



DRAFT DISCUSSION DOCUMENT

# Regional Pest Management Plan 2017



Pests are unwanted plants and animals that impact on our environment, economy and our people.

## Your views

The Bay of Plenty Regional Council wants to hear the community's views on pest management in the region. Your knowledge about pests in the region will be important in getting our pest management programme right.

Throughout the document we ask specific questions about our proposed approach. These are simply prompts for your feedback. You don't need to answer all or any of those questions. You may prefer to tell us in your own words:

- which pests should be included, and why?
- how we should prevent new pests arriving or spreading in our region?
- are there sites that need special and focused pest management?
- when is pest management a government, regional ratepayer, industry, community or landowner responsibility – and importantly who should pay for pest management?

## Contents

<b>Introduction</b>	<b>3</b>
<b>Managing Pests</b>	<b>4</b>
What type of management is there?	4
The pest infestation curve	5
Who should pay?	5
Current Management: How are we doing?	6
<b>Pest Programmes</b>	<b>7</b>
Exclusion	7
Eradication	9
Progressive Containment	11
Sustained Control	12
Site-led Pest Management	13
<b>Changing the way we manage some pests</b>	<b>14</b>
<b>A new option – Pathway Management</b>	<b>16</b>
<b>Good neighbour rules</b>	<b>17</b>
<b>Issues with particular pests</b>	<b>18</b>
Gorse	18
Unowned Cats	19
<b>Working with others</b>	<b>20</b>
<b>Schedule 1</b>	<b>23</b>





# Introduction

Pests are unwanted organisms such as plants and animals that impact on our environment, economy and our people. Pest control is important. It helps to protect the health of individuals and businesses, livelihoods and assets (for example, control of agricultural pests), and the beauty of our region. Pest control also protects our native ecosystems, and individual interests such as private gardens.

The Bay of Plenty Regional Council is reviewing the way it approaches pest management. This discussion document describes the pest management issues facing the region, and the Council's proposed approach to managing these issues. This document has been developed to provide the community with information so that people can provide feedback to the Council.

Council needs to decide how the region's pests fit within the range of management programmes, and is required to analyse benefits and costs. We also need to consider how the costs of programmes should be allocated, taking into account who benefits and who is adding to the pest problem.

The Regional Pest Management Plan (RPMP) is the key policy document that directs pest management in our region. What we hear from the community will help us decide what goes into the next RPMP. Council intends to notify the RPMP by September 2017. At that stage there will be another opportunity for your input through a 'submission' process.



# Managing Pests

There is a community expectation that all pests should be actively managed to reduce their number or spread – and ideally all pests should be eradicated. This is not always achievable or realistic.

There are several regulatory tests that must be met for a pest to be included in a RPMP – particularly where rules are being suggested. In summary, the pest must adversely affect environmental, economic, social or cultural values and the benefits of regional intervention to manage the pest must outweigh the costs of control.

There are some animals that are already managed through other legislation so don't need to be named as pests in the RPMP. For example, swan, pūkeko, uncontained goats, pigs and deer. Council will continue to support lead agencies managing these animals.

Once Council has decided we are going to manage a pest, we need to decide how much effort is needed to manage it. We also need to be sure we can fund that level of effort.

The pests currently managed by the RPMP are listed in Schedule 1 (see page 23).

Are there any pests not currently managed by the RPMP that should be included and why?

## What type of management is there?

National legislation provides a pest classification system to define different levels of management for pests that we need to follow. Pests are classified according to how severe the threat is and what can be achieved.

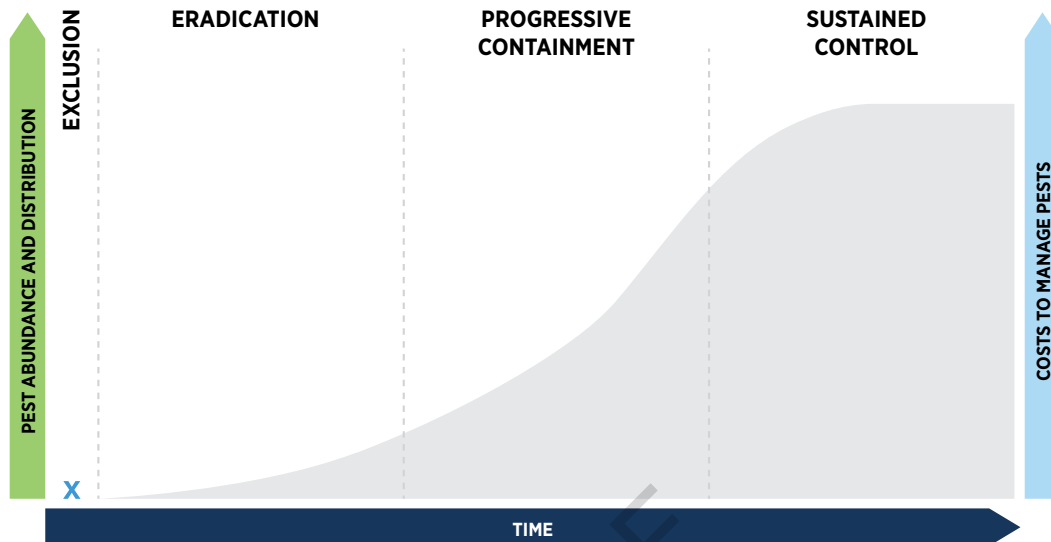
Every pest specified in our RPMP must be subject to one or more of the following programmes.

PROGRAMMES	DESCRIPTION AND EXAMPLES
<b>Exclusion</b>	Prevent the establishment of a pest, which is present in New Zealand but not yet established in an area or region. For example, perch.
<b>Eradication</b>	Reduce the infestation level of a pest to zero levels in an area in the short to medium term. For example, nassella tussock.
<b>Progressive containment</b>	Contain or reduce the geographic distribution of a pest to an area over time. For example, African feather grass.
<b>Sustained control</b>	Ongoing control of a pest to reduce its impacts on values and spread to other properties. For example, ragwort.
<b>Site led</b>	A pest that is capable of causing damage to a place is excluded or eradicated from that place, or is contained, reduced, or controlled within the place to an extent that protects the values of that place. For example, Moutohorā (Whale Island) which is predator free.

## The pest infestation curve

The pest infestation curve diagram is a useful way of describing what actions might be appropriate for managing any particular pest. Each area of the diagram has particular characteristics that help define what Council can usefully do in response to pests.

This Discussion Document uses the pest curve to provide a context for the discussion about pest management.



**Exclusion:** At the left hand side of the diagram are pests that have not managed to invade our region. Council's role is to manage potential pathways for the pest and survey risk areas to check that it has not reached the region.

**Eradication:** If a pest manages to cross into our region and is detected before its numbers or distribution significantly increases there may be an opportunity to eradicate the whole population.

**Progressive containment:** If a pest manages to establish before it is detected or eradication fails, there may be an opportunity to prevent it spreading to other parts of the region or to reduce population over time.

**Sustained control:** If a pest is widely established across the region, periodic or a low level of ongoing control will prevent or minimise its impacts.

## Who should pay?

There is an expectation that those who benefit from pest control or those who exacerbate a pest problem should be required to pay for pest management. As Council develops its pest management policy it needs to consider how the costs of control are allocated.

Generally for exclusion and eradication pests there is likely to be public good in preventing the pest from establishing so it is reasonable to assume management of that pest is a tax payer/rate payer responsibility.

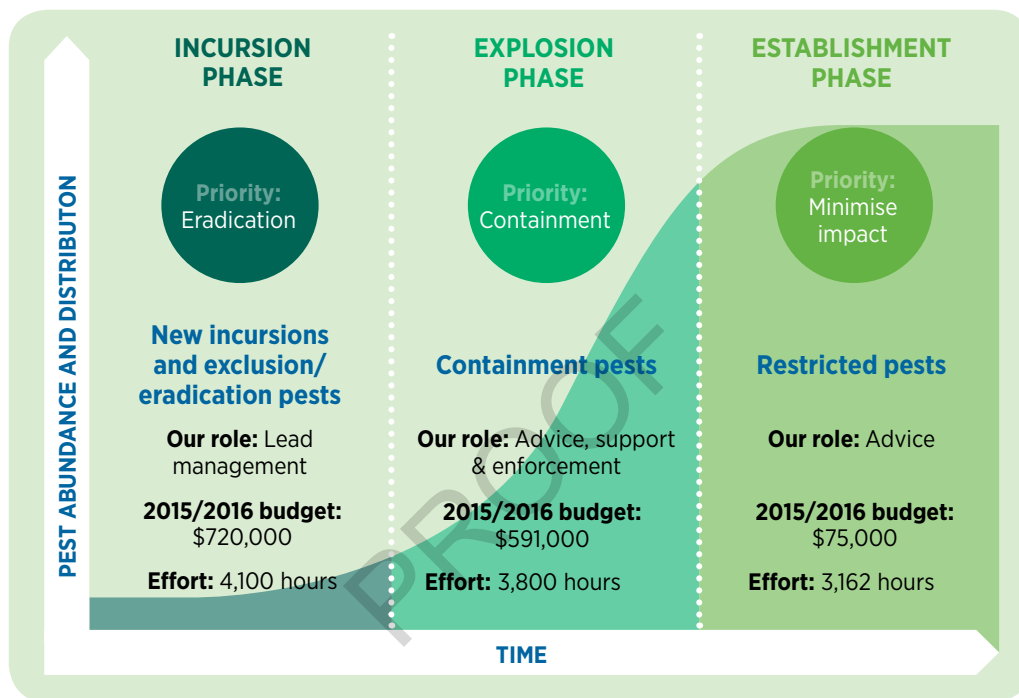
For progressive containment and sustained control, Council thinks the costs should fall to the landowner on the basis that land owners are responsible for managing their land. Landowners will be motivated to carry out their own pest control work to comply with RPMP rules or because it benefits them personally, either through increased production on farms, or enhanced the quality of the environment.

## Current Management: How are we doing?

Council actively manages 45 pests through the eradication/exclusion and containment pest categories in the current RPMP. For 31 of these pests, Council feels the current level of management is “about right” and Council is proposing to maintain its current level of pest management. However, Council is facing challenges in managing the remaining 13 pests, ‘new to region’ pest incursions and pest issues raised by the community. Our approach to managing these pests needs to be reconsidered through our review of the RPMP.

Our current pest management reflects a continued focus on detecting and controlling low incidence pests rather than managing well-established pests.

Any changes in our pest management approach has resourcing implications which could lead to increased property rates or a reprioritisation of our pest management effort.



### Issue 1: Resources to manage pests are finite

There are always resourcing constraints and pest management is no different. Any discussions on pest management ends up with hard decisions about where resources should go, what action should be taken, which pests represent the most risk and what resources will be needed to manage them.

#### Response:

Council's focus for future pest management is:

- Greater support for surveillance of new to region pests
- Council will lead eradication of new to region pests
- Less Regional Council intervention in the management of established, widespread pests. This means costs will generally fall to landowners for progressive containment and sustained control.
- Introduction of pathway management to reduce risk of new pest incursions (see issue 6)

Do you agree with Council aligning its resources with this focus?





# Pest Programmes

## Exclusion

Exclusion pests will generally sit off the infestation curve as they are not yet present in the region or in an area.

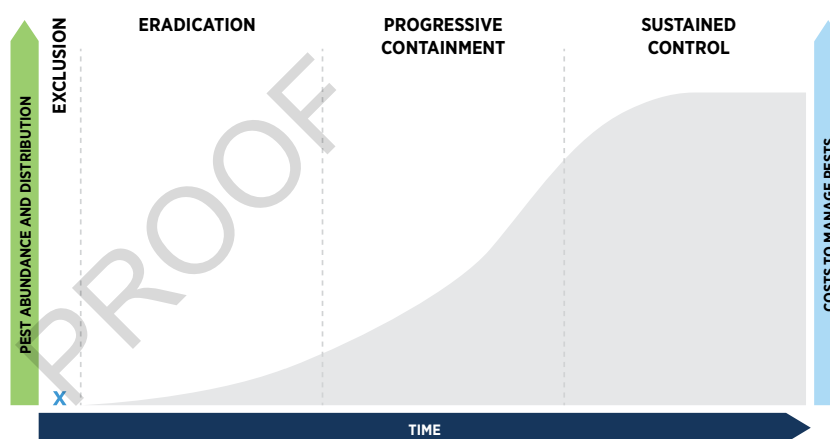
This programme focuses on stopping new pest species crossing our border. Preparedness, surveillance and research will help minimise the risk of a new pest incursion. It is much more cost effective to prevent threats than to manage them once they have arrived in our region.

Pest threats we need to manage are constantly changing. New pests constantly threaten to arrive in our region or there may be a risk of pests already existing in our region moving into new areas.

Reasons for this include:

- Greater movement of people, goods, animals and vehicles due to trade, migration, recreation, tourism and primary production
- Land use including land use change, product demand and production systems
- Climate change
- Lack of awareness and understanding of pests and how they spread

Council will prioritise action in the early phases of the pest infestation curve. This means greater focus on prevention, detection and early intervention.



## The challenge of excluding Marine Pests from the Bay of Plenty

Bay of Plenty's marine environment is highly valued for its cultural values, biodiversity, tourism, recreation, harvesting of seafood, aquaculture, natural character, and amenity. Marine pests can significantly impact on these values by outcompeting native species and fouling vessels, structures and equipment. The current RPMP does not include marine pests.

Two 'new to region' marine pests (Mediterranean fanworm and clubbed tunicate) were detected in Tauranga Harbour in 2013.

The Biosecurity Act allows regional councils to carry out small-scale eradication or control programmes for unwanted organisms, which are not already named in their RPMP, by developing small scale management programmes. Council approved small scale management programmes for Mediterranean fanworm and clubbed tunicate in 2015, the programmes were designed to manage the threat of marine pests until the review of the RPMP. The RPMP review will determine if and how we classify these pests.

The current level of infestation for Mediterranean fanworm is considered low. A total of 67 fanworm have been detected since the initial find in 2013, with all but two being found in either the Bridge or Sulphur Point marinas. Council is still managing a residual issue of fanworm infestation in the marina. A number of vessels have also been identified with hull fouling which contains fanworm. In all cases the owners have removed and cleaned the vessels using appropriate methods to remove the threat. All known sites are within Tauranga harbour.

The current level of infestation for *Styela clava* is also considered low. While fewer sites have been identified when compared to fanworm, 29, the level of infestation at these sites is generally higher. The biology of *Styela clava* also means it is likely to establish faster than fanworm. All known sites are within Tauranga harbour apart from a recent discovery at Karewa Island. *Styela clava* has also been identified in contaminated mussels for sale at supermarkets around the Bay of Plenty.

The likely way these pests will spread is via boats travelling from a location that has the pest present or through the movement of contaminated equipment. Although we know for *Styela clava* there is also a degree of natural spread. Currently effort is focussed on extensive surveillance of known sites, removal of any organisms found and raising awareness of the risks of moving vessels with fouled hulls.

Council is considering including Mediterranean fanworm and *Styela clava* as either Eradication or Progressive Containment species in the next RPMP. Other regions are considering pathway management plans to manage the spread of marine pests. Council is keeping up to date with these developments and assessing how such an approach could be used in the Bay of Plenty.



Photos courtesy  
of G.Read and Northland  
Regional Council



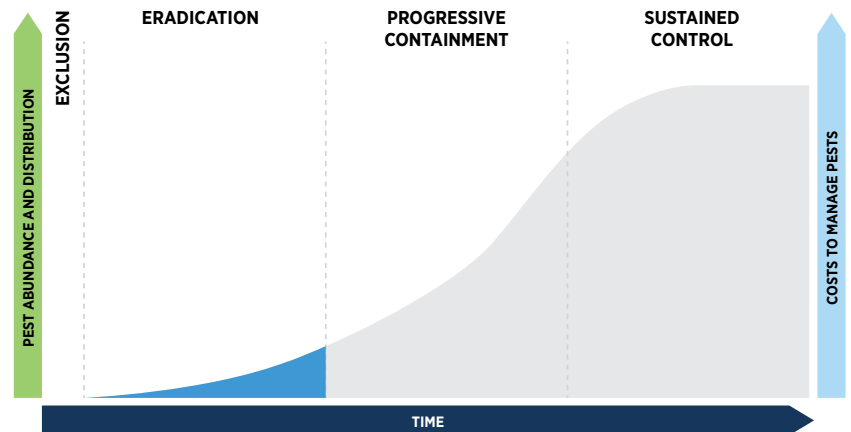
Mediterranean fanworm on boat  
hull in Pilot Bay, Tauranga Harbour  
November 2014



## Eradication

Once a species is in our region or newly present in an area and we know where it is, our efforts are best aimed at stopping it from spreading and eradicating it if we can. This relies on knowing how far the species has spread and having appropriate tools to completely eradicate it over a relatively short timeframe.

Generally, the economic benefits of eradicating a pest far outweigh the costs. There will also be environmental and social benefits in managing the pest.



### CASE STUDY

## Catfish in Lake Rotoiti

The existing RPMP includes brown bullhead catfish (catfish) as an exclusion/eradication pest. In March 2016, a live catfish was captured by a weed harvester in Lake Rotoiti – the first known incidence of this pest being present. In response, an initial fyke net survey was carried out on 30 March 2016 catching 52 catfish. Further netting operations caught approximately 400 catfish between March and June 2016. This included juveniles through to what is generally expected to be the maximum size (350mm) in New Zealand. Lake Rotoiti is the only place where brown bullhead catfish are known to be present in the Bay of Plenty region.

Catfish are opportunistic scavengers and pose significant risks to the environment. They predate on and compete with many desirable species and are generally considered the biggest threat to kōura currently in New Zealand. They can impact on water quality due to some of their feeding habits but this impact is likely to be relatively minor. They could impact many environmental, social, recreational and cultural values in the region. They are a hardy species capable of surviving a variety of environmental conditions including polluted and low oxygen water bodies.

They can survive for long period out of water which increases the risk of them being transferred to other lakes and rivers. Likely methods of spread can include intentional release, accidental release through contaminated equipment and vessels and natural spread through connected water bodies.

Council has been working with a number of key stakeholders and research providers to determine the best management options. Significant time and money has been allocated to control the population and to understand more about the current incursion and how to more effectively target them.

Council is currently taking a progressive containment approach while investigating and researching new control tools which may make eradication possible in the future.



## Issue 2: New pest incursions and pest spread occur all the time

Response:

- Add new pests to the RPMP.

Council is considering adding marine pests, velvetleaf, rough horsetail, arrowhead, creeping gloxinia, spiny emex and stout bamboo grass to its RPMP. New incursions of these pests have been detected since the last RPMP.

*The benefits and costs of managing of each of these pests will be analysed to confirm their inclusion (and appropriate programme classification) in the RPMP*

- Council will take an adaptive and responsive approach to new pest incursions. This may include undertaking partial reviews of pest management plans to address new pests or changes to their status.
- Council can utilise other provisions in the Biosecurity Act to manage new incursions. For example Council's small-scale eradication to manage marine pests (Mediterranean fanworm and clubbed tunicate programmes).
- Council may manage pests using non-statutory mechanisms for example, providing landowners with advice and funding support to control pests (e.g. via Biodiversity Management Plans).
- Council will support the intent of national and industry-led responses to new pest incursions and will contribute when appropriate.
- Council will be proactive in increasing education, awareness and information to enable community surveillance for new to region pests.

Are there pests that you think could be eradicated, but are in other categories?

### CASE STUDY

## Velvetleaf

Velvetleaf is a serious cropping weed, potentially affecting arable crops by competing for nutrients, space, and water. It is one of the world's worst cropping weeds, and can cause significant yield losses if not controlled. It was initially introduced to New Zealand by contaminated seed batches and can spread through plant material (e.g. maize silage), stock, vehicles, machinery and equipment.

Unfortunately there is one property in the Bay of Plenty where velvetleaf has been confirmed. Ministry for Primary Industries (MPI) is currently leading the response to this incursion.

Due to the amount of farmland and cropping in the Bay of Plenty, there is a large potential for spread and negative impacts. Movement of agricultural machinery and feed between Waikato (where velvetleaf is more established) and the Bay of Plenty are key potential vectors.

Council is currently supporting MPI's efforts to contain velvetleaf. MPI's approach is based on voluntary action by affected parties (farmers, agricultural contractors) to control velvetleaf and manage the risks of spread. Currently Council has no ability to make landowners or contractors apply best management practice.

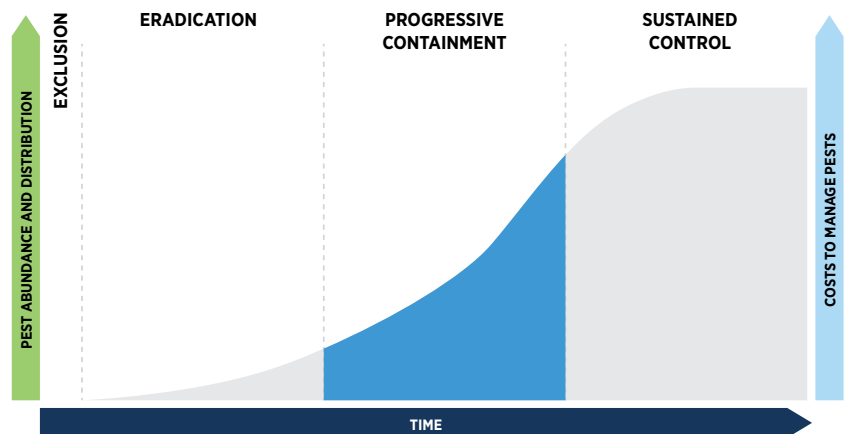
Council is considering velvetleaf as a pest for inclusion in the RPMP (or managing risk of spread through a regional pathways plan). This would mean Council will have the lead management role in the region. The RPMP could contain rules to underpin good management practice and improve the likelihood of successful containment of this pest.



## Progressive Containment

If a pest was not detected early enough for eradication to be attempted or an eradication attempt has failed, the priority then becomes to prevent it spreading further and to reduce the pest population over time. This is progressive containment. Examples of pests being effectively contained in our region include feral goats, African feathergrass, yellow flag iris and Italian buckthorn. Council focuses its efforts on containment pests with limited distribution and where effective control is realistically feasible.

The rules for 'progressive containment' pests will be similar to existing rules in the current RPMP. These pests are considered enough of a problem for landowners to be required to remove or destroy them.



**Issue 3:** Ongoing effort is required to manage pests that could significantly expand their range and increase their impact through the Bay of Plenty.

**Response:**

- Council will maintain its 'progressive containment' effort for established pests where good progress is being made.
- Council may divide up the region and assign different programme classifications according to the level of infestation.

Should Council continue to try and contain pests that are now relatively well-established through the region, such as woolly nightshade, or should we consider managing them as sustained control pests?



## On-farm biosecurity advice

Plant pest infestations can lead to financial loss for farmers and horticultural producers, and seriously harm our natural environment. Many pest plants are spread by natural means such as birds, wind and water, but farming practices and other human activities can also spread pests.

Council recommends that everyone treats their property boundary like a border. Measures to protect your property include:

- Know the threats
- Make sure machinery and equipment moving on and off your property is clean
- Consider the pest status of the properties you buy your animal/stock feed from
- Do regular inspections and contact your neighbours about pests you see across your boundary

Do you think focusing on-farm biosecurity is an effective way to increase awareness of agricultural pests and how they spread? What is best way to deliver information on agricultural pests?

On farm biosecurity can protect businesses. Should Council continue to offer an advisory service to help farmers develop on-farm biosecurity plans?

## Sustained Control

Where a pest is well established and preventing its spread is no longer a realistic objective, management of the pest focuses on reducing the general impacts of the pest. This is sustained control.

The economic returns to manage these pests are lower. However on balance environmental and social outcomes might be more important when making decisions to act.

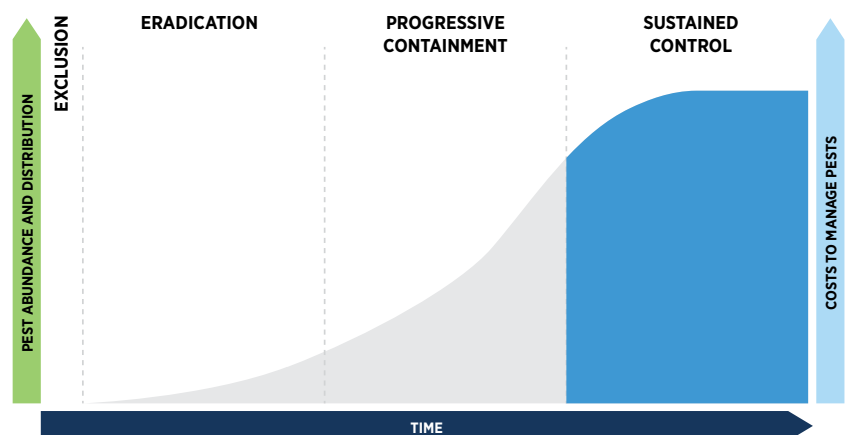
Council has invested significant funding and resources to control some of these pests over the last 20 years with mixed successes. The review of this Plan is a good time to reconsider Council's role in managing pests that meet the criteria for sustained control.

For many established pests, the land occupiers are both the beneficiaries of the pest control (for example benefiting from rabbit control by having more productive grass) and exacerbators of the pest problem (for example, contributing to the problem by allowing rabbit populations to increase on their land which then spread to neighbouring land). Landowners will make decisions about what levels of pest control make sense in relation to productivity returns or protecting their land.

Council is proposing occupiers will be largely responsible for managing well established pests (e.g. those in the sustained control programmes as indicated in Schedule 1). Currently there is not a 'sustained control' programme in our RPMP, and for most established pests Council just provides advice on how the pests could be managed.

Rules could focus on land owners controlling 'sustained control' pests on their land and preventing them from spreading to neighbouring land.

Pests that could be considered as well established in our region and meet the sustained control criteria include: blackberry, gorse, ragwort and wild ginger.



## Site-led Pest Management

Some pests are only a problem in some areas and others are so widespread that managing them across the region is unrealistic. However, some of these pests can significantly impact biodiversity or cultural values, for example, so there is value in managing them at sites that have high value. It is often better to manage these pest threats collectively rather than via individual pest species programmes. This approach is termed 'site-led' pest management.

This approach has the potential to support Council's Biodiversity Programme – a voluntary programme where landowners and community groups are offered advice and funding support to protect and manage high value sites.

Pests that could be considered as site-led pests include: royal fern, green goddess lily, banana passionfruit, Japanese honeysuckle, cherry trees, hedgehogs, possums, rodents and stoats. The full list of pests Council is proposing to manage as site led pests is in Schedule 1. Some of those are already subject to regulation under the Biosecurity Act as they have been declared as unwanted organisms. For some of those pests, Council has agreed to monitor them to prevent their sale, propagation and distribution through the National Plant Pest Accord.

Any pest listed in the RPMP under other programmes is also subject to site-led management rules.

Rules in this category will focus on stopping the pest entering a specified site and may require removal of pests within that site. Criteria for these rules will need to be developed, but a possible scenario is the rule may apply to adjoining properties or properties within a certain distance of the site being protected.

### Issue 4: Targeted pest management is required to protect high value sites and vulnerable sites

Site led rules and associated rules can help ensure the success of weed and pest control efforts where they are protecting values such as biodiversity.

#### Response:

- Council is considering site-led programmes to protect community values. These rules may mean removal of pests or boundary control.

Criteria for site-led programmes will need to be developed. Criteria could be based on biodiversity value, landowner agreement, current pest management effort, physical, geographical and cultural factors.

Would you support site-led rules to protect high value sites?

## CASE STUDY



### Pūtauaki (Mount Edgecumbe)

Nga Maunga Putauaki Trust and Council are working together to manage animal and plant pests on and around Pūtauaki (approximately 1000 hectares) which is a significant and highly valued landscape in our region.

The long term goal is for Ngā Maunga Pūtauaki to be restored from pinus radiata back into native species. The main plant pests being currently targeted are wilding pines and gorse. Other pest plants on the radar for future management include the Taiwan cherry (on the perimeter of the subject area) and wattle (although wattle is recognised as a nurse crop for native species at this stage of regeneration).

Possum and rat control has been very successful for a portion of the area and small bird monitoring shows an increase in bird numbers.



# Changing the way we manage some pests

Current RPMP management objectives for some established pests are not being met. Reasons for this include:

- extent of the pest not being fully understood when the last RPMP was developed
- available resourcing to manage the pest
- impacts of the pest are not significant enough to motivate land occupiers to manage the pest.

The RPMP review provides an opportunity to align our pest management priorities and our proposed programmes to manage different pests.

## CASE STUDY

### Woolly nightshade

Woolly Nightshade is a fast growing shrub or small tree that forms dense stands, crowding out and suppressing all other plants. It invades low intensity pastoral land, production forests, native forest margins, waste land, and urban areas. This species is widespread throughout warm, coastal parts of the region. In colder, inland areas of the region it is still at very low densities.

Currently Woolly Nightshade is a containment pest. Woolly Nightshade has received a vast amount of Council resources for several decades in an attempt to contain it, yet it is still spreading and it is failing to meet the current RPMP objectives. Due to its widespread distribution, quick growth and dispersal, ongoing containment of Woolly Nightshade in coastal areas of the region may not be feasible. However in the cooler, inland areas, progressive containment may still be achievable.





**Issue 5:** Current RPMP management objectives need to be reassessed for some established pests.

**Response:**

- Council is considering reclassification of some pests to reflect more achievable management objectives and available resourcing. Proposed reclassifications are shown in Schedule 1.
- Council is considering reducing intervention to manage some pests and transferring the responsibility to manage those pests to private land owners.

Do you agree with Council stepping back from managing well established pests and the responsibility moving towards landowners?

Do you think Council should classify some pests differently across the region depending on their level of infestation in different areas?

If yes, which pests?

**CASE STUDY**

## Alligator weed

Alligator weed has become widespread in parts of Northland and Auckland with a scattered distribution through the Waikato and Bay of Plenty and a few sites in the South Island. In both aquatic and terrestrial sites, alligator weed rapidly displaces native and crop plant species, altering habitats and water/land use. Alligator weed is difficult to control because each node is capable of forming a new plant, and fragments generated from mechanical clearance only encourage its spread.

The first alligator weed site discovered in the Bay of Plenty was on a Pikowai farm in the eastern Bay of Plenty in 1995. This site had previously been a market garden, and it is thought that alligator weed fragments may have been transferred to the site via kūmara purchased from Northland where alligator weed is abundant. Most of the alligator weed sites in the eastern Bay of Plenty appear to have some link to previous kūmara gardens.

Alligator weed is currently classified as an 'eradication pest' in our RPMP. Increased surveillance effort in recent years has identified several problematic sites on the Rangitaiki Plains and a kiwifruit orchard at Ōpōtiki. There are currently 17 alligator weed sites in the Bay of Plenty region. Three sites are now considered eradicated and the remaining 14 sites are under active management.

The sites in the western Bay of Plenty are generally small, isolated and relatively new, and are tracking well for being eradicated in the short to medium term. Generally, the sites in the eastern Bay of Plenty have been established for a long period of time (due to their links to historic market gardens), cover large areas and are challenging sites, this includes the lower Rangitāiki River. A number of new sites have been found in the last 2-3 years in the eastern Bay of Plenty. The current management effort at these sites aims to suppress growth and prevent any further spread. For these sites, eradication will not be achieved in the medium term.

Council needs to decide whether the classification of alligator weed should be changed from eradication to progressive containment or whether there should be different classifications across the region depending on the level of infestation.





# A new option – Pathway Management

Amendments to the Biosecurity Act in 2012 include the provision of pathway management plans. Pathway management planning is a new opportunity to provide a preventative and coordinated approach to reduce the spread of pests by specifically addressing how pests travel. An example of pathway management is requiring the cleaning of boat trailers to manage the spread of aquatic plants.

The fundamental difference between RPMPs and pathway management plans is that the RPMP specifies the pest to be managed, whereas the pathway management plan manages the key risk pathways (potentially for a number of pests). Both plans may contain rules and provisions for compliance.

## CASE STUDY

### Aquatic plants

Aquatic pest plants, such as hornwort, lagarosiphon and egeria, are well established through much of the Bay of Plenty. However some of our lakes are still free of one or more of these pests. Council has worked with other agencies like Land Information New Zealand and Ministry for Primary Industries to reduce the risk of these problematic pests spreading to new lakes. This work has involved an advocacy programme run each summer to inform and motivate people to clean their boats and equipment, spray programmes around boat ramps to minimise the risk of weed attaching to boats, and establish 'weed cordons' around some boat ramps to hopefully contain any weed fragments that are accidentally introduced to a lake. The RPMP also contains rules requiring people not to transport vessels or machinery contaminated with aquatic pests.

While this work has helped minimise the risk of weed spread between lakes it has not addressed the issues associated with weed growing in a lake, particularly where that weed is now preventing people from using and enjoying the lake.

Council is currently working with LINZ, Te Arawa and other stakeholders to develop Lake Plant Management Plans which will give a more 'global' view of aquatic weed management. Plans will aim to address the risk of weed spread as well as weed related amenity and biodiversity issues.



*Lagarosiphon major*



*Weed cordon at Lake Ōkataina*

**Issue 6:** Multiple pests are spread the same way and it makes sense to target some pest pathways.

Examples of risk pathways include the movement of agricultural and forestry machinery and in the case of marine and aquatic pests, the movement of boats and fishing equipment.

**Response:**

- Council is considering developing pathway management plans to manage some risk pathways, in particular the spread of aquatic, marine and agricultural pests.
- Support ‘pathway’ education programs focused about on-farm biosecurity.
- Increase awareness around risk of spread associated with movement of agricultural, forestry and marine vehicles and equipment and how risk can be managed.

Do you think managing pest spread through pathway management requires a good practice and/or regulatory approach?

## Good Neighbour rules

Rules will play an integral role in securing many of the pest management outcomes sought by the RPMP. They help protect land owners and/or occupiers from the effects of the actions or inactions of others where non-regulatory means are inappropriate or do not succeed.

If control is being done on one property in accordance with the RPMP, neighbours are also required to do so in boundary areas. As there will already be rules for exclusion, eradication, progressive containment and sustained control pests, Council is proposing good neighbour rules could apply to site-led, sustained control or progressive containment pests.

Importantly, Good Neighbour rules now bind the Crown following legislative amendments. There are certain tests that need to be met.

**Issue 7:** Lack of pest control by some landowners (including the Crown) can undermine the effort of adjacent landowners

**Response:**

The RPMP is likely to have good neighbour rules for some pests listed as site-led, sustained control or progressive containment.

Do you agree that a future Plan should include Good Neighbour rules that bind all land occupiers to manage some pests?

.....  
Are there any other pests that should be managed through Good Neighbour rules?





# Issues with particular pests

There are some pests which need particular consideration because of special circumstances.

## Gorse

Current management of gorse across the region focuses on boundary control. However we know gorse in the Rotorua lakes catchments contributes to the nitrification of the lake and water quality degradation.

Council has initiated a Lake Rotorua Gorse Conversion Project to incentivise gorse removal for water quality purposes. The purpose of this project is to improve water quality in Lake Rotorua by reducing up to 30 tonnes of nitrogen entering the lake from gorse infested land. Uptake of the financial incentives to remove gorse in the lakes catchments is voluntary.

Council is considering a regulatory approach to sit in behind the incentives offered for gorse removal to ensure the water quality targets are met and to recognise the special circumstances of gorse in the Lake Rotorua catchment.

Do you agree with Council using a regulatory approach (including smaller blocks and roadsides) to ensure gorse control in the Lake Rotorua catchment?

.....

How do you think gorse should be managed in other nitrogen sensitive catchments?

.....

How do you think gorse should be managed in rest of the region?



Photo sourced from <http://www.rotorualakes.co.nz/vdb/document/1171>

## Unowned cats

Unowned cats can have a significant negative impact on local wildlife, human health and property. Currently cats and cat problems have a high profile and last year submissions were received on the Long Term Plan with regard to the management of stray cats.

Regional councils have a responsibility to provide regional leadership under the Biosecurity Act. The Bay of Plenty Regional Council's current RPMP, lists Feral/wild cats as a "Restricted pest animal". The RPMP defines Feral as "Any cat that is living without direct or indirect (sheltering under buildings, scavenging food) assistance from humans.

Under the RPMP cat control is a "landowner responsibility" however the Council currently supports cat control via its Biodiversity Management Programme. For example managing cats where they pose a significant threat to the biodiversity values being protected (e.g. the Whakatāne Kiwi Project).

As a result of a submission to the Long Term Plan, BOPRC elected to support a cat control programme run by SPCA and ARRC Wildlife, <http://www.bopcats.co.nz/>

A national cat management strategy was released for consultation in September 2016 by the National Cat Management Strategy Group. This Group consists of representative national organisations that have an interest in cats. The Strategy makes a number of recommendations including micro-chipping of all owned cats. Council will keep up to date with progress on the National Cat Management Strategy and will align with any requirements that follow on from this process.

Moving forward, the new RPMP could take a number of approaches, largely dependent on community views and subsequent costs.

1. **Status Quo** – cat control remains a "landowner responsibility" and the Council supports cat control via its Biodiversity Management Programme, where cats pose a significant threat to the biodiversity values being protected under a particular programme at a particular site. This can be termed "site-led" pest management.
2. **Remove cats from the RPMP** and allow the community and local City/District councils to deal with the issue of unowned cats.
3. **Add rules to the RPMP** such as requiring all cat owners to micro-chip and neuter their cats. Exemption may be granted to registered cat breeders to keep their cats entire.



What role do you think Council should have in managing cats?





# Working with others

A RPMP is part of a wider national biosecurity framework. Pest management requires a collective effort across the nation to protect New Zealand’s environmental, economic, social and cultural values from pest threats.

Council supports a joint agency approach in pest management. When appropriate, Council will align with national, industry or community led initiatives.

Management of new-to-New Zealand pests such as the Queensland Fruit Fly occurs at the national level. Examples of national initiatives to manage pests across the country include Predator Free New Zealand, Wilding Pine Strategy and rules to manage ballast water.

.....

## Predator Free New Zealand 2050

Recently, the Government announced its goal of New Zealand being predator free by 2050. The ambition of this goal is that every part of New Zealand will be completely free of rats, stoats and possums.

Predator Free 2050 aims to build on the efforts already underway across communities, iwi, private businesses, philanthropists, scientists and government.

Four interim 2025 goals:

- Suppress predators on a further 1 million hectares;
  - Eradicate predators from at least 20,000 hectares without the use of fences;
  - Eradicate predators from island nature reserves;
  - Achieve a breakthrough science solution capable of eradicating at least one small mammal predator.
- .....

Unfortunately some pests are more of a problem in our region compared with the rest of the nation and require combined effort between Regional Council and other agencies.

## Biosecurity 2025 Direction Statement for New Zealand’s biosecurity system

Recently the Ministry for Primary Industries led the development of Biosecurity 2025. This is a direction statement for New Zealand’s biosecurity system that presents a high-level roadmap on how the nation can future-proof New Zealand’s biosecurity system through to 2025 and beyond.

It has been developed on the premise that everyone needs to participate in biosecurity. Biosecurity 2025 includes the following five strategic directions indicating main priority areas:

The five strategic directions are:

- A biosecurity team of 4.7 million
- A toolbox for tomorrow
- Smart, free-flowing information
- Effective leadership and governance
- Tomorrow’s skills and assets.

Council understands it is a partner in this initiative and will ensure our own policy and operations align with this direction.

## CASE STUDY

# Central Government and Local Government working together

## Wallabies

Since dama wallabies were released near Lake Ōkāreka in 1912 their distribution has continued to expand. They now occupy approximately 200,000 hectares, preferring forested or scrubby habitat with access to pasture. Wallabies are a threat to production forestry for the first few years following planting, they compete with stock for pasture and they cause significant damage to the understorey of native forest, preventing the regeneration of some species.

In 2006 Department of Conservation (DOC), Bay of Plenty Regional Council and Waikato Regional Council (WRC), agreed to work together through a multi-agency management plan, to prevent further spread of wallabies. Resourcing limitations combined with a lack of proven surveillance, monitoring and control tools for low density populations have limited progress.

MPI investigated the potential threat of on-going wallaby spread to New Zealand. The worst case scenario showed, without control, dama wallabies could spread to cover  $\frac{1}{3}$  of the North Island in 50 years and costing New Zealand \$12.3 million in lost revenue over the next 10 years.

In the last year, increased funding by BOPRC and WRC has improved our understanding of the current distribution and control of several satellite populations has been implemented. Increased public awareness resulting from TV, radio and newspaper coverage, improved reporting rates from the public.

Even with current resourcing, progressive containment of wallabies will prove challenging. Our surveillance tools (camera traps, ground survey and wallaby indicating dogs) have been successful in detecting new populations of wallabies, but the 'detection probability' of these methods is not understood (i.e. does a negative result actually mean wallabies are not present). Effective methods for controlling detected wallabies are limited.

Long Term Plan submissions, along with public interest generated by the recent Lakes Water Quality Society symposium, have shown that public and iwi concerns about wallabies are increasing.

To be successful in containing wallabies, long term funding commitments are needed to support improvements in surveillance and control tools, research into the drivers for wallaby dispersal, and surveillance and control operations.



Should Council continue pursuing the containment of wallabies if this will require higher ratepayer funding?

*Photo showing the impact of dama wallaby on the native forest understorey at Ōkātina. Wallabies have access to the area on the left and are excluded from the area on the right.*





## Issue 8: Effective pest management relies on government, councils community and industry working together.

### Response:

- Council will continue to work with other agencies on pests of mutual interest or supporting other agencies who have a clear leadership role in managing particular pests. This includes
  - National Pest Plant Accord (working with Nursery and Garden Industry Association, MPI, DOC and regional councils to prevent the sale of and distribution of pest plants)
  - National Interest Pest Response (supporting MPI to manage certain high risk pests)
  - National Wilding Conifer Management Strategy 2015-2030 (working with MPI, DOC, forestry companies and landowners)
  - Wallaby Working Group (supporting MPI and working with WRC and DOC)
  - Wild kiwifruit (working with Kiwifruit Vine Health, orchardists and landowners)
  - New to NZ pest incursions (supporting MPI)
  - Top of the North Marine Biosecurity Partnership (working with regional councils in the northern North Island, DOC and MPI)
  - Kauri Dieback Programme (working with iwi, MPI, DOC, Northland Regional Council, Auckland Council and Waikato Regional Council)
- Council will work with industry representatives and the community to advocate good pest management practice
- Council supports ongoing science to advance effective pest management

### CASE STUDY

## Kiwifruit

Wild kiwifruit is a fast growing vine which rapidly forms a dense, heavy blanket of growth that smothers and eventually kills, or topples, trees and shrubs beneath. It is an ecosystem modifier and is a significant threat to native bush and plantation forestry. Wild kiwifruit is able to grow in a number of habitats, e.g. native bush, pine forest, shelter belts and gullies. It is mostly found near orchard areas (e.g. Te Puke) but can also found in isolated places, usually in native bush.

Seed is spread by birds eating the fruit left on vines in orchards. It is also spread by humans dropping fruit remains. An additional mechanism of spread is from reject fruit being transported and fed out as stock food. There are a large number of wild kiwifruit sites in the region, for example a recent aerial survey of the Te Puke gullies found around 100 new sites.

The expansion of the kiwifruit industry into new parts of the region i.e. Ōpōtiki and Te Kaha, is increasing the spread of wild kiwifruit due to suitable habitat being nearby. A large amount of Council resource is being utilised for surveillance and control of wild kiwifruit.

The Industry, through Kiwifruit Vine Health (KVH), also contributes to the costs of control. Landowners with wild kiwifruit are required to control any wild kiwifruit on their properties but are offered a subsidised control programme where 75 percent of the control costs are covered through joint Council and KVH funding. The kiwifruit industry is the primary exacerbator for this pest plant, by providing an ongoing seed source for spread.

Council is proposing to maintain wild kiwifruit as a progressive containment pest but wants to review how surveillance and control work is funded.



How do you think the management of wild kiwifruit should be resourced?

Should landowners/occupiers be made responsible for controlling wild kiwifruit on their properties?



## PROGRESS KEY

- Not achieved
- Meeting some RPMP objectives
- Meeting all RPMP objectives

# Schedule 1

Progress	Current RPMP Programme: <b>Agency Pests</b>				
	<i>There will be no Agency Pests in the next RPMP, as this category is not provided for by legislation. These pests are of national significance and are subject to programmes coordinated by the Crown.</i>				
	Pest	Comments	Proposed Programme	Changes to required resourcing	
<span style="color: teal;">●</span>	Cape tulip	2 sites under surveillance	None	→	None
<span style="color: teal;">●</span>	Didymo	Waterway monitoring in place	None	→	None
<span style="color: teal;">●</span>	Hydrilla	Not present	None	→	None
<span style="color: teal;">●</span>	Johnson grass	Not present	None	→	None
<span style="color: teal;">●</span>	Manchurian wild rice	Not present	None	→	None
<span style="color: teal;">●</span>	Phragmites	Not present	None	→	None
<span style="color: teal;">●</span>	Kauri Dieback	Not present	None	→	None
<span style="color: teal;">●</span>	Pyp grass	Not present	None	→	None
<span style="color: teal;">●</span>	Salvinia	4 sites under surveillance	None	→	None
<span style="color: teal;">●</span>	Water hyacinth	3 sites under surveillance, 1 new site detected - MPI notified	None	→	None
<span style="color: teal;">●</span>	White bryony	Not present	None	→	None
<span style="color: teal;">●</span>	Rainbow lorikeet	no known breeding populations, but individual birds sighted - MPI notified	None	→	None
<span style="color: teal;">●</span>	Feral sika deer	Sightings in eastern BOP reported to DOC	None	→	None

Progress	Current RPMP Programme: <b>Eradication/Exclusion Pests</b>				
	Pest	Comments	Proposed Programme	Changes to required resourcing	
<span style="color: red;">●</span>	Alligator weed	Significant new sites along Rangitāiki River and at Ōpōtiki detected, Eradication in short term unlikely.	Progressive containment	↑	Medium
<span style="color: teal;">●</span>	Horse nettle	Satisfactory progress	Eradication	→	None
<span style="color: teal;">●</span>	Kudzu vine	Satisfactory progress	Eradication	→	None
<span style="color: teal;">●</span>	Marshwort	Satisfactory progress	Exclusion	→	None

Progress	Current RPMP Programme: <b>Eradication/Exclusion Pests</b>				
	Pest	Comments	Proposed Programme	Changes to required resourcing	
●	Nassella tussock	Satisfactory progress	Eradication	→	None
●	Noogoora bur	Satisfactory progress	Eradication	↑	Low
●	Purple loosestrife	Satisfactory progress	Eradication	→	None
●	Senegal tea	Satisfactory progress	Eradication	→	None
●	Spartina	Management plan for Maketū yet to be developed.	Eradication	↑	Medium
●	Water poppy	Satisfactory progress	Exclusion	→	None
●	White edged nightshade	Satisfactory progress	Eradication	→	None
●	Catfish	Catfish population detected in Lake Rotoiti, eradication currently not technically feasible.	Progressive containment	↑	High
●	Koi carp	Satisfactory progress	Eradication	→	None
●	Perch	Satisfactory progress	None	→	None
●	Rooks	Satisfactory progress	Eradication	→	None

Progress	Current RPMP Programme: <b>Containment Pests</b>				
	Pest	Comments	Proposed Programme	Changes to required resourcing	
●	African feather grass	Satisfactory progress	Progressive containment	→	None
●	Apple of Sodom	Satisfactory progress	Progressive containment	→	None
●	Asiatic knotweed	Satisfactory progress	Progressive containment	→	None
●	Blackberry (defined areas)	Satisfactory progress	Sustained Control	→	None
●	Boneseed	Satisfactory progress	Progressive containment	→	None
●	Chilean rhubarb	Distribution not well understood	Site-led	↓	Low
●	Climbing spindle berry	Density reduction achieved, but increase in distribution	Sustained Control	↑	Low
●	Coast tea tree	Satisfactory progress	Progressive containment	→	None
●	Darwin's barberry	Satisfactory progress	Progressive containment	→	None
●	Egeria densa	Satisfactory progress	Site-led	↑	Low
●	Gorse (defined areas)	Satisfactory progress	Sustained Control	↑	Medium
●	Green goddess lily	Pest is wide spread through BOP	Site-led	↓	Low
●	Hornwort	Satisfactory progress	Site-led	↑	Medium
●	Italian buckthorn	Satisfactory progress	Progressive containment	→	None
●	Lagarosiphon	Satisfactory progress	Site-led	↑	Medium
●	Lantana	Biocontrol released	Sustained Control	↓	Low
●	Lodgepole pine	Satisfactory progress	Progressive containment	↑	Medium
●	Old man's beard	Satisfactory progress	Sustained Control	↑	Medium
●	Ragwort (defined areas)	Satisfactory progress	Sustained Control	→	None

Progress	Current RPMP Programme: <b>Containment Pests</b>				
	Pest	Comments	Proposed Programme	Changes to required resourcing	
●	Royal fern	Containment of distribution will be challenging	Site-led	↓	Low
●	Variegated thistle	Satisfactory progress	Progressive containment	→	None
●	Wild ginger – yellow and kahili	Density reduction achieved, but increase in distribution	Sustained Control	→	None
●	Wild kiwifruit	Density reduction achieved, but increase in distribution	Progressive containment	→	None
●	Woolly nightshade (defined areas)	Density reduction achieved, but increase in distribution	Sustained Control	↑	Medium
●	Yellow flag iris	Satisfactory progress	Progressive containment	→	None
●	Feral Goats	Satisfactory progress	Progressive containment	→	None
●	Rudd	Satisfactory progress	Progressive containment	→	None
●	Tench	Satisfactory progress	None	→	None
●	Wallabies	Containment of distribution will be challenging	Progressive containment	↑	High

Progress	Current RPMP Programme: <b>Restricted Pests</b>				
	* These species have been declared as unwanted organisms and are subject to rules in the Biosecurity Act.				
	Pest	Comments	Proposed Programme	Changes to required resourcing	
●	Agapanthus	Satisfactory progress	Site-led	→	None
●	Aluminium plant*	Satisfactory progress	Site-led	→	None
●	Arum lily	Satisfactory progress	Site-led	→	None
●	Banana passionfruit*	Satisfactory progress	Site-led	→	None
●	Blue morning glory*	Satisfactory progress	Site-led	→	None
●	Bushy asparagus*	Satisfactory progress	Site-led	→	None
●	Californian rush *	Satisfactory progress	Site-led	→	None
●	Cathedral bells*	Satisfactory progress	Site-led	→	None
●	Cestrum species (four)	Satisfactory progress	Site-led	→	None
●	Chilean flame creeper*	Satisfactory progress	Site-led	→	None
●	Chinese fan palm	Satisfactory progress	Site-led	→	None
●	Climbing asparagus*	Satisfactory progress	Site-led	→	None
●	Climbing dock	Satisfactory progress	Site-led	→	None
●	Coastal banksia	Satisfactory progress	Site-led	→	None
●	Crack willow*	Satisfactory progress	Site-led	→	None
●	Elaeagnus	Satisfactory progress	Site-led	→	None
●	Elephant's ear	Satisfactory progress	Site-led	→	None
●	Elodea canadensis	Satisfactory progress	Site-led	→	None
●	English ivy	Satisfactory progress	Site-led	→	None
●	Firethorn*	Satisfactory progress	Site-led	→	None



Progress	Current RPMP Programme: <b>Restricted Pests</b>				
	<i>* These species have been declared as unwanted organisms and are subject to rules in the Biosecurity Act.</i>				
	Pest	Comments	Proposed Programme	Changes to required resourcing	
●	German ivy	Satisfactory progress	Site-led	→	None
●	Grey willow*	Satisfactory progress	Site-led	→	None
●	Heather*	Satisfactory progress	Site-led	→	None
●	Himalayan balsam	Satisfactory progress	Site-led	→	None
●	Houttuynia	Satisfactory progress	Site-led	→	None
●	Japanese honeysuckle*	Satisfactory progress	Site-led	→	None
●	Japanese spindle tree*	Satisfactory progress	Site-led	→	None
●	Japanese walnut	Satisfactory progress	Site-led	→	None
●	Jasmine	Satisfactory progress	Site-led	→	None
●	Lilium formosanum	Satisfactory progress	Site-led	→	None
●	Mexican feather grass	Satisfactory progress	Site-led	→	None
●	Mexican waterlily*	Satisfactory progress	Site-led	→	None
●	Mignonette vine	Satisfactory progress	Site-led	→	None
●	Mile-a-minute*	Satisfactory progress	Site-led	→	None
●	Mistflower	Satisfactory progress	Site-led	→	None
●	Monkey apple*	Satisfactory progress	Site-led	→	None
●	Moth plant*	Satisfactory progress	Site-led	→	None
●	Pampas*	Satisfactory progress	Site-led	→	None
●	Parrot's feather*	Satisfactory progress	Site-led	→	None
●	Periwinkle	Satisfactory progress	Site-led	→	None
●	Plectranthus	Satisfactory progress	Site-led	→	None
●	Prickly pear cactus	Satisfactory progress	Site-led	→	None
●	Privet*	Satisfactory progress	Site-led	→	None
●	Purple nutsedge	Satisfactory progress	Site-led	→	None
●	Rum cherry*	Satisfactory progress	Site-led	→	None
●	Saltwater paspalum	Satisfactory progress	Site-led	→	None
●	Selaginella *	Satisfactory progress	Site-led	→	None
●	Shield pennywort	Satisfactory progress	Site-led	→	None
●	Smilax*	Satisfactory progress	Site-led	→	None
●	Snow poppy*	Satisfactory progress	Site-led	→	None
●	Strawberry dogwood	Satisfactory progress	Site-led	→	None
●	Sydney golden wattle	Satisfactory progress	Site-led	→	None
●	Tree of heaven*	Satisfactory progress	Site-led	→	None
●	Taiwan cherry	Satisfactory progress	Site-led	→	None
●	Thistle species other than variegated thistle	Satisfactory progress	Site-led	→	None
●	Tradescantia	Satisfactory progress	Site-led	→	None
●	Tuber ladder fern*	Satisfactory progress	Site-led	→	None

Progress	Current RPMP Programme: <b>Restricted Pests</b>			
	<i>* These species have been declared as unwanted organisms and are subject to rules in the Biosecurity Act.</i>			
	Pest	Comments	Proposed Programme	Changes to required resourcing
●	Velvet groundsel	Satisfactory progress	Site-led	→ None
●	Wilding conifers (excluding Lodgepole pine)	Satisfactory progress	Progressive containment	↑ Low
●	Wonder tree	Satisfactory progress	Site-led	→ None
●	Argentine and Darwin ants	Satisfactory progress	Site-led	→ None
●	Eastern Rosella	Satisfactory progress	Site-led	→ None
●	Hedgehog	Satisfactory progress	Site-led	→ None
●	Ferrets	Satisfactory progress	Site-led	→ None
●	Wild cats	Satisfactory progress	Site-led	↑ Medium
●	Gambusia	Satisfactory progress	Site-led	→ None
●	Magpies	Satisfactory progress	Site-led	→ None
●	Wild mice	Satisfactory progress	Site-led	→ None
●	Possums	Satisfactory progress	Site-led	↑ Low
●	Feral rabbits	Satisfactory progress	Site-led	↑ Low
●	Rainbow skinks	Satisfactory progress	Site-led	→ None
●	Rats (Ship and Norway)	Satisfactory progress	Site-led	↑ Low
●	Stoats	Satisfactory progress	Site-led	↑ Low
●	Wasps (common wasp, German wasp, Asian paper wasp, Australian paper wasp)	Satisfactory progress	Site-led	→ None
●	Weasels	Satisfactory progress	Site-led	→ None

PROOF



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