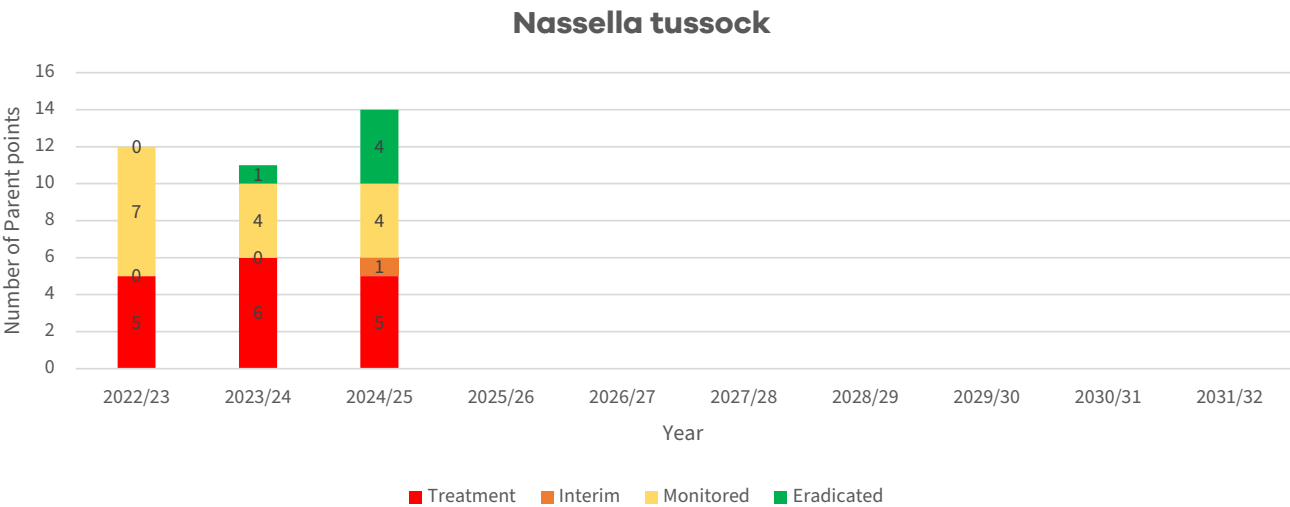
Programme summary	Results
Number of operational sites	7
Total area of operational sites	2.1ha
Total infestation points	36
Infestation area	8.3m²
Comments	This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Nassella tussock (*Nassella trichotoma*)

RPMP classification	Area	Programme status
Eradication	Whole of region	On track

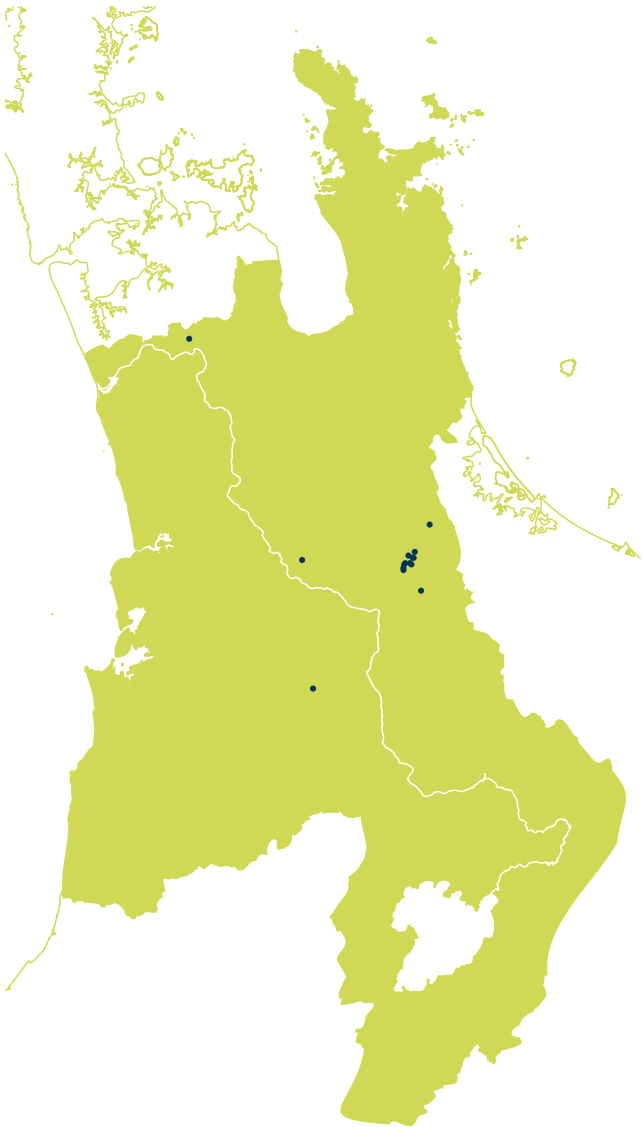
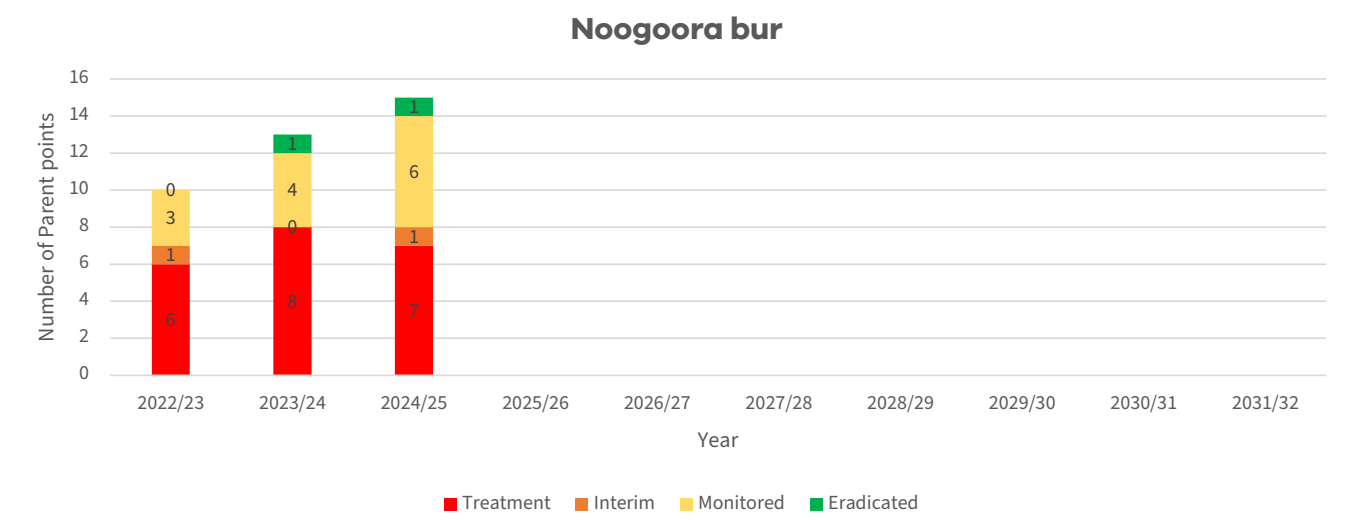
Programme summary	Results
Number of operational sites	6
Total area of operational sites	15.5ha
Total infestation parent points	14
Pest plant cover	57m²
Comments	This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Noogoora bur (*Xanthium strumarium*)

RPMP classification	Area	Programme status
Eradication	Whole of region	On track

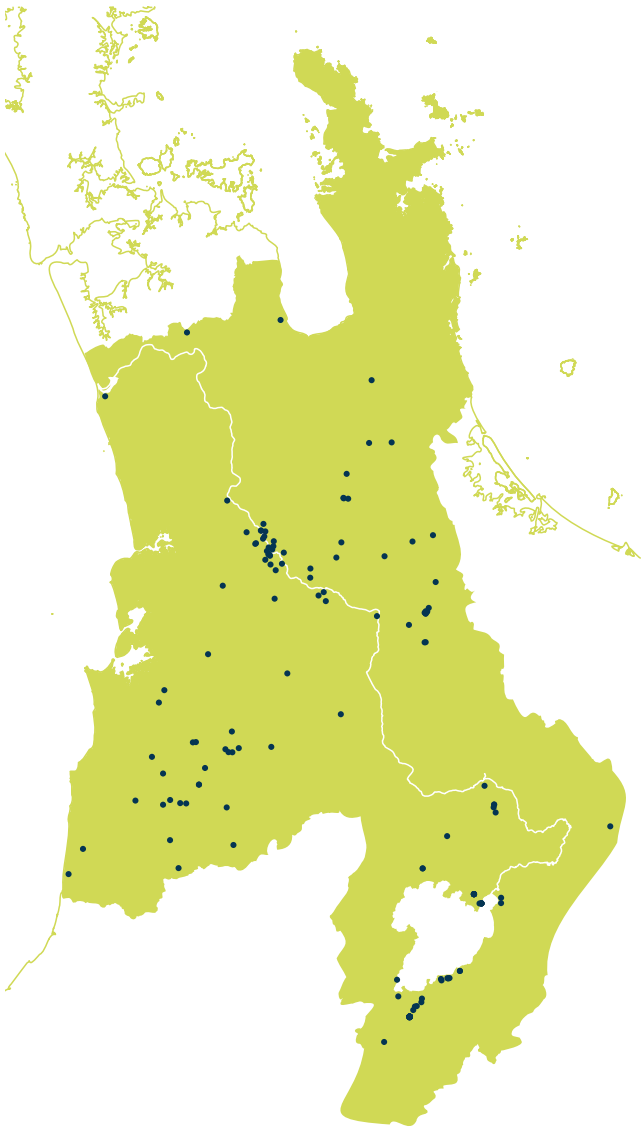
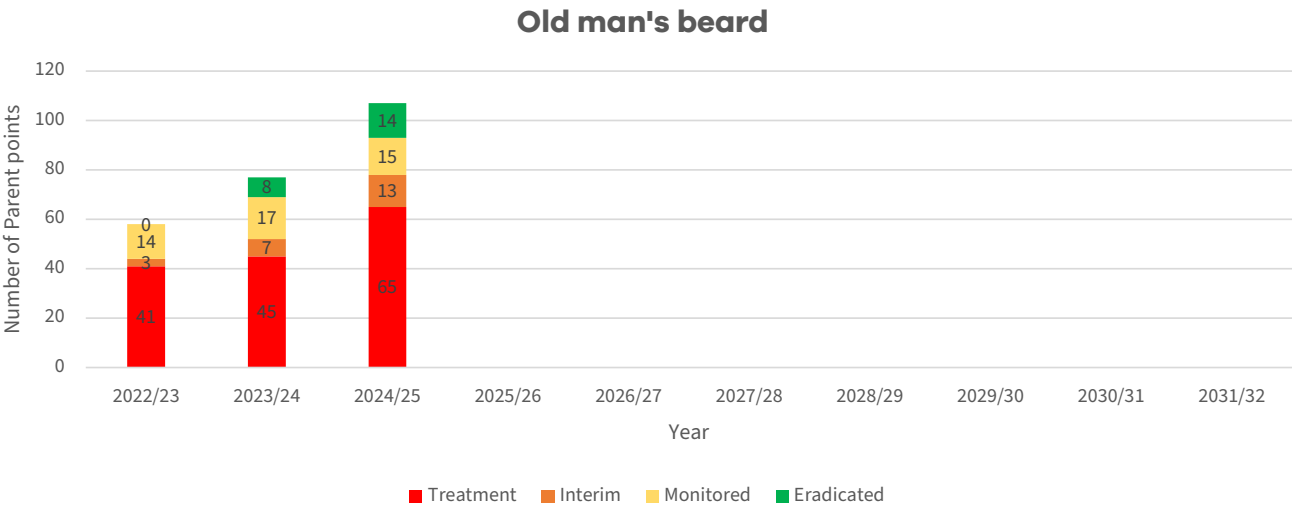
Programme summary	Results
Number of operational sites	14
Total area of operational sites	343.5ha
Total infestation parent points	15
Pest plant cover	3686m ²
Comments	This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Old man’s beard (*Clematis vitalba*)

RPMP classification	Area	Programme status
Progressive containment	Whole of region	On track

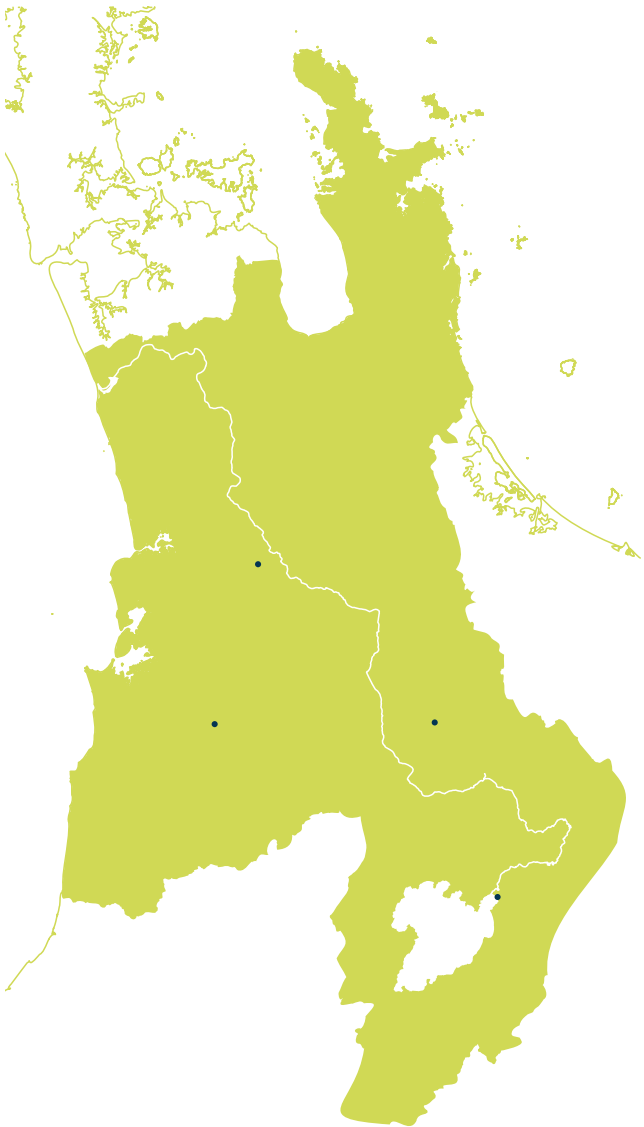
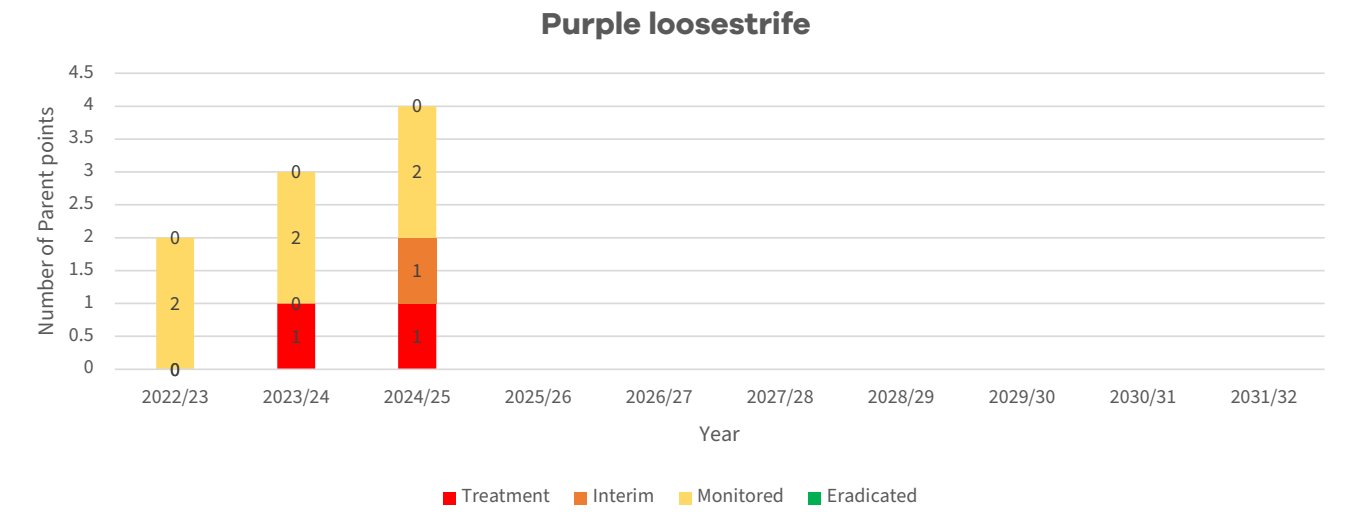
Programme summary	Results
Number of operational sites	82
Total area of operational sites	2,732ha
Total infestation parent points	107
Pest plant cover	1,708m²
Comments	This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Purple loosestrife (*Lythrum salicaria*)

RPMP classification	Area	Programme status
Eradication	Whole of region	On track

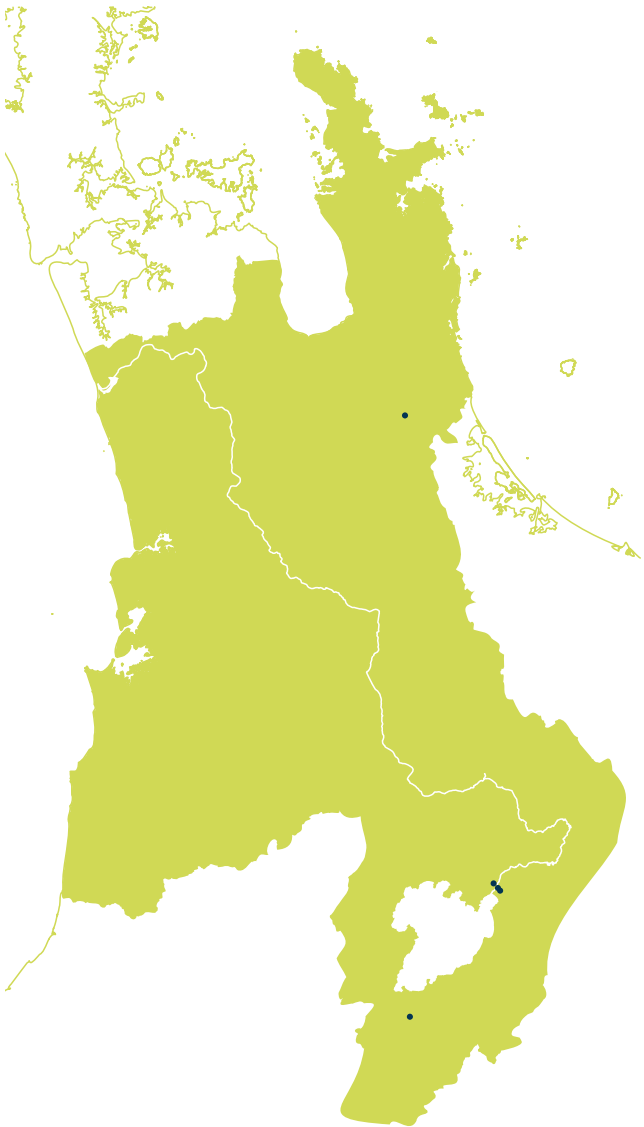
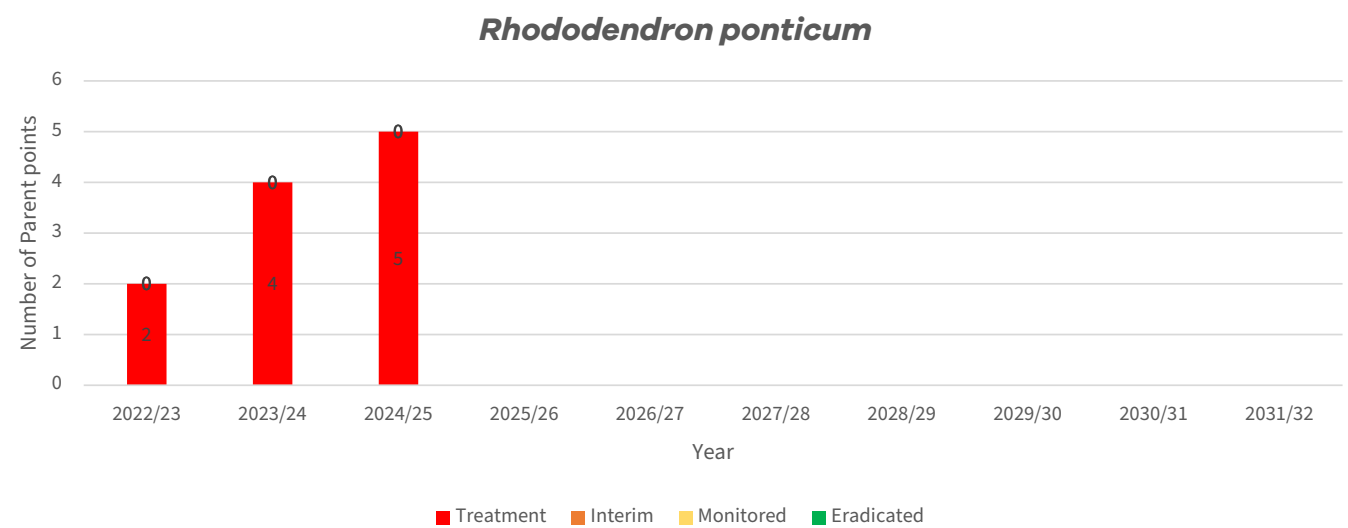
Programme summary	Results
Number of operational sites	4
Total area of operational sites	1.8ha
Total infestation parent points	4
Pest plant cover	11m²
Comments	This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Rhododendron ponticum

RPMP classification	Area	Programme status
Eradication	Whole of region	At risk

Programme summary	Results
Number of operational sites	4
Total area of operational sites	13.7ha
Total infestation parent points	5
Pest plant cover	11m ²
Comments	This programme has not met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> . <i>Rhododendron ponticum</i> can be very difficult to distinguish from other <i>Rhododendron</i> species and cultivars, especially when not flowering. This means that there is likely infestations in the region that have not yet been identified.

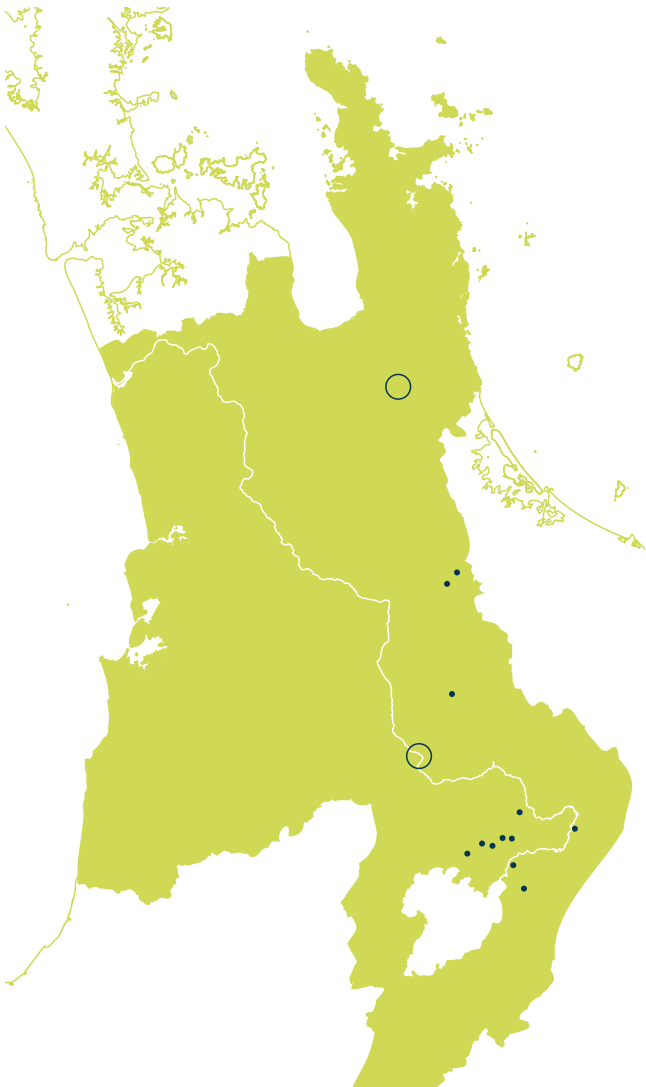
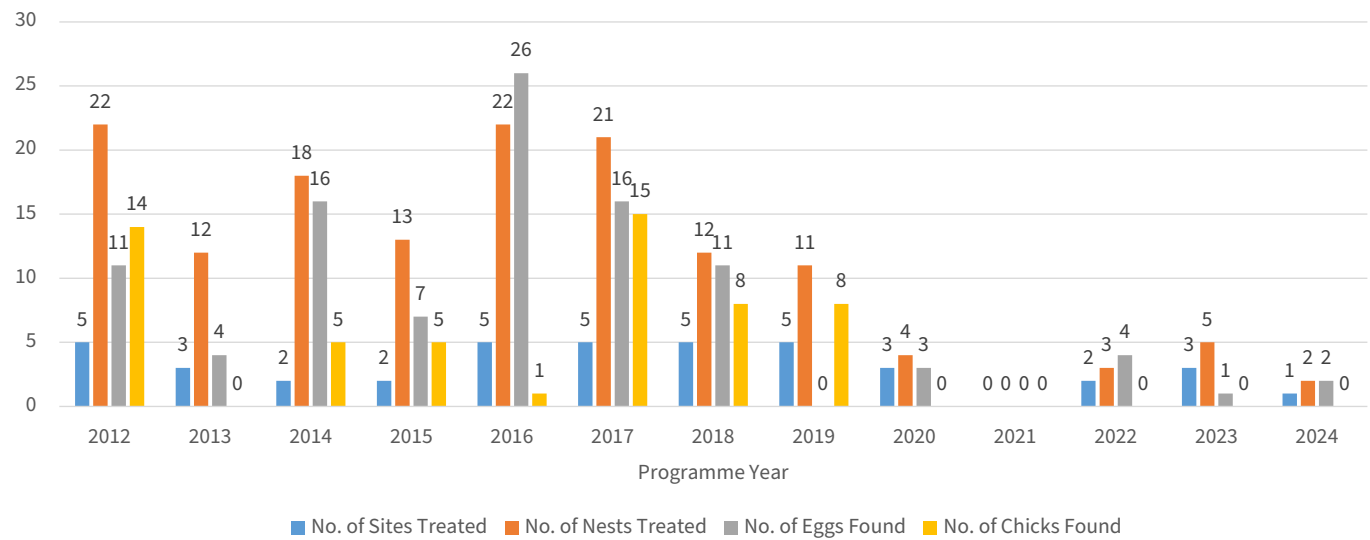


Rook (Corvus frugilegus)

RPMP classification	Area	Programme status
Eradication	Whole of region	On track

Programme summary	Results
Number of sightings received	IRIS – 25
Surveillance undertaken	Multiple properties from Paeroa to north of Taupō.
Number of known rookery sites	2 confirmed rookeries in 2024/25
Nest sites controlled	2 (4 found - 2 abandoned)
Comments	<div><div></div><div><div><div></div><div>There were 38 confirmed sightings of rooks.</div></div><div><div></div><div>Control work was undertaken with a helicopter - DRC1339 application to two nests in Mangakino. Two nest were abandoned in Paeroa due to bad weather.</div></div><div><div></div><div>A review of the programme was completed, with a number of recommendations made. Most will be implemented in 2025/2026. (<i>The last rook</i>, page 15.)</div></div></div></div>

Rook Programme Summary 2012 - 2024

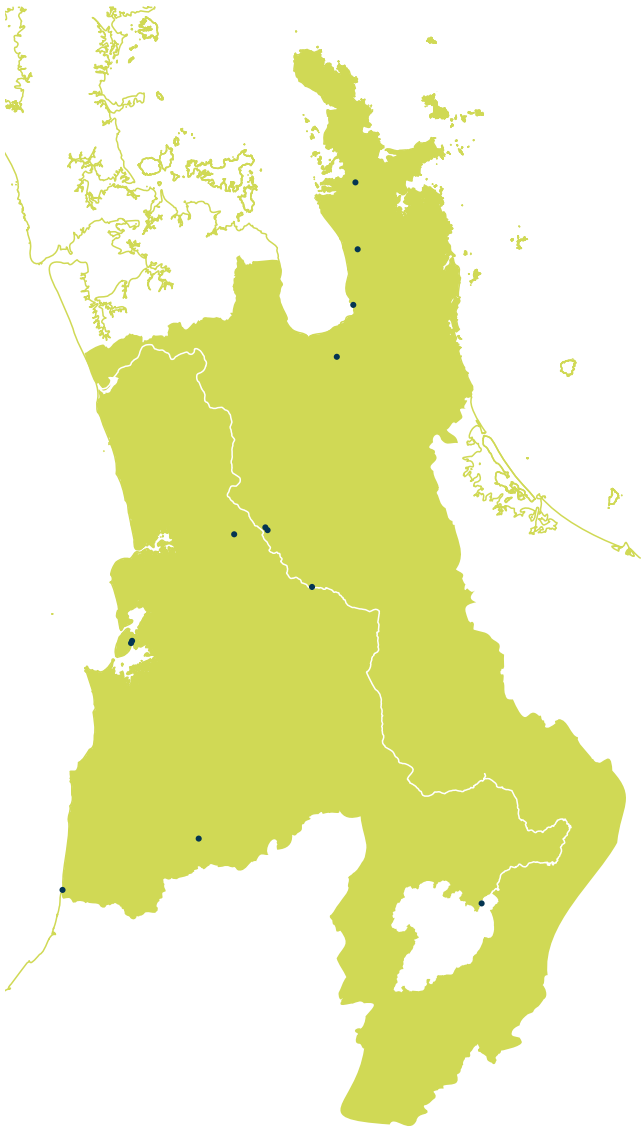
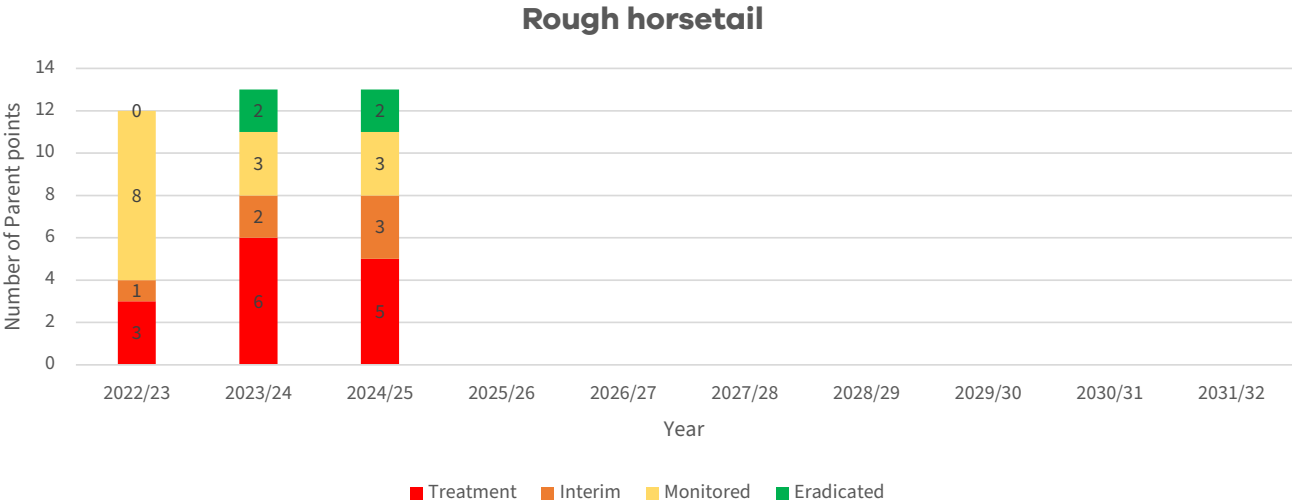


The circles represent the two nests controlled, while the dots represent confirmed sightings in 2024/25.

Rough horsetail (*Equisetum hyemale*)

RPMP classification	Area	Programme status
Eradication	Whole of region	On track

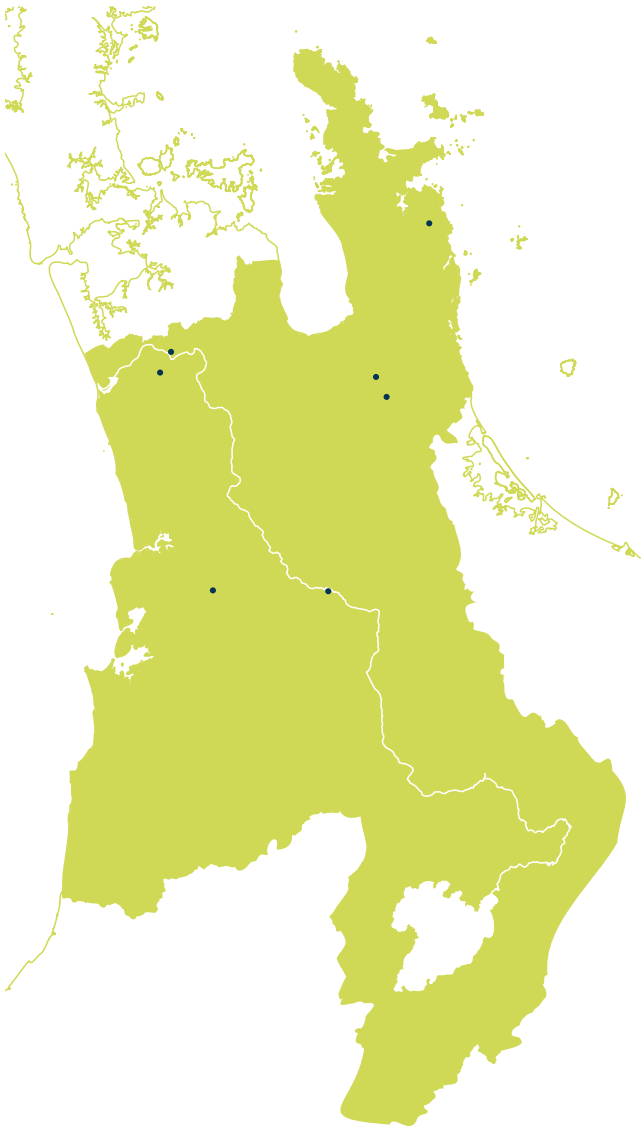
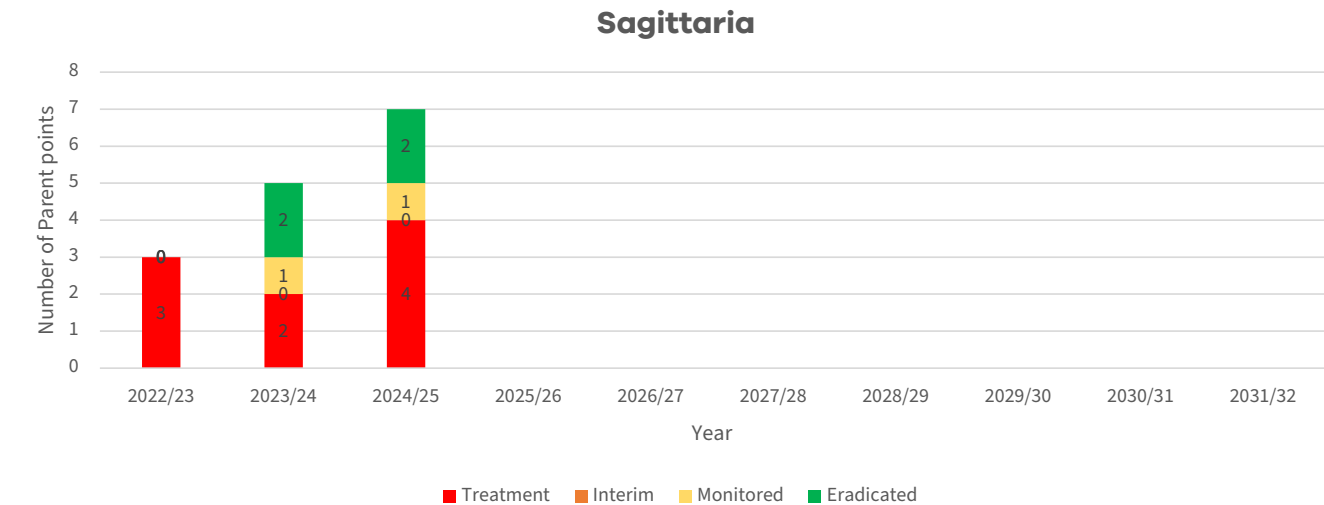
Programme summary	Results
Number of operational sites	13
Total area of operational sites	11.8ha
Total infestation parent points	13
Pest plant cover	71m ²
Comments	The programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Sagittaria/arrowhead (*Sagittaria montevidensis*, *S. sagittifolia* and *S. platyphylla*)

RPMP classification	Area	Programme status
Eradication	Whole of region	At risk

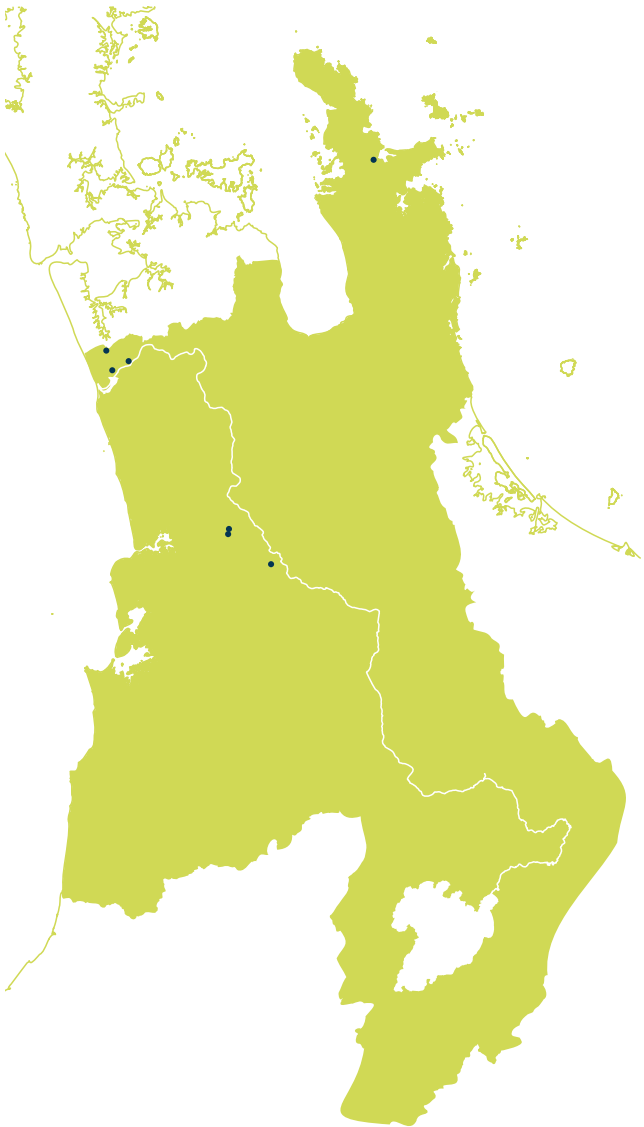
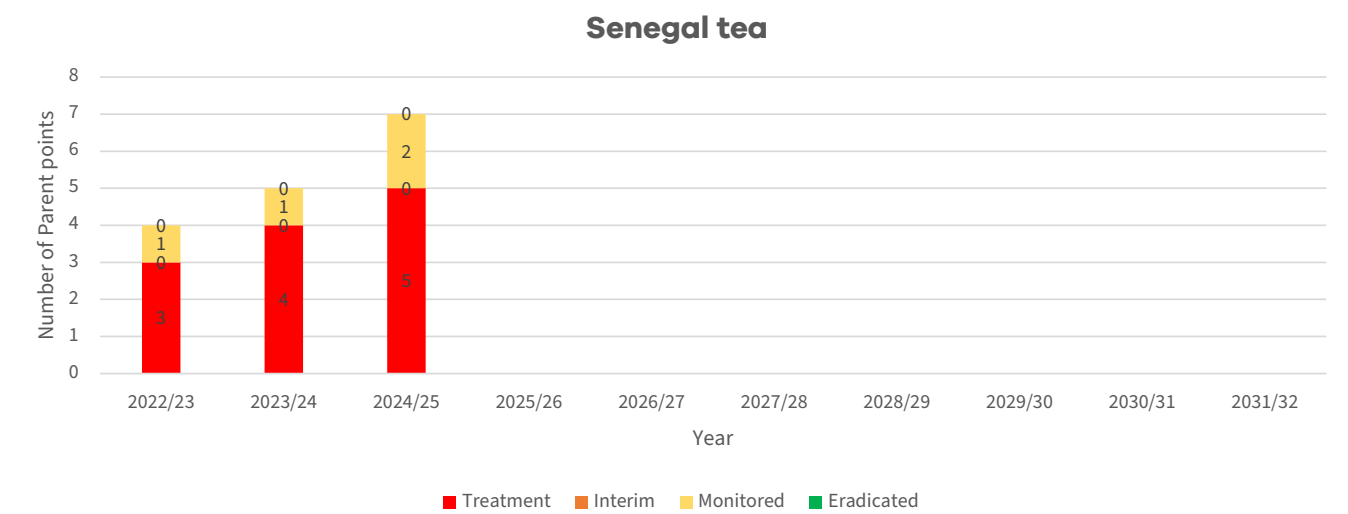
Programme summary	Results
Number of operational sites	5
Total area of operational sites	1,259.9ha
Total infestation parent points	7
Infestation area	10m²
Comments	<p>This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i>.</p> <p>There are couple of species of <i>Sagittaria</i> that were not listed in the new RPMP, with pending amendments to correct this to ensure the programme is on track.</p>



Senegal tea (*Gymnocoronis spilanthoides*)

RPMP classification	Area	Programme status
Eradication	Whole of region	On track

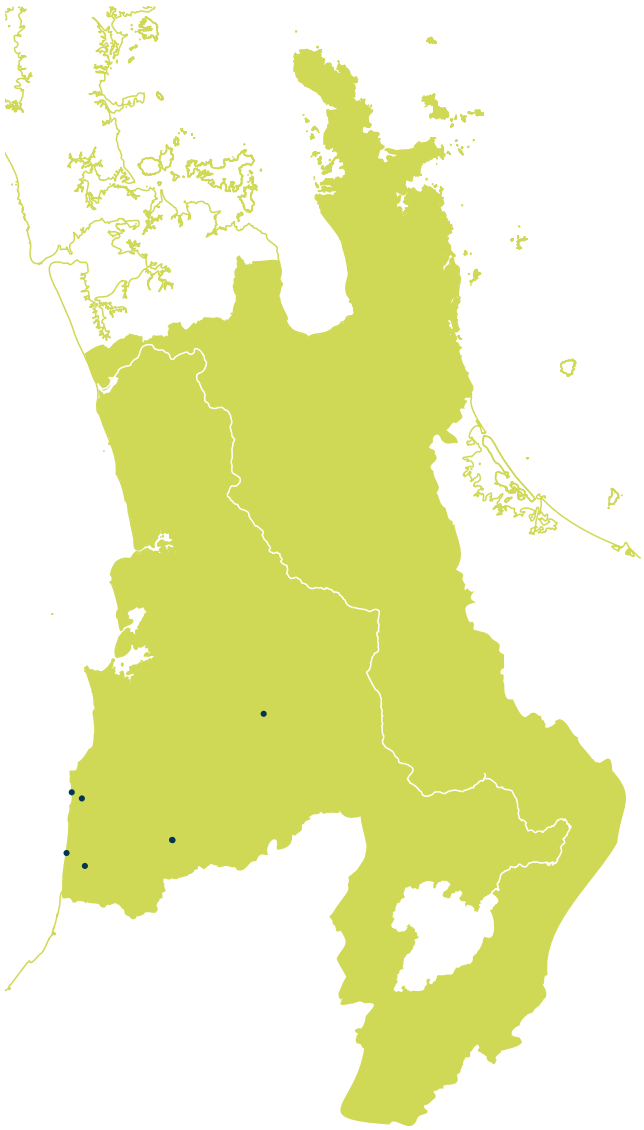
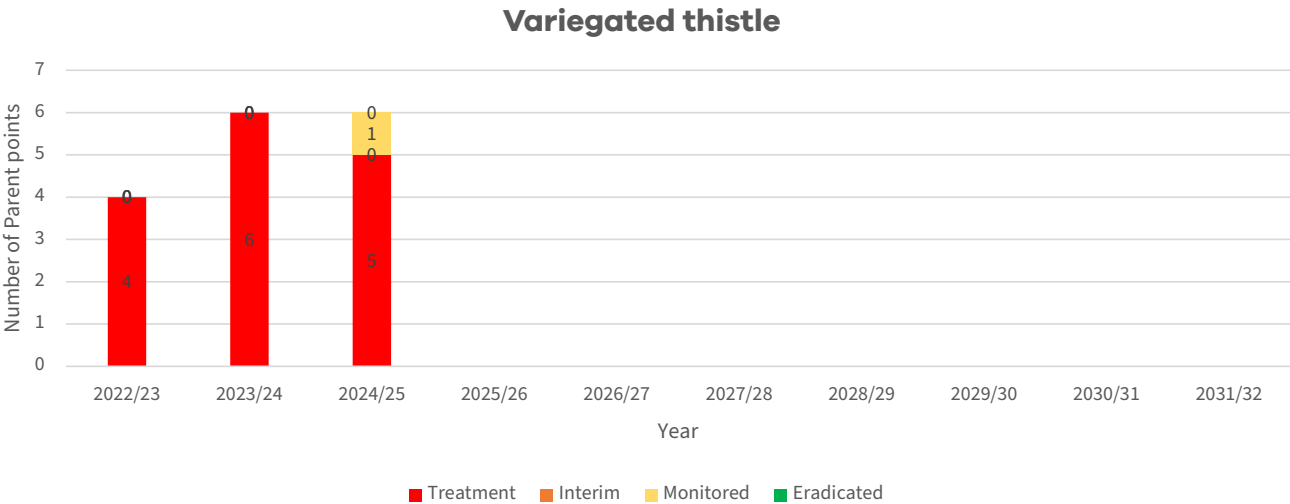
Programme summary	Results
Number of operational sites	6
Total area of operational sites	158.8ha
Total infestation parent points	7
Infestation area	562.7m²
Comments	This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Thistle (variegated thistle) (*Silybum marianum*)

RPMP classification	Area	Programme status
Eradication	Whole of region	On track

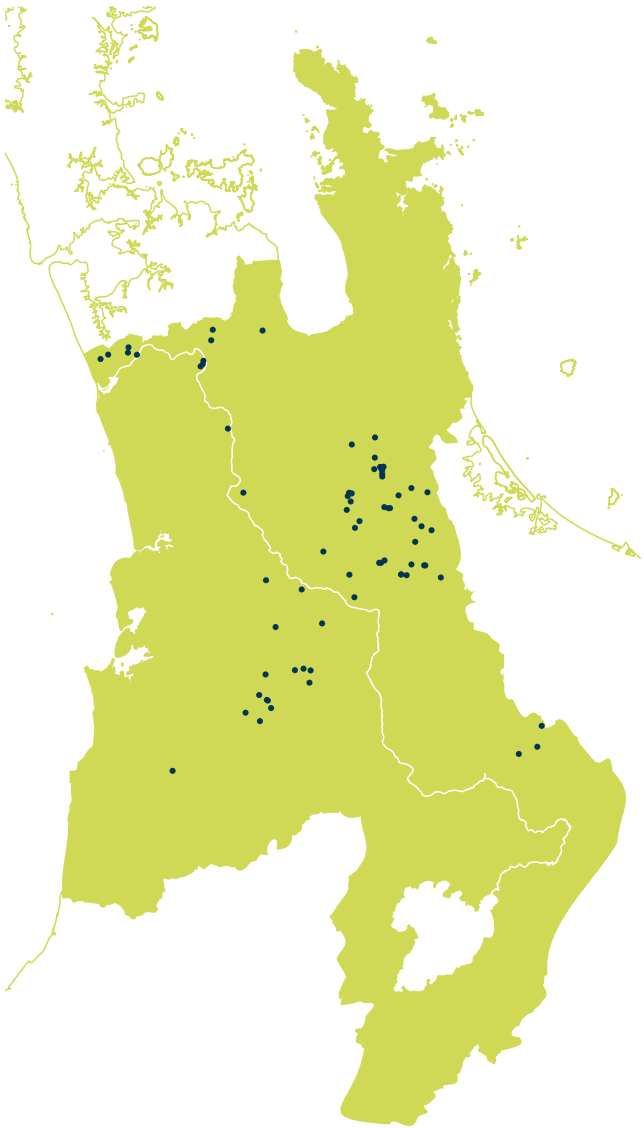
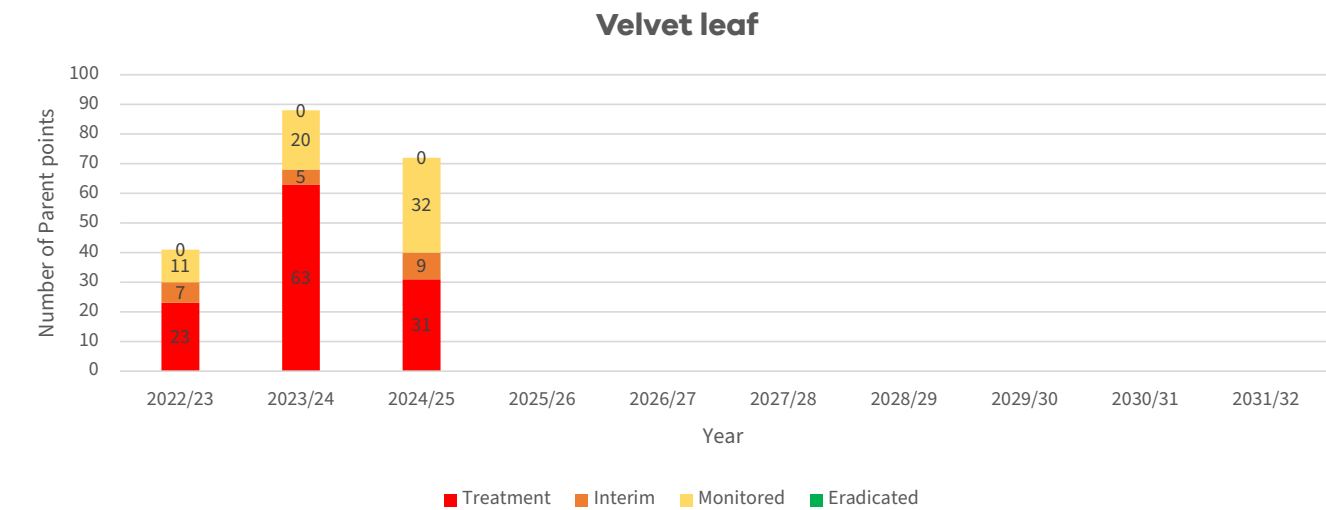
Programme summary	Results
Number of operational sites	● 5
Total area of operational sites	● 1,404ha
Total infestation parent points	● 6
Pest plant cover	● 100,001m ²
Comments	This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Velvetleaf (*Abutilon theophrasti*)

RPMP classification	Area	Programme status
Progressive containment	Whole of region	On track

Programme summary	Results
Number of operational sites	91
Total area of operational sites	7,151.9ha
Total infestation parent points	72
Infestation area	214m²
Comments	Three more infestations were found and more operational sites were established following tracing. This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Wallaby (Bennett’s, brush-tailed rock, parma and swamp wallaby) (*Macropus rufogriseus*, *Petrogale penicillate*, *Macropus parma*, and *Wallabia bicolor*)

RPMP classification	Area	Programme status
Exclusion	Whole of region	On track
Programme summary	Results	
Number of sightings outside of the Containment Area received	0	
Number of responses required	0	
Comments	No occurrences of Bennett’s, brush-tailed rock or swamp wallaby were recorded in the Waikato region this financial year. ² This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .	



Bennett’s wallaby
 Photo: Nasser Halaweh
 Licence: Creative Commons



Parma wallaby
 Photo: Mitch Ames
 Licence: Creative Commons



Brush-tailed rock wallaby
 Photo: Doug Beckers
 Licence: Creative Commons



Swamp wallaby
 Photo: Rufus46
 Licence: Creative Commons

2 Recent genetic studies by Manaaki Whenua Landcare Research have determined that parma wallaby are already present in the region, and may have been here for some time. They are controlled along with dama wallaby as part of the Tipu Mātoro National Wallaby Eradication Programme.

Wallaby (dama) (Macropus eugenii)

RPMP classification	Area	Programme status
Progressive containment	Whole of region – outside of Dama Wallaby Progressive Containment Area	On track

Programme summary	Results
Number of complaints/enquiries received	● IRIS – 2
Number of ‘out of containment area’ public sighting reports received	● WALL-IS – 59 reports or sightings ³
Wallaby indicator dog and drone surveillance	● Total 50,736.4ha covered ● 6,409km walked or flown (drone)
Direct control – night shooting	● Over 495 wallabies shot
Tipu Mātoro National Wallaby Programme outcomes met	● Yes
Comments	<ul style="list-style-type: none">• Priority surveillance and control work in response to sightings out of the containment area.• Proactive control work in the buffer and priority areas outside of containment.• Contributed to development and delivery of comms and engagement material, in conjunction with the national programme.• Attended three stakeholder and community events.• This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i>. (<i>Tackling wallabies</i>, page 28.)



3 Public reports or sightings submitted via <http://www.reportwallabies.nz/> and captured in WALL-IS, the data management system administered by LINZ for the Tipu Mātoro National Wallaby Eradication Programme. These are followed up by council, with surveillance and control undertaken as required.

Wasp (common/German) (*Vespula vulgaris* and *Vespula germanica*)

RPMP classification	Area	Programme status
Sustained control	Whole of region (human health)	On track

Programme summary	Results
Number of enquiries/complaints received	● IRIS – 30
Number of inspections undertaken	● 1
Service delivery required	● 2 (on council-owned land)
Comments	Council again contributed \$20,000 to the National Wasp Biocontrol Programme in collaboration with Manaaki Whenua – Landcare Research. This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> . (Wasp control, page 31.)



Biocontrol programme for wasp control

For many wide spread pests like common and German wasps, biological control (biocontrol) offers a promising tool to reduce their populations, and as result their environmental, economic and human health impacts. The council supports Manaaki Whenua Landcare Research’s Wasp Biocontrol Programme, that identified two insect species, *Volucella inanis* (hoverfly) and *Metoecus paradoxus* (a wasp nest beetle) as promising biocontrol agents to reduce wasp populations. Both are natural enemies of these introduced wasp species, for example the hoverfly’s eggs are laid in wasp eggs, hatching to feed on wasp larvae and pupae.

After exhaustive host testing, cultural assessments and consultation, the EPA has now approved the import and release of these species. The first hoverflies were released on properties in the upper South Island, in the Marlborough and Tasman districts, with more releases planned. Hopefully these little wasp warriors will establish and begin mitigating the widespread impacts of invasive *Vespula* wasps.

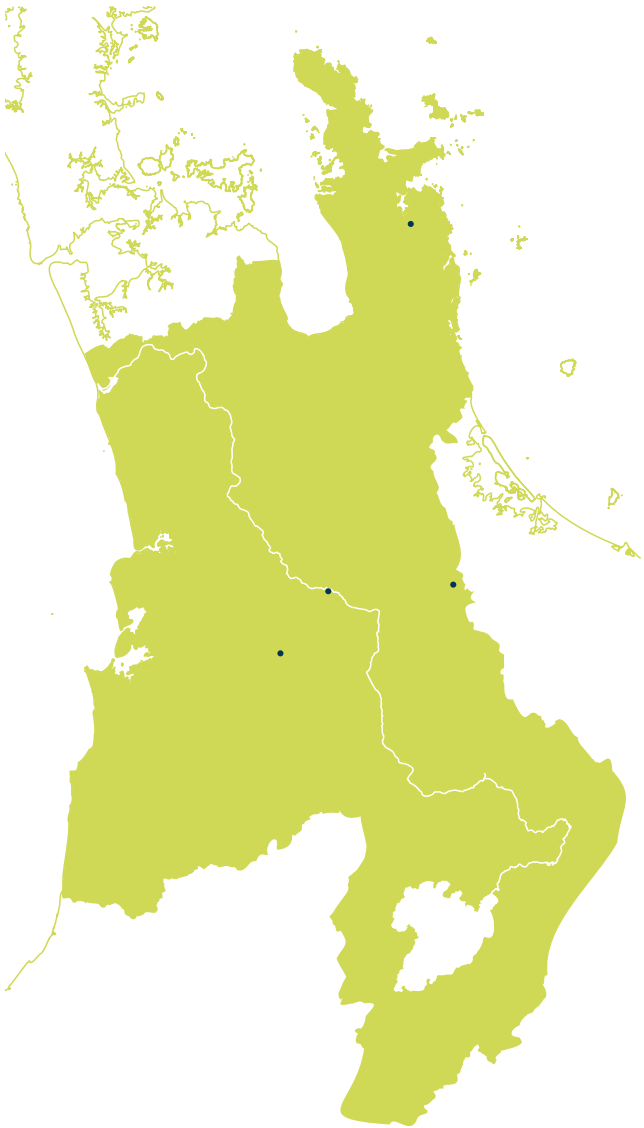
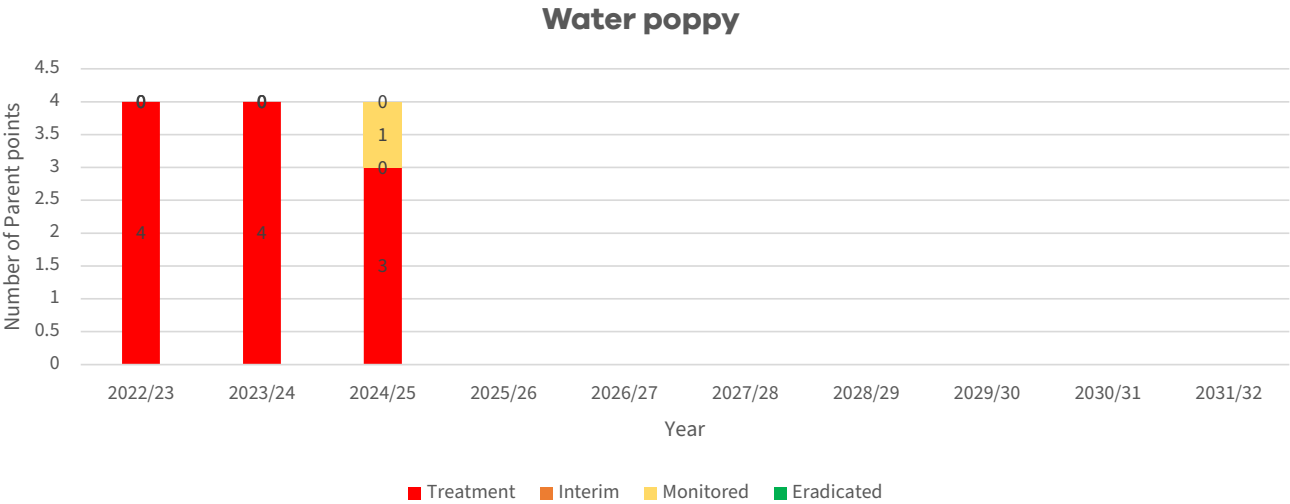
Case study



Water poppy (*Hydrocleys nymphoides*)

RPMP classification	Area	Programme status
Eradication	Whole of region	On track

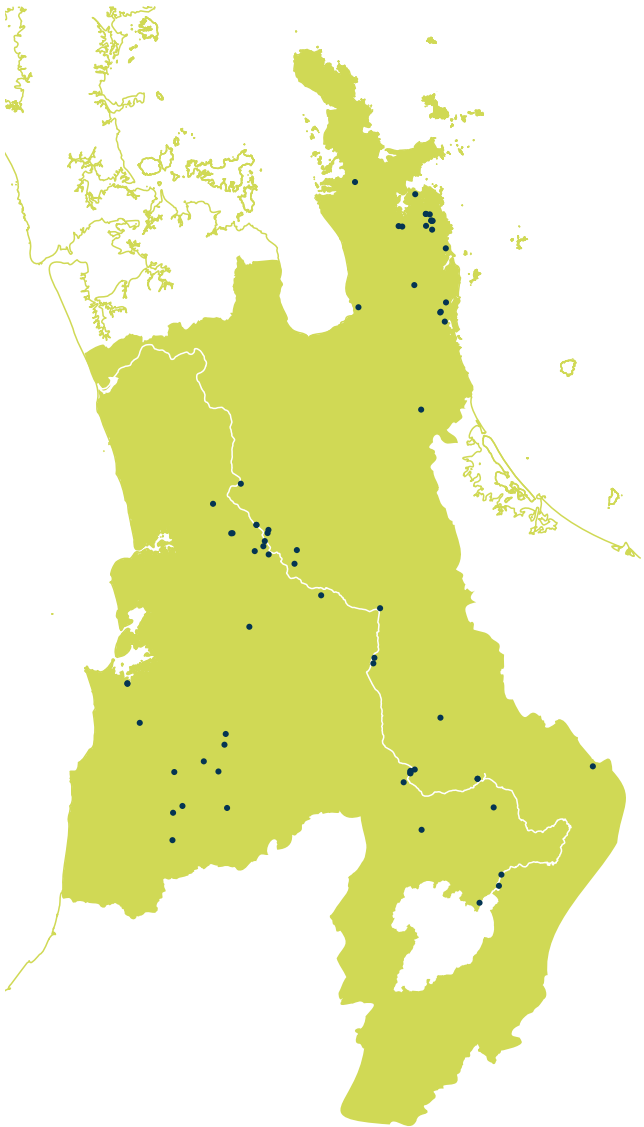
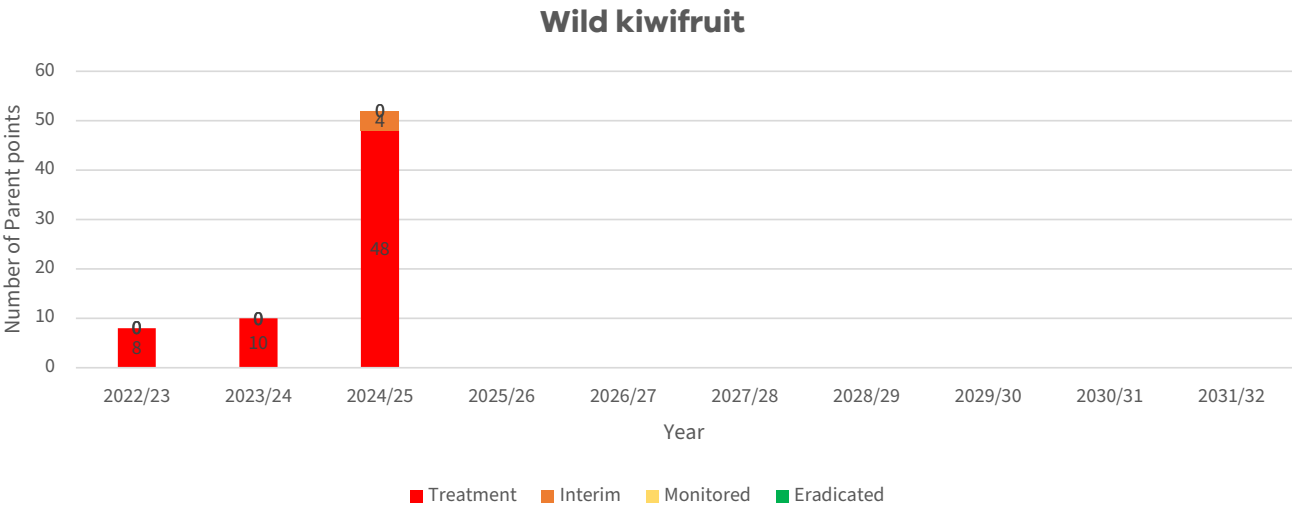
Programme summary	Results
Number of operational sites	● 4
Total area of operational sites	● 9ha
Total infestation parent points	● 4
Pest plant cover	● 500m²
Comments	<p>This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i>.</p> <p>This programme has had some challenges. The council has begun control on the largest known water poppy site in the country.</p>



Wild kiwifruit (*Actinidia* spp.)

RPMP classification	Area	Programme status
Progressive containment	Whole of region	At risk

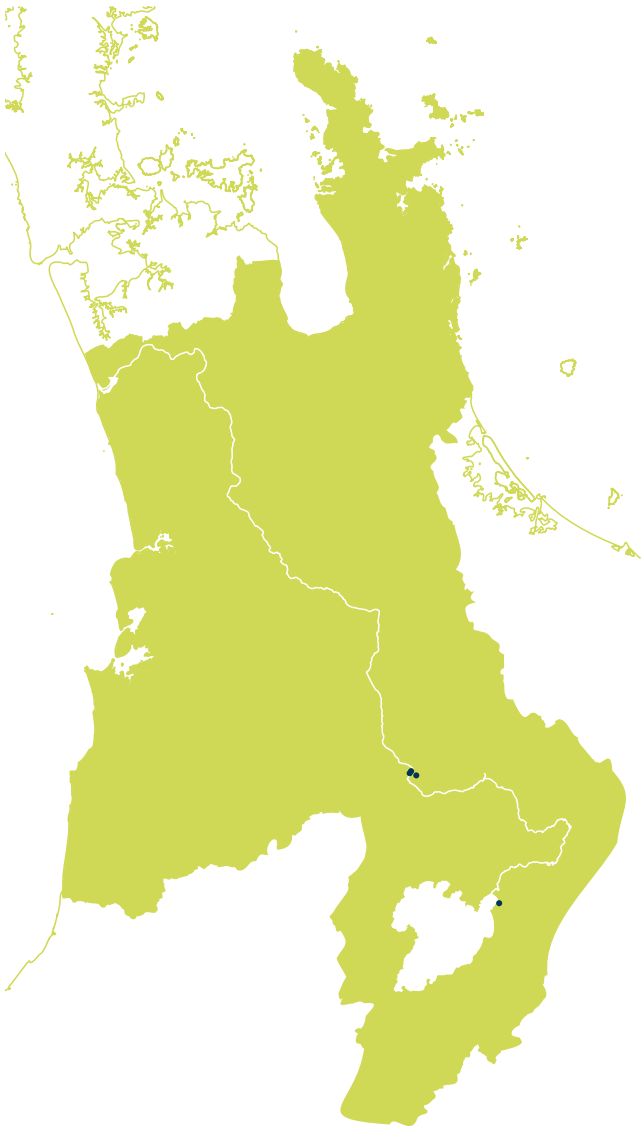
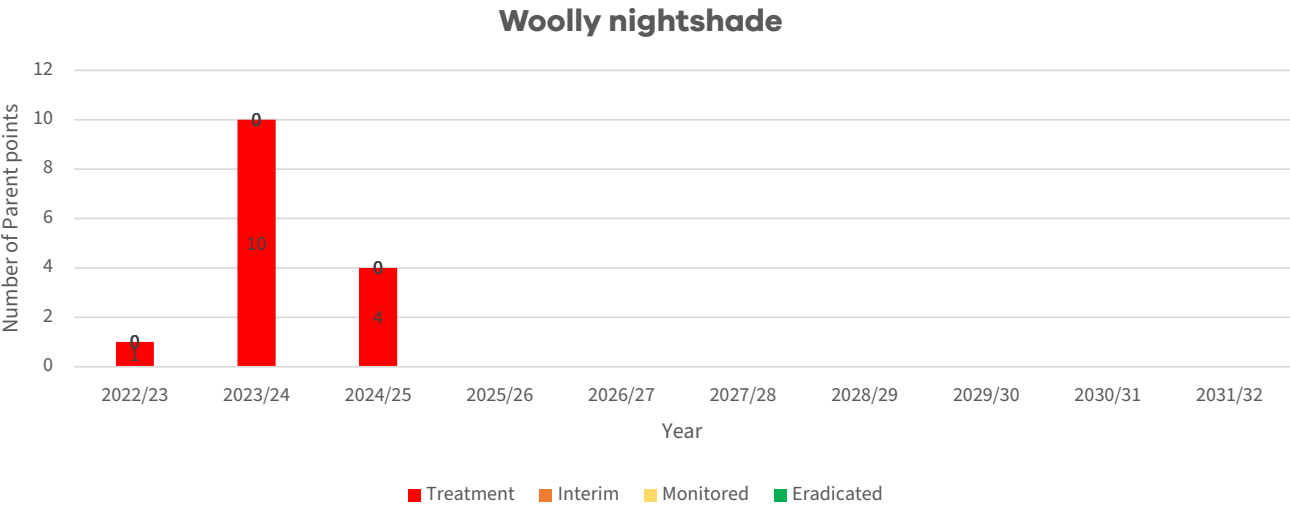
Programme summary	Results
Number of operational sites	10
Total area of operational sites	1ha
Total infestation parent points	52
Infestation area	190m²
Comments	<p>There have been 34 new wild kiwifruit sites identified this year, as a result of increased general surveillance efforts, and targeted surveillance in former and current kiwifruit growing areas. We continue to work with Kiwifruit Vine Health (KVH) to develop an agreed way of working and funding this pest plant programme.</p> <p>This programme is at risk while council quantifies the extent of this pest plant issue, and the nature of the management programme required.</p>



Woolly nightshade (*Solanum mauritianum*)

RPMP classification	Area	Programme status
Progressive containment	Taupō and Rotorua districts	On track

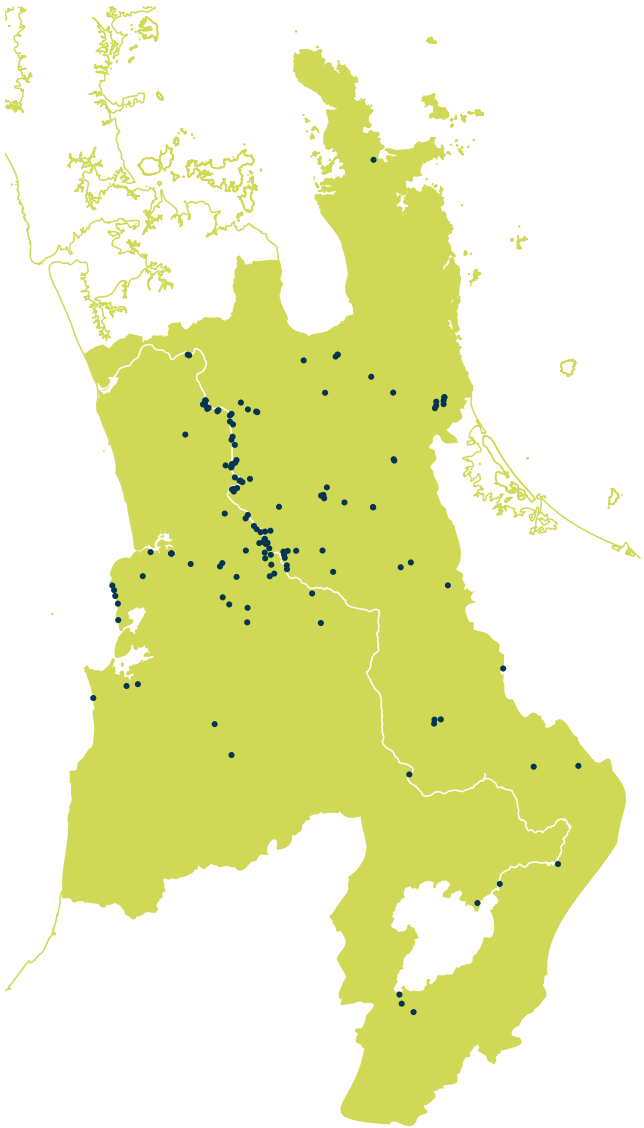
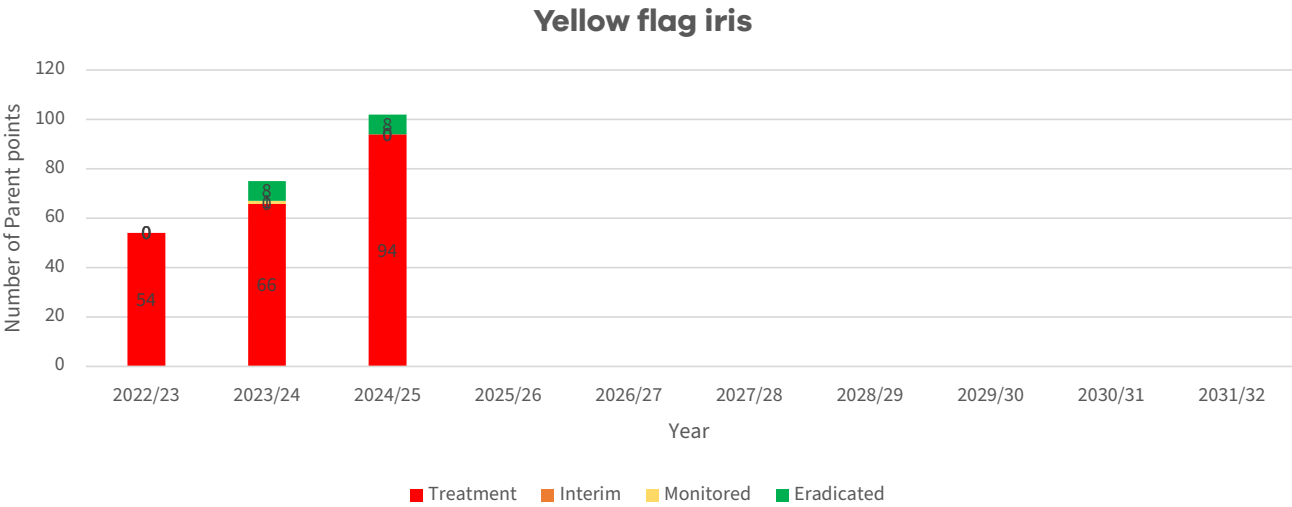
Programme summary	Results
Number of operational sites	3
Total area of operational sites	518.5ha
Total infestation parent points	4
Infestation area	487 m ²
Comments	<p>Woolly nightshade is a sustained control pest for the rest of the region outside of the Taupō and Rotorua districts, therefore statistics for this species outside these areas are reported on under the key statistics section.</p> <p>This programme has met all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i>.</p>



Yellow flag iris (*Iris pseudoacorus*)

RPMP classification	Area	Programme status
Progressive containment	Whole of region	At risk

Programme summary	Results
Number of operational sites	102
Total area of operational sites	16,442.5ha
Total infestation parent points	102
Infestation area	8,357m²
Comments	Yellow flag iris is a significant pest plant in the Waikato region. Not all sites have received the service delivery required to meet all Key Performance Indicators included in the <i>Waikato RPMP Operational Plan 2022-2032</i> .



Ngā kupu whakamārama

Glossary

Key performance indicators	The performance targets set out for each pest management programme within the RPMP Operational Plan 2022-2032, to help determine whether RPMP objectives are being met.
Modified McLean Scale	A scale used by councils to determine rabbit levels. It helps with regulation to make sure occupiers are managing rabbit numbers to a level set in the Waikato Regional Pest Management Plan 2022-2032. The RPMP has set the scale for sustainable rabbit control across the Waikato region at level 4 or below.
Monitoring	To observe, measure and record the population levels and trends of a particular pest population.
Operational site	The area that immediately surrounds an infestation of a pest plant(s), that is most at risk of spread or invasion from that pest. The size of the site is dependent on the pest's reproductive and growth form characteristics, site land use and pertinent environmental factors.
Infestation Parent Points	Indicates a pest plant infestation within an operational site. The pest plant infestation associated with a parent point can cover a large area as long as it lies within the operational site and it can also include areas of eradication.
Residual trap catch (RTC)	The residual trap catch (RTC) index is a method of determining relative possum density in an area. Lines of 10 leg-hold traps, spaced 20 metres apart, are set for three consecutive nights in random locations within the operational area, before and after control. The number of lines used is determined by the size of the management area. The standard performance target commonly set for a reduction in possum densities in ground control operations in the region is an RTC of < 5% (i.e. less than 5 possums caught for every 100 trap-nights) and < 3% for aerial operations (i.e. less than 3 possums caught for every 100 trap-nights).
Surveillance	To survey areas to establish the absence, presence, or extent of pests.

Kauri



He taiao mauriora ▲ **Healthy environment**

He hāpori hihiri ▲ **Vibrant communities**

He ōhanga pakari ▲ **Strong economy**

Policy Series PS25/19
ISSN 2230-4339 (Print)
ISSN 2230-4347 (Online)
Published September 2025 #7619

Private Bag 3038, Waikato Mail Centre,
Hamilton 3240, New Zealand
waikatoregion.govt.nz
0800 800 401