Keeping Pests Out

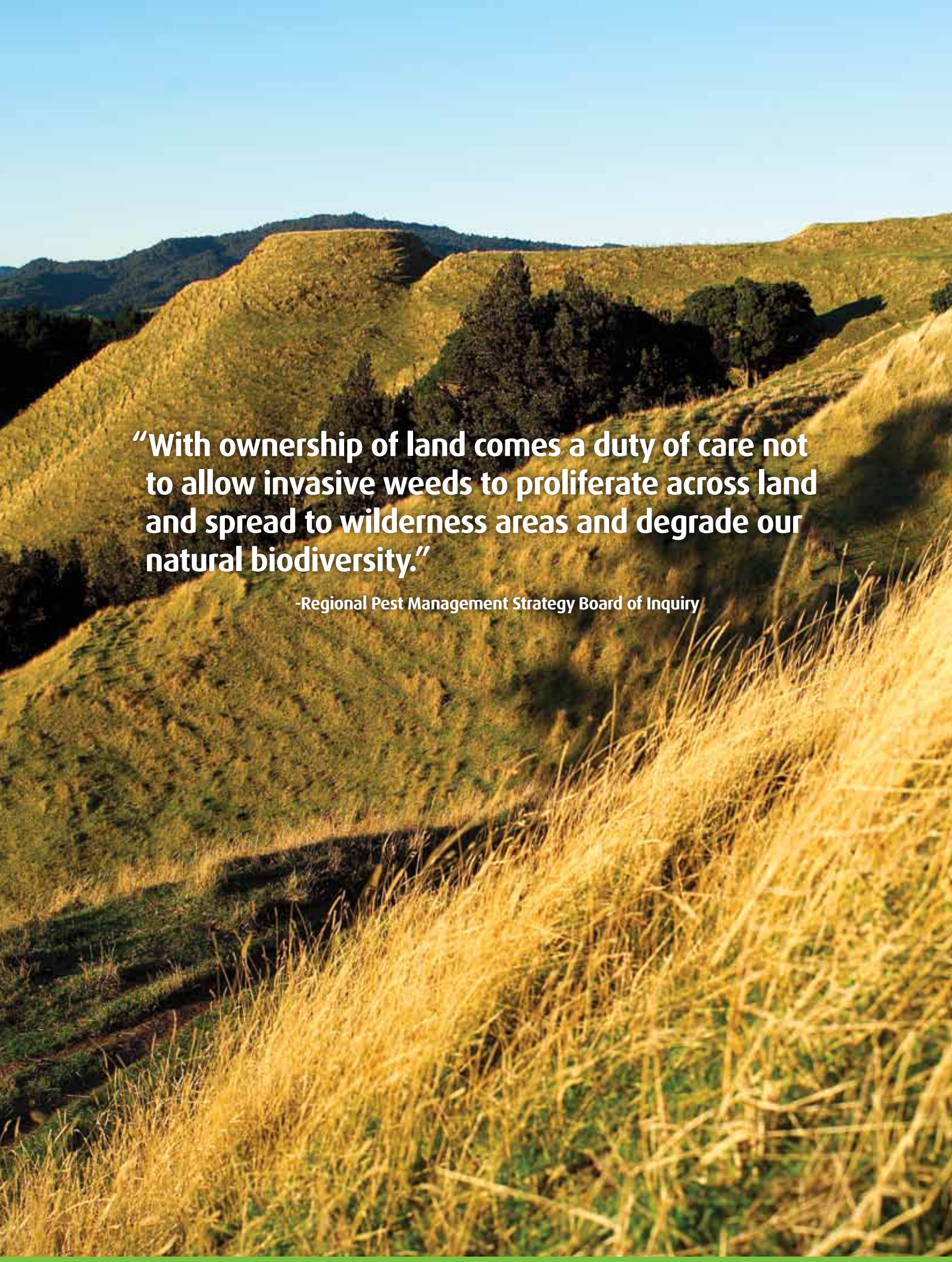
Regional Pest Management Plan for the Bay of Plenty 2011 – 2016

Strategic Policy Publication 2011/03
ISSN: 1176 4112 (print)
ISSN: 1178 3907 (online)

September 2011

Bay of Plenty Regional Council
5 Quay Street
PO Box 364
Whakatāne 3158
NEW ZEALAND

Bay of Plenty
REGIONAL COUNCIL



"With ownership of land comes a duty of care not to allow invasive weeds to proliferate across land and spread to wilderness areas and degrade our natural biodiversity."

-Regional Pest Management Strategy Board of Inquiry

Introduction

This Regional Pest Management Plan for the Bay of Plenty 2011 – 2016 is presented by the Bay of Plenty Regional Council.

The Plan sets out what Council is trying to achieve through our efforts to manage pest plants and pest animals in the Bay of Plenty region. It identifies a set of key outcomes that we wish to see achieved, and some high-level objectives and rules that need to be followed to help realise the outcomes.

The Plan identifies the primary pest management roles and responsibilities for Council as well as landowners and occupiers across the region. It also provides a reference point for continuing work to protect the natural assets in our region from the damage pest plants and pest animals can create.

For any species or rule to be included in a regional pest management plan, it must meet specific requirements set out in the Biosecurity Act 1993. The benefit of action must outweigh its cost, taking into account what might happen if no action is taken at all. A cost-benefit assessment has been completed for all of the species included in this Plan.

Council has also ensured that all species and rules included in the Plan are consistent with Council's own pest management policy:

- Prevent new pests entering and establishing in the Bay of Plenty.
- Manage established pests where it is practical and cost-effective to do so, using Council's regulatory and/or operational roles.
- Support the voluntary efforts of landowners/occupiers and communities to manage established pests.

The cost-benefit assessment and our pest management policy have been used to underpin this Plan. It has also been guided by public consultation on the draft Plan during 2010, as well as public consultation on the future of pest management during 2009.

All background information supporting the development of this Plan is provided on our website at **www.boprc.govt.nz**.

For further information contact: Bay of Plenty Regional Council – Phone: 0800 884 880 Fax: 0800 884 882.

Regional Pest Management Plan for the Bay of Plenty 2011 – 2016

It is hereby certified that this is the Regional Pest Management Plan for the Bay of Plenty 2011 – 2016 approved by resolution of the Bay of Plenty Regional Council on the 27th day of July 2011. The Council has further resolved that the Plan shall become operative on the 30th day of September 2011.

Mary-Anne Macleod
Chief Executive

Status of the Plan

This Regional Pest Management Plan for the Bay of Plenty 2011 – 2016 is a statutory document created by Bay of Plenty Regional Council in accordance with the Biosecurity Act 1993.

The Plan contains rules for the control of pest plants and pest animals across the Bay of Plenty. It sets out the roles and responsibilities for Council and all landowners and occupiers in the region.

The Bay of Plenty Regional Council must prepare an operational plan. This plan sets out further detail about how we will implement our role delivering the Regional Pest Management Plan for the Bay of Plenty 2011 – 2016.

The Plan has effect over the entire Bay of Plenty region as set out by the Local Government Amendment Act 1992.

The Plan will remain in force for five years from the date of publication. It will be reviewed after five years to remain responsive to current and emerging pest issues. The Plan may also be amended earlier than this in response to changes in pest risks, national legislation and regional policy and priorities.

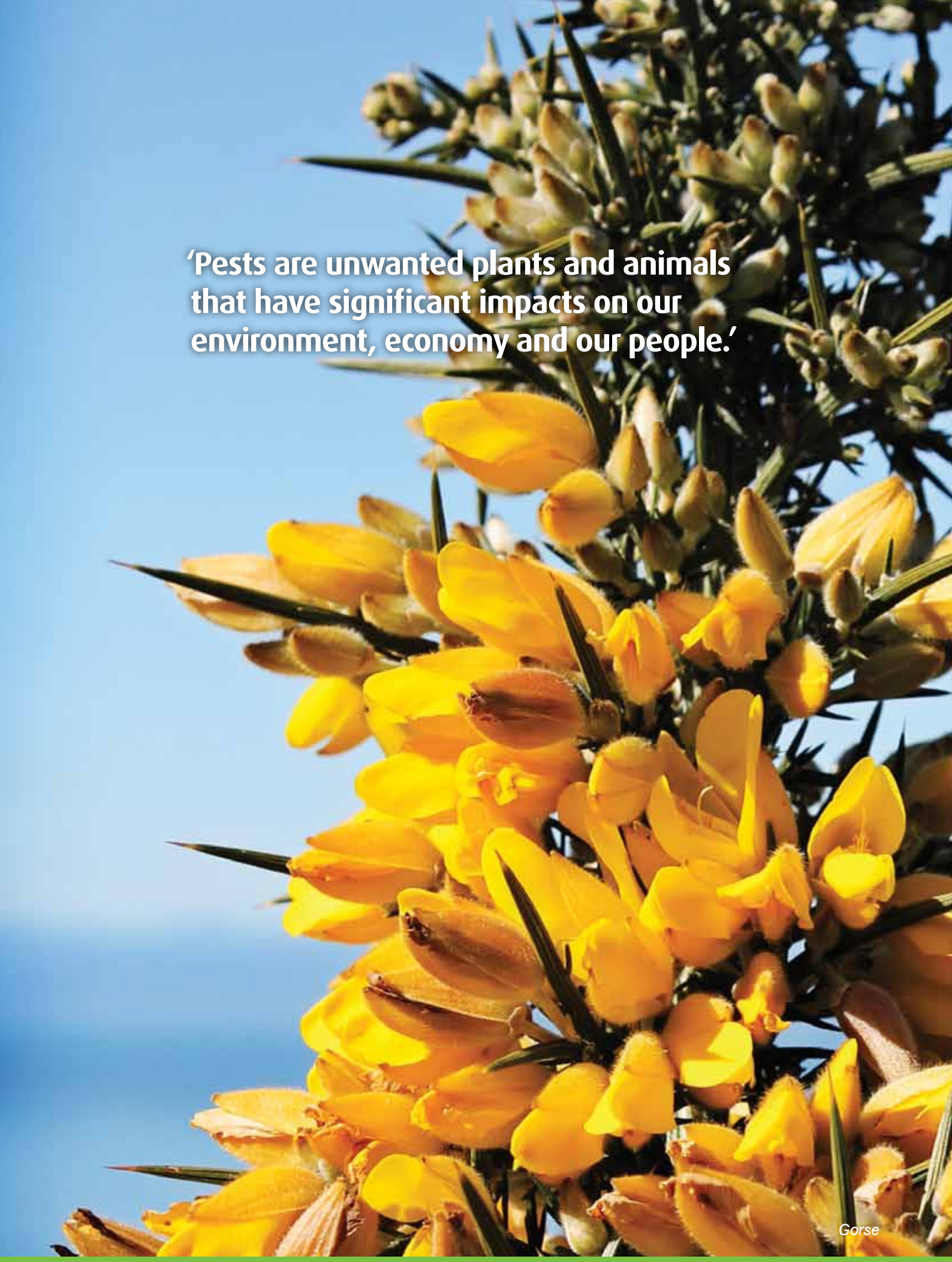
The process for reviewing a Plan is outlined in the Biosecurity Act 1993. Minor amendments to the Plan will be made where the amendment will not have any significant effect on the rights and obligations (including obligations to contribute to the costs of the Plan) of any person.

This Plan replaces the Bay of Plenty Regional Pest Management Strategy 2003 – 2008.

Good progress was made in achieving the management objectives of the 2003 – 2008 Strategy[1]. However, the 2003-2008 Strategy was replaced due to the changing landscape of pest management in New Zealand, as well as the changes in threats that different pests pose to our region.

[1] A detailed assessment of the progress made under the Bay of Plenty Regional Pest Management Strategy 2003 – 2008 is available in the 2009 Bay of Plenty Regional Council publication “Pest Management in the Bay of Plenty – Discussion Document, March 2009”.

Contents



‘Pests are unwanted plants and animals that have significant impacts on our environment, economy and our people.’

Gorse

About this Plan

Why do we manage pests?

Pests are unwanted plants and animals that have significant impacts on our environment, economy and our people. Pests are actively managed, in regions and throughout the country, to reduce these impacts.

There are limited resources to deal with the pests that are established, or all those that have the potential to become established. Hard decisions always need to be made about where resources should go, what type of actions might be effective and which pests represent the most risks.

Bay of Plenty Regional Council has developed this Regional Pest Management Plan (the Plan) as the tool to direct the management of pests in the Bay of Plenty region. This tool has been chosen because it:

- Provides an agreed context for our pest management actions
- Guides decision-makers when prioritising and allocating resources
- Ensures we respond consistently to pest risks
- Allows rules to be made in support of pest management outcomes
- Provides transparency around roles and responsibilities of all involved.

This Plan's purpose

This Plan sets out what we are trying to achieve through our efforts to manage pest plants and pest animals in the Bay of Plenty region (Figure 1 shows the area covered by this Plan).

It identifies a set of key outcomes that we wish to see achieved, and some high level objectives and rules that need to be followed to help realise these outcomes.

It sets out the primary pest management roles and responsibilities for Bay of Plenty Regional Council and landowners and occupiers across the region.

It provides a reference point for continuing work to protect the natural assets in our region from the damage pest plants and pest animals can create.

Pest management and pest management strategies are a critical component of our biosecurity system, and contribute to achieving the overall vision for biosecurity in New Zealand[1]:

"New Zealanders, our unique natural resources, our plants and animals are all kept safe and secure from damaging pests and diseases."

The Plan is guided by the overall outcomes sought for pest management nationally[2]:

- Unwanted damage caused by harmful organisms that have established in New Zealand is prevented or reduced
- New Zealanders are active, informed and supportive participants in the biosecurity system.

The statutory and policy framework for pest management in New Zealand is provided in Appendix 1.

[1] Biosecurity Council New Zealand (2003) Tiakina Aotearoa Protect New Zealand: The Biosecurity Strategy for New Zealand
[2] Ministry of Agriculture and Forestry (2010) Pest Management Proposed National Plan of Action 2010 to 2035

What this Plan aims to achieve

The aim of this Plan is to protect the natural land and water assets that contribute towards the quality of life, cultural identity, economy and natural ecosystems we enjoy in the Bay of Plenty. In practical terms, achieving the outcomes of the Plan will mean different things to different people. For some it will mean clean water free from weeds, for others it will mean protecting biodiversity and maintaining recreational and cultural values.

Managing pests in our region contributes towards four outcomes that the Bay of Plenty community has identified as priorities for the region:

- A clean and protected environment
- A prosperous and sustainable economy
- Respected culture and heritage
- Healthy and safe communities.

Regional outcomes hierarchy

The specific outcomes and objectives for pest management delivered through this Plan are:

Regional Pest Management Plan outcome	Our people, economy and ecosystems are protected from harmful pests					
Intermediate Plan outcomes	No new pests are established in the region*	Identified pest impacts are excluded, reduced or contained	Our regional communities are experienced and effective pest managers			
Plan objectives	Invest in the prevention of new pest populations establishing in the region	Promote and invest in the control of pests across the region	Support initiatives that national and regional communities undertake to manage pests	Ensure the ongoing development and implementation of our biosecurity system		
The things Bay of Plenty Regional Council does	Support national pest programmes	Make and enforce rules	Carry out pest control	Undertake surveillance and monitoring	Provide support, advice and information	Develop and review policy

*This is an aspirational outcome; ensuring that no new pests become established is inherently hard to achieve.

Delivering the Plan

The primary responsibility for managing pests in the region rests with landowners and occupiers. The Crown has a lead role in managing pests of national interest. The Plan also relies on the actions of the general community to deliver its outcomes.

To achieve the broader outcomes and objectives of this Plan, Bay of Plenty Regional Council exercises a variety of roles in pest management. We play a leadership role in promoting, influencing, motivating, enforcing, educating and informing those involved in pest management across the region.

Key roles for Bay of Plenty Regional Council are:

- Provide advice and support to landowners and occupiers on the effective control and management of pests
- Carry out control work ourselves where this is feasible and cost-effective on a pest-led-basis.

We also have a role in enforcement. Our enforcement role begins when we have reasonable grounds to believe that non-compliance with this Plan or the Biosecurity Act 1993 may have occurred or may be occurring.

The roles undertaken in any given situation will depend on how the pest is classified and regional priorities and resourcing at the time of action.

The Biosecurity Act 1993 requires Bay of Plenty Regional Council to prepare an operational plan setting out how the Plan will be implemented. Further detail about how we will undertake these roles in implementing the Plan will be outlined in this operational plan. The operational plan must be developed within three months of this Plan coming into effect.

Decisions about the funding level for Bay of Plenty Regional Council's role are made through the Ten Year Plan and Annual Plan cycles. These processes include opportunities for public input.

Monitoring and reporting

Monitoring progress of the Plan will be by public annual reporting against the Plan outcome performance indicators:

Intermediate Plan Outcome	Indicators
No new pests are established in the region	• Number of emerging pest threats identified • Number of new pests detected in the region • Number of new pests with management plans in place
Identified pest impacts are excluded, reduced or contained	• Number of new occurrences eradicated and monitoring plans in place • % of Eradication and Containment pest species that have had their densities reduced • % of Eradication and Containment pest species that have had their distributions reduced
Our regional communities are experienced and effective pest managers	• Number of sites where community work is underway to control pests • Number of reports and requests for advice made by the community • % of Restricted pests that have had their spread reduced

These performance indicators are high-level and relate directly to the high-level outcomes of this Plan. Clear targets for individual pest species and classifications will be provided in the operational plan. Progress in meeting these targets will be publically reported on annually.

‘...empower communities to take responsibility for the environment they live in.’

CASE STUDY

Volunteers initiate native plant restoration at Lake Ōkāreka

A project run by Landcare volunteers at Lake Ōkāreka has led to community-wide support for weed clearance in reserves and properties in the area.

This provides a good example of how the Bay of Plenty Regional Council helps empower communities to take responsibility for the environment they live in.

Weed clearing work at Lake Ōkāreka's walkway reserve began in 2002. It has now expanded to other Rotorua District Council and Department of Conservation reserves around the lake.

Before work began, an incremental creep of weeds (made worse from the dumping of garden waste) started to affect the amount of birdlife in the area. Out-of-control weeds choked native plants, wiping out bird food supplies.

Large weed-infested areas were also unattractive, making the area a less desirable place to live or visit.

Since work started, large areas of weeds have been taken out and replaced with native plants.

The Bay of Plenty Regional Council donates 500 plants per year and provides other assistance, including contractors for heavy work and technical expertise as required.

Lake Ōkāreka Landcare volunteers also run education campaigns encouraging people to appreciate a weed-free environment. Many people have difficulty identifying weeds and are unaware of how quickly they can spread, and the damage they cause to native plants and bird life. The number of volunteers and support for the group's work has quickly grown over the years due to these educational campaigns.

The Lake Ōkāreka community continues to add environmental projects to its agenda. It is now working with the Rotorua Botanical Society on the Ōkāreka Mistletoe restoration project and Project Crimson, an initiative to protect and enhance pohutukawa and rata trees in New Zealand.

'Different pest plants and pest animals in the region warrant different levels of management action.'

Rainbow lorikeet

How pests will be managed

Pest species covered by this Plan

The pest plants and pest animals that are subject to active management in this Plan are set out as a complete list in Appendix 2. The list includes pests that are already present in our region. It also includes pests that are not here, but that we are concerned about, given the biosecurity risks that the region faces.

Bay of Plenty Regional Council is also involved in specific pest management programmes outside of this Plan, such as the National Pest Plant Accord. Details of these and pest management issues such as the use of chemicals and biological control are provided at Appendix 3.

Levels of pest management

Different pest plants and pest animals in the region warrant different levels of management action.

The response required to different pest risks depends on a number of factors:

- Severity of the threat that the pest poses environmentally, socially and economically
- Cost of action
- Effectiveness of response, both locally and regionally.

Bay of Plenty Regional Council has classified pests in this Plan based on an assessment of these factors, underpinned by a full cost-benefit analysis[3].

The cost-benefit analysis critically analysed the biosecurity risks in our region. It also analysed the impacts of pests and the costs to Council and landowners of controlling them. The full cost-benefit analysis is available to download from the Council's website at www.boprc.govt.nz.

The classification system has been guided by discussions with the community and between central agencies and regional councils, with the aim to have a consistent classification system throughout the country.

The classification system creates different levels of management response and action. It also creates obligations and responsibilities for agencies, landowners and occupiers and the general community. These obligations and responsibilities are also summarised in Appendix 4.

The classification system is based on pest species and the threats that they pose. It is not based on areas or zones within the region, as areas and zones are pest and threat dependant. Where different threats require different rules across the region for a specific pest, this will be dealt with in Part 3: Rules of the Plan. In all other cases, areas and zones will be identified in the operational plan or species management plans.

[3] Jon Sullivan and Melissa Hutchison (2010) Pest impact assessment and cost benefit analysis for the proposed Bay of Plenty Regional Pest Management Strategy

Classification system

Classification: **Agency pests**

Definition: Pests of national significance that are managed by or subject to programmes co-ordinated by the Crown.

- These are pests that pose significant threats to the New Zealand environment, economy and way of life.

Management objectives[4]

- Support national pest management initiatives led by the Crown.

Roles and responsibilities

- The Crown has a lead role in targeting these top priority pests, through preventing them crossing our national border, eradicating populations that are here and preventing their further spread.
- Bay of Plenty Regional Council may undertake co-funding, joint decision making and in-kind support of Crown or other agency coordinated pest management programmes. We may provide expert advice, monitoring and surveillance. We also assist with publicity and education, as well as enforcing rules and statutory obligations.
- Occupiers and other agencies are bound by the Plan's rules and statutory obligations associated with these pests.

Classification: **Exclusion and Eradication pests**

Definition: Pests we want to prevent from entering the region, or eradicate from the region.

- For those pests not here in the region, it is imperative that we keep a watch for them and act quickly on any new incursions.
- For pests already in the region, this classification applies to those where eradication is considered possible, or the seriousness of their impact means eradication is a priority.

Management objectives:

- Immediate control leading to the eradication of new occurrences in the region
- Control of pest plants to zero density
- Eradication of currently known populations of pest animals.

Roles and responsibilities:

- Bay of Plenty Regional Council undertakes a lead role in controlling these pests if they are present, with the purpose of eradicating them. We also undertake monitoring and surveillance activities, as well as enforcing rules and statutory obligations.
- Occupiers and other agencies are bound by the Plan's rules and statutory obligations associated with these pests.

[4] The management objectives stated for each classification are high level. Management objectives for each of the pests within the classifications may differ and these species-specific objectives will be identified in the operational plan.

Classification: **Containment pests**

Definition: Pests that we want to minimise the effects of and prevent their further spread.

- These are pests that have serious impacts and are established in some areas, or throughout the region.
- Eradication is considered unlikely or technically impossible at present, but they can be practically and cost-effectively controlled either regionally or within defined sub-regional areas.

Management objectives:

- Reduction in distribution and density of known populations.

Roles and responsibilities:

- Occupiers and agencies take a lead role in controlling these pests, and are bound by the rules and statutory obligations associated with these pests.
- Bay of Plenty Regional Council's primary role in managing these pests is to enforce rules and statutory obligations. We encourage voluntary compliance and community initiatives. We also coordinate and support approved programmes as well as provide advice on control and disposal methods.

Classification: **Restricted pests**

Definition: Pests we want to reduce the further spread of and will support community and occupier efforts to control, in places where they are a problem.

- These are pests that are widespread and/or have minor adverse effects, and are not practical or cost-effective to control across the region or within a defined sub-regional area.

Management objectives:

- Bay of Plenty residents understand the impacts of restricted pests and prevent their spread.
- Bay of Plenty residents and community groups voluntarily participate in a wide range of activities that contribute towards managing the impacts of restricted pests.

Roles and responsibilities:

- Occupiers and communities take the lead role in managing these pests, through voluntary control.
- Bay of Plenty Regional Council's primary role is to enforce statutory obligations on preventing the spread of these pests. We encourage voluntary compliance and community initiatives as well as coordinate and support approved programmes. We also provide advice on the control of these species.

Before: Wild kiwifruit on the Raparapahoe Stream margin, Te Puke

After: Five years later, wild kiwifruit controlled with regeneration of native plants

Wild kiwifruit

CASE STUDY

Controlling wild kiwifruit in the Bay of Plenty

A collaboration between the Bay of Plenty Regional Council and New Zealand Kiwifruit Growers Inc. (NZKGI) has led to a significant reduction of wild kiwifruit in the Bay of Plenty.

With innovative approaches to pest control, this partnership provides a nation-leading example of how pests can be effectively and sustainably controlled.

Wild kiwifruit has existed in the Bay of Plenty, particularly in Te Puke, since the 1970s.

Kiwifruit is an easily accessible food source for birds, rats and possums, as reject kiwifruit is used by farmers to feed stock.

Each kiwifruit has about 1100 seeds. This means a large number of seeds can be spread from bird droppings, allowing for growth of wild kiwifruit wherever the birds fly.

Wild kiwifruit can form a mound of tangled stems up to three metres high, or grow up and over native and exotic trees. If left uncontrolled, wild kiwifruit can strangle trees causing them to die or fall. Without active control of wild kiwifruit, areas of forests and native bush might soon disappear in parts of our region.

NZKGI and the Bay of Plenty Regional Council have been working together to help reduce the spread of wild kiwifruit, for the past ten years. NZKGI provides funding towards the control of wild kiwifruit and the Regional Council monitors the work and identifies locations where control is required. In the Regional Pest Management Plan, wild kiwifruit is listed as a "containment" pest, which means landowners are also responsible for its control. Dozens of landowners in the Bay of Plenty region help pay for wild kiwifruit control.

Farmers help stop the spread of wild kiwifruit by covering reject fruit before it's fed to stock, to stop birds and other animals eating it. Unwanted kiwifruit is also cleared from vines at harvest time.

Over 25,000 wild kiwifruit vines have been destroyed in the Bay of Plenty. Large wild vines have almost been eliminated and the number of smaller vines is currently declining each year.

Because of this initiative, the day may come when people will wonder what all the fuss was about with wild kiwifruit – a goal NZKGI and the Regional Council hope to achieve.

Groundbreaking waste to gold process

The Regional Council supports Waste to Gold, an initiative led by Scion Research, Zespri International Ltd and NZKGI, which sees waste kiwifruit converted into bio-plastic.

A chemical process, developed by the Scion research team, melts kiwifruit into plastic. One piece of fruit can produce more than 100 'spifes', a combined spoon and knife utensil used to eat kiwifruit. Plans are also in place to make packaging with the plastic, for export kiwifruit. This project helps reduce the 50,000 tonnes of waste kiwifruit distributed into the environment, considerably helping the control of wild kiwifruit and helping maintain a sustainable industry.

'...pests damage the Bay of Plenty's biodiversity, and impact on cultural, recreational, economic and human health values.'

Ferret

Rules of this Plan

It is well known that pests damage the Bay of Plenty's biodiversity, and impact on cultural, recreational, economic and human health values. The intent of this Plan is to prevent new damaging pests from establishing in the region and minimise the impacts of those already there.

This Plan aims to achieve this through rules that are efficient (the cost to the region is justified by the benefits) and effective (they achieve the desired outcomes).

For each classification of pest plant and pest animal we have identified the rules that need to be put in place for the effective and efficient management of the species listed. The rules specify:

- Species that the rules apply to
- Objectives for managing this classification of pest (high-level, not species-specific)
- Plan rules specific to this classification of pest
- Statutory obligations
- Offences associated with non-compliance
- General funding approach for this classification of pest
- Additional advice regarding the intent of the rules, or associated legislation and management plans.

The obligations that the Plan places on Bay of Plenty Regional Council, agencies, land occupiers and the regional community are summarised in Appendix 4.

Effects of the Plan

Bay of Plenty Regional Council considers that the rules in the Plan will have significant, positive effects in managing pests in our region. Effects that the Biosecurity Act 1993 requires Council to specify are outlined in Appendix 5.

Section A: Agency pest rules

Pests of national significance that are managed by or subject to programmes co-ordinated by the Crown.

Species [1, 2] see advice note below	Cape tulip[1] Didymo Hydrilla Johnson grass Manchurian wild rice[1] Phragmites[1] Pyp grass[1]	*Phytophthora taxon agathis* (PTA) Salvinia[1] Water hyacinth[1] White bryony Rainbow lorikeet[2] Feral sika deer
Objectives for management	Support national pest management initiatives led by the Crown.	
Plan rules	**Section A (1):** No person shall move or interfere with any article or substance left in place by an Authorised Person for the purpose of monitoring, controlling or eradicating an Agency pest plant or pest animal.	
Statutory obligations	**Section A (2):** No person shall knowingly communicate, cause to be communicated, release, or cause to be released, or otherwise spread any Agency pest plant or pest animal (see section 52 of the Biosecurity Act 1993). **Section A (3):** No person shall sell, offer for sale, display or propagate any Agency pest plant or pest animal in contravention of section 53 of the Biosecurity Act 1993.	
Offences	A breach of a statutory obligation creates an offence under sections 52 and 53 of the Biosecurity Act 1993. A breach of any rule creates an offence under section 154 of the Biosecurity Act 1993.	
Funding	Most activities are fully funded by the Crown. Council provides a level of funding for surveillance and monitoring.	
Advice	[1] These species are listed in the National Pest Plant Accord. All are unwanted organisms under the Biosecurity Act 1993. [2] The rainbow lorikeet is an unwanted organism under the Biosecurity Act 1993. Birds may still be kept as pets in secure aviaries and cages but it is illegal to release a rainbow lorikeet into the wild.	


Rook


Blue morning glory


Wild blackberry

Section B: Exclusion and Eradication pest plant rules

Pest plants we want to prevent from entering the region, or eradicate from the region.

Species [1]see advice note below	Alligator weed[1] Horse nettle Kudzu vine Marshwort[1] Nassella tussock[1] Noogoora bur	Purple loosestrife[1] Senegal tea[1] Spartina Water poppy[1] White edged nightshade[1]
Objectives for management	Immediate control leading to the eradication of new occurrences in the region. Control of pest plants to zero density.	
Plan rules	**Section B (1)**: No person shall move or interfere with any article or substance left in place by an Authorised Person for the purpose of monitoring, controlling or eradicating an Exclusion and Eradication pest plant. **Section B (2):** No person shall move, or allow to be moved, any machinery, vessel, organism, risk goods or other goods that is contaminated with any Exclusion and Eradication pest plant.	
Statutory obligations	**Section B (3):** No person shall knowingly communicate, cause to be communicated, release, or cause to be released, or otherwise spread any Exclusion and Eradication pest plant (see section 52 of the Biosecurity Act 1993). **Section B (4):** No person shall sell, offer for sale, display or propagate any Exclusion and Eradication pest plant in contravention of section 53 of the Biosecurity Act 1993.	
Offences	A breach of a statutory obligation creates an offence under sections 52 and 53 of the Biosecurity Act 1993. A breach of any rule creates an offence under section 154 of the Biosecurity Act 1993.	
Funding	Council funds surveillance, monitoring and control. The Crown manages the control of spartina on Crown land.	
Advice	[1] These species are listed in the National Pest Plant Accord. All are unwanted organisms under the Biosecurity Act 1993. Section B (2): The intent of this rule is to ensure that all goods contaminated with any pest listed here, or part of any pest listed here, are thoroughly inspected and cleaned prior to departing a contaminated site to prevent its spread.	


Alligator weed


Pampas


Asiatic knotweed

Section C: Exclusion and eradication pest animal rules

Pest animals we want to prevent from entering the region, or eradicate from the region.

Species	Brown bullhead catfish, koi carp, perch, rooks
Objectives for management	Immediate control leading to the eradication of new occurrences. Eradication of currently known populations of pest animals.
Plan rules	**Section C (1):** No person shall move or interfere with any article or substance left in place by an Authorised Person for the purpose of monitoring, controlling or eradicating an Exclusion and Eradication pest animal. **Section C (2):** Unless directed by an Authorised Person, no person shall: i) Discharge a firearm at any rook or rookery ii) Lay any poison bait that is acceptable to rooks where rooks are known to be present iii) Damage, disturb or interfere in any way with a rookery. **Section C (3):** No person shall move or allow to be moved, any machinery, vessel, organism, risk goods or other goods that is contaminated with any Exclusion and Eradication pest animal.
Statutory obligations	**Section C (4):** No person shall knowingly communicate, cause to be communicated, release, or cause to be released, or otherwise spread any Exclusion and Eradication pest animal (see section 52 of the Biosecurity Act 1993). **Section C (5):** No person shall sell, offer for sale, display or propagate any koi carp, perch or rooks in contravention of section 53 of the Biosecurity Act 1993.
Offences	A breach of a statutory obligation creates an offence under sections 52 and 53 of the Biosecurity Act 1993. A breach of any rule creates an offence under section 154 of the Biosecurity Act 1993.
Funding	Council funds surveillance, monitoring and control. The Crown takes a lead role in the management of koi carp and brown bullhead catfish.
Advice	Section C (2): This rule is in place because disturbing rooks and rookeries can actually cause them to spread further, and can make professional control more difficult. Section C (3): The intent of this rule is to ensure that all goods contaminated with any pest listed here, or part of any pest listed here, are thoroughly inspected and cleaned prior to departing a contaminated site to prevent its spread. Section C (5): Brown bullhead catfish are not included in this rule because the possession and sale of brown bullhead catfish is regulated by the Ministry of Fisheries. For information on fishery controls for brown bullhead catfish see www.fish.govt.nz. Koi carp is listed as a noxious fish under the Freshwater Fisheries Regulations 1983 and perch is listed as a coarse fish under the Conservation Act 1987. Serious penalties and offences are associated with distributing these species in waterways.

Section D: Containment pest plant rules

Pest plants that we want to minimise the effects of and prevent their further spread.

Species [1, 2, 3, 4] see advice notes below	African feather grass	*Egeria densa*[1, 4]	Ragwort[3]
	Apple of Sodom	Gorse[3]	Royal fern[1]
	Asiatic knotweed[1]	Green goddess lily[1]	Variegated thistle
	Blackberry[3]	Hornwort[1, 4]	Wild ginger – yellow and kahili[1]
	Boneseed[1]	Italian buckthorn	Wild kiwifruit
	Chilean rhubarb[1]	Lagarosiphon[4]	Woolly nightshade[1, 2]
	Climbing spindle berry[1]	Lantana[1]	Yellow flag iris[1]
	Coast tea tree	Lodgepole pine[1]	
	Darwin's barberry[1]	Old man's beard[1]	
Objectives for management	Reduction in distribution and density of known populations.		
Plan rules	**Section D (1):** Landowners and occupiers shall destroy woolly nightshade on all land occupied except in the areas defined in Figure 2. **Section D (2):** Landowners and occupiers shall destroy blackberry or gorse within 10 metres of any property boundary, or ragwort within 50m of any property boundary. **Section D (3):** Landowners and occupiers must destroy *Egeria densa*, lagarosiphon and hornwort in all areas defined in Figure 3. **Section D (4):** Landowners and occupiers shall destroy all Containment pest plants on all land occupied, except those pest species specified in rules (1), (2) or (3) above. **Section D (5):** No person shall move or interfere with any article or substance left in place by an Authorised Person for the purpose of monitoring, controlling or eradicating any Containment pest plant. **Section D (6):** No person shall move, or allow to be moved, any machinery, vessel, organism, risk goods or other goods that is contaminated with any Containment pest plant.		
Statutory obligations	**Section D (7):** No person shall knowingly communicate, cause to be communicated, release, or cause to be released, or otherwise spread any Containment pest plant (see section 52 of the Biosecurity Act 1993). **Section D (8):** No person shall sell, offer for sale, display or propagate any Containment pest plant in contravention of section 53 of the Biosecurity Act 1993.		
Offences	A breach of a statutory obligation creates an offence under sections 52 and 53 of the Biosecurity Act 1993. A breach of any rule creates an offence under section 154 of the Biosecurity Act 1993.		
Funding	Individual landowner and occupier funding unless the control is part of an approved Council programme (an Environmental Programme, Care Group, Community Control Programme) in which case funding support may be given by Council.		

Section D: Containment pest plant rules continued

Advice	[1] These species are listed in the National Pest Plant Accord. All are unwanted organisms under the Biosecurity Act 1993. [2] Control of woolly nightshade is required, except in a defined area (Figure 2). Section D (1) rule applies. This exemption area defined for woolly nightshade has been specified and approved by Council in a Woolly Nightshade Management Plan. [3] Control of gorse, blackberry and ragwort is required in defined areas. Section D (2) rule applies. [4] Control of *Egeria densa*, lagarosiphon and hornwort is required in defined areas (Figure 3). Section D (3) rule applies. The Crown (or Crown Agent) is responsible for managing aquatic pests in the Rotorua Lakes, through the Te Arawa Lakes Deed of Settlement (except in Lake Rotokakahi and Lake Ōkaro). In the event of a new incursion, an incursion response plan will be developed by Council in consultation with Te Arawa Lakes Trust and Land Information New Zealand, or the lake owners (Lakes Rotokakahi and Ōkaro). Section D (4): Control of Containment pest plants may be undertaken by an approved Bay of Plenty Regional Council programme. Section D (6): The intent of this rule is to ensure that all goods contaminated with any pest listed here, or part of any pest listed here, are thoroughly inspected and cleaned prior to departing a contaminated site to prevent its spread. This is particularly important in order to stop the spread of aquatic weeds through contaminated boats and boat trailers.

Section E: Containment pest animal rules

Pest animals that we want to minimise the effects of and prevent their further spread.

Species	Feral goats, rudd, tench, wallabies
Objectives for management	Reduction in distribution and density of known populations.
Plan rules	**Section E (1):** Landowners and occupiers are required to destroy all rudd and tench in any pond or waterway, excluding Lake McLaren. **Section E (2):** No person shall move or interfere with any article or substance left in place by an Authorised Person for the purpose of monitoring, controlling or eradicating a Containment pest animal. **Section E (3):** No person shall move or allow to be moved, any machinery, vessel, organism, risk goods or other goods that is contaminated with any Containment pest animal.
Statutory obligations	**Section E (4):** No person shall knowingly communicate, cause to be communicated, release, or cause to be released, or otherwise spread any Containment pest animal (see section 52 of the Biosecurity Act 1993). **Section E (5):** No person shall sell, offer for sale, display or propagate any Containment pest animal in contravention of section 53 of the Biosecurity Act 1993.
Offences	A breach of a statutory obligation creates an offence under sections 52 and 53 of the Biosecurity Act 1993. A breach of any rule creates an offence under section 154 of the Biosecurity Act 1993.
Funding	Funding for feral goat control is identified in the Strategic Management Plan for Feral Goats East of the Rangitaiki River. Funding for wallaby control is provided by Council, Department of Conservation and Environment Waikato. Individual landowner and occupier funding unless the control is part of an approved Council programme (a Biodiversity Programme, Care Group, Community Control Programme) in which case funding support is given by Council.
Advice	Section E (1): An Authorised Person must determine the appropriate methods to be used to destroy the pests (draining, poisoning). Section E (3): The intent of this rule is to ensure that all goods contaminated with any pest listed here, or part of any pest listed here, are thoroughly inspected and cleaned prior to departing a contaminated site to prevent its spread. Rudd is listed as a noxious fish under the Freshwater Fisheries Regulations 1983 and tench is listed as a coarse fish under the Conservation Act 1987. Serious penalties and offences are associated with distributing these species in waterways. Control of goats is undertaken by Council, Department of Conservation and Ngā Whenua Rahui. Control of wallabies is undertaken by Council, Department of Conservation and Waikato Regional Council.

Section F: Restricted pest plant rules

Pest plants that we want to reduce the further spread of and will support community and occupier efforts to control, in places where they are a problem.

Species [1, 2, 3] see advice notes below	Agapanthus[2] Aluminium plant[1] Arum lily[2] Banana passionfruit Blue morning glory[1] Bushy asparagus[1] Californian bulrush[1] Cathedral bells[1] Cestrum species (four) Chilean flame creeper[1] Chinese fan palm[2] Climbing asparagus[1] Climbing dock Coastal banksia[2] Crack willow[1] Elaeagnus Elephant's ear Elodea canadensis[2] English ivy[2] Firethorn[1] German ivy Grey willow[1] Heather[1] Himalayan balsam Houttuynia Japanese honeysuckle[1] Japanese spindle tree[1] Japanese walnut Jasmine *Lilium formosanum* Mexican feather grass Mexican waterlily[1] Mignonette vine Mile-a-minute[1] Mistflower Monkey apple[1] Moth plant[1] Pampas[1] Parrot's feather[1] Periwinkle[2] Plectranthus Prickly pear cactus[2] Privet[1] Purple nutsedge Rum Cherry[1] Saltwater paspalum[2] Selaginella[1] Shield pennywort[2] Smilax[1] Snow poppy[1] Strawberry dogwood[2] Sydney golden wattle Tree of heaven[1] Taiwan cherry[2] Thistle species other than variegated thistle Tradescantia Tuber ladder fern[1] Velvet groundsel Wilding conifers[3] Wonder Tree[2]
Objectives for management	Bay of Plenty residents and community groups understand the impacts of Restricted pest plants and prevent their spread. Bay of Plenty residents and community groups voluntarily participate in a wide range of activities that contribute towards the management of the impacts of Restricted pest plants.
Plan rules	**Section F (1):** No person shall move or interfere with any article or substance left in place by an Authorised Person for the purpose of monitoring, controlling or eradicating a Restricted pest plant.
Statutory obligations	**Section F (2):** No person shall knowingly communicate, cause to be communicated, release, or cause to be released, or otherwise spread any Restricted pest plant (see section 52 of the Biosecurity Act 1993). **Section F (3):** No person shall sell, offer for sale, display or propagate any Restricted pest plant in contravention of section 53 of the Biosecurity Act 1993.
Offences	A breach of a statutory obligation creates an offence under sections 52 and 53 of the Biosecurity Act 1993. A breach of any rule creates an offence under section 154 of the Biosecurity Act 1993.
Funding	Individual landowner and occupier funding unless the control is part of an approved Council programme (a Biodiversity Programme, Care Group, Community Control Programme) in which case funding support may be given by Council.
Advice	[1] These species are listed in the National Pest Plant Accord. All are unwanted organisms under the Biosecurity Act 1993. [2] The sale of these species is permitted in the Bay of Plenty region. [3] Self-propagated Scots pine, Douglas fir, Corsican pine, mountain pine, muricata pine, maritime pine, European larch, radiata pine, ponderosa pine, white pine. Excludes lodgepole pine.

Section G: Restricted pest animal rules

Pest animals that we want to reduce the further spread of and will support community and occupier efforts to control, in places where they are a problem.

Species [1] see advice note below	Argentine and Darwin ants Eastern rosella Hedgehog Ferrets Feral cats Gambusia[1] Magpies Wild mice	Possums Wild rabbits Rainbow skinks Rats (Ship and Norway) Stoats Wasps (common wasp, German wasp, Asian paper wasp, Australian paper wasp) Weasels
Objectives for management	Bay of Plenty residents and community groups understand the impacts of Restricted pest animals and prevent their spread. Bay of Plenty residents and community groups voluntarily participate in a wide range of activities that contribute towards the management of the impacts of Restricted pest animals.	
Plan rules	**Section G (1):** No person shall move or interfere with any article or substance left in place by an Authorised Person for the purpose of monitoring, controlling or eradicating a Restricted pest animal.	
Statutory obligations	**Section G (2):** No person shall knowingly communicate, cause to be communicated, release, or cause to be released, or otherwise spread any Restricted pest animal (see section 52 of the Biosecurity Act 1993). **Section G (3):** No person shall sell, offer for sale, display or propagate any Restricted pest animal in contravention of section 53 of the Biosecurity Act 1993.	
Offences	A breach of a statutory obligation creates an offence under sections 52 and 53 of the Biosecurity Act 1993. A breach of any rule creates an offence under section 154 of the Biosecurity Act 1993.	
Funding	Individual landowner and occupier funding unless the control is part of an approved Council programme (a Biodiversity Programme, Care Group, Community Control Programme) in which case funding support is given by Council.	
Advice	[1] Gambusia is an unwanted organism under the Biosecurity Act 1993.	

Good neighbour rules in this Plan

A good neighbour rule is a rule that requires a landowner or occupier to manage the spread of a pest that will cause costs to landowners or occupiers of adjacent land. Section D and Section E rules in this Plan are considered to be good neighbour rules. This is because the Section D and Section E rules all require landowners or occupiers to control pests on their land, to prevent their spread.

Pest fish and fishing in the Bay of Plenty

The introduction and subsequent spread of pest fish in New Zealand has mostly been by intentional means and all the most significant incursions throughout the country are as a result of illegal releases. In many cases pest fish have been released to establish recreational fisheries, particularly for rudd, tench, perch and koi carp.

Bay of Plenty Regional Council's position is that banning the practice of fishing for pest fish outright will decrease the risk that someone deliberately introduces a pest fish in our waterways to establish a new fishery. With no opportunity to catch unwanted fish in our region, the incentive to introduce them in the first place is reduced.

We cannot ban fishing for all pest fish at this stage. Tench and perch are managed as 'sports fish' in our region under the Conservation Act 1987 by Fish and Game Councils. The Biosecurity Act 1993, and any rules in our Plan made under that Act, cannot derogate from the Conservation Act.

Council intends to work with the Department of Conservation and Fish and Game New Zealand to reach an agreed solution for banning fishing for pest fish in our region. This Plan will be updated once this work is complete.

Koi carp

Hornwort

CASE STUDY

Western Bay of Plenty roadside weed control

Five years ago, the Western Bay of Plenty District Council and Transit NZ (now the NZ Transport Agency) began a project in collaboration with the Bay of Plenty Regional Council to control roadside weeds.

A strategy was developed to manage roadside pests in a safe and structured way, ensuring landowners did not attempt to clear weeds on busy roads themselves.

In the past five years, weeds have been replaced with native plants along many of the district's highways. Thousands of native plants were provided through Honda New Zealand's Honda Treefund, and the Bay of Plenty Regional Council provided funding for site preparation, planting and project coordination.

The strategy involves InRoads – the road maintenance contractor for Western Bay of Plenty roads - completing an annual survey on all Western Bay of Plenty roads. The survey reviews work completed and identifies areas requiring maintenance. Since roadside weed control work began, survey results show roadsides with out of control weeds have decreased significantly and now only require minor weed control maintenance.

Clearing highly visible roadside weeds has the added benefit of setting a good example for landowners to keep their own properties weed-free. By establishing a long-term strategy for roadside weed control, the Western Bay of Plenty has set the standard for maintaining attractive and safe roadsides across New Zealand.

"We will also support the work of landowners and community groups (such as Care groups) in managing pests where they are a problem."

Agapanthus

Implementing this Plan

Providing support, advice and information

Bay of Plenty Regional Council will encourage and assist others to manage the pests in this Plan. We will provide advice and information on identifying pests as well as the most appropriate measures for controlling them. Raising awareness of pests, the threats they pose, and how they are spread will be a priority across the region.

We will also support the work of landowners and community groups (such as Care groups) in managing pests where they are a problem. Support will include providing resources and funding for approved programmes.

Undertaking monitoring and surveillance

Bay of Plenty Regional Council will undertake routine monitoring and surveillance of pests already in the region as well as pests that are elsewhere in New Zealand. The purpose of this monitoring and surveillance is to understand the threats that a pest may pose, what its impact might be, how it is distributed and how fast it is spreading. This information is critical to determine what, if any, management response might be appropriate. It will also help to determine how effective our current management responses are.

Carrying out pest control

Bay of Plenty Regional Council will carry out pest control where it is feasible and cost-effective to do so. The main situations where we will undertake pest control are:

- Supporting the management of Agency pests
- Controlling Exclusion and Eradication pests
- Where landowners are unwilling to act (and Council will recover costs)
- Where industry, organisations or landowners request our services because they are unable to act, or it is more efficient for us to act.

As part of our role in carrying out pest control, we will also invest in the use of biological control agents as well as research into more effective pest control methods.

Supporting national pest programmes

Bay of Plenty Regional Council will support and participate in national pest programmes administered by the Ministry of Agriculture and Forestry, the Crown agency with responsibility for biosecurity nationally.

Our roles will include monitoring for the introduction of pests new to New Zealand, reacting to incidents once a new pest is detected and enforcing the provisions of the Biosecurity Act 1993 (particularly as it relates to the deliberate spread or sale of plants and animals declared to be unwanted organisms).

We will also assist with the monitoring and eradication of national interest pests. For example, in support of the National Plant Pest Accord [refer Appendix 3] we will inspect local nurseries, plant retail outlets, roadside stalls and weekend flea markets to ensure that the approximately 150 plant species named within the Accord are not sold, propagated or distributed within the region.

Enforcement approach

Bay of Plenty Regional Council staff will perform their roles under the Plan and Biosecurity Act 1993 with professionalism, integrity and impartiality. Our approach is to be firm but fair and to motivate actions that will achieve the outcomes sought by the Plan.

Bay of Plenty Regional Council has a number of options and tools for ensuring compliance with the Plan. The statutory functions, powers and duties available under Part VI of the Biosecurity Act 1993 will be used [refer Appendix 6].

Our initial response to non-compliance might not involve the use of one of our statutory enforcement tools. For example, if non-compliance is of a minor nature, or depending on the pest plant or animal concerned, we might agree with the duty holder on ways to become compliant without having to use an enforcement tool.

Where non-compliance is of a serious nature, or represents a likelihood of seriously impeding the management of a pest, we are more likely to act on default, use a direction or prosecute.

We will be supportive of duty holders who demonstrate a genuine willingness to comply with the Plan. In some circumstances it may be appropriate for Bay of Plenty Regional Council and the duty holder to negotiate an agreement of specific actions and timeframes to bring about compliance with the Plan and Biosecurity Act 1993. However, where we believe the duty holder is disingenuous, obstructive, has a record of similar non-compliance or has taken no reasonable action to comply after notification and follow-up, we are likely to move quickly to stronger enforcement options.

Penalties if you don't comply

Sections 52 and 53 of the Biosecurity Act 1993 restrict the sale, breeding, propagation, distribution or release of all pests in this Plan, except where specified. A breach of any of the provisions is an offence under the Biosecurity Act 1993. The penalties for a breach of sections 52 and 53 for an individual person is a fine of up to $100,000 or up to five years in jail, or both. For a corporation the fine is up to $200,000.

Section 122 of the Biosecurity Act 1993 provides Bay of Plenty Regional Council with the power to direct an occupier to destroy any pest or to take steps to prevent the spread of any pest, or to comply with a rule in this Plan. Anyone who fails to comply with these directions, without a reasonable excuse, is liable for a fine of up to $50,000 or up to three months in jail, or both. For a corporation the fine is up to $100,000.

A breach of any rule specified in this Plan creates an offence under section 154 of the Biosecurity Act 1993. A breach can result in a fine of up to $5,000 for individuals and up to $15,000 for corporations.

Exemptions

Exemptions may, upon the written request of a landowner, occupier or road and rail controlling authorities, exempt any person from any requirement in a Plan rule. The process Bay of Plenty Regional Council will follow in granting an exemption is set out in Appendix 6.

Coordination

Cross-boundary issues can occur between regions as pest distributions are seldom constrained by regional council boundaries. There is a need for collaborative relationships between national agencies and regional councils to produce complementary, effective and efficient pest management in New Zealand.

The Plan aims to minimise the effects of cross-boundary issues and promote collaboration through:

- Having regard to any national or regional pest management plan, any regulation, or any regional policy statement or regional plan prepared under the Resource Management Act 1991
- Liaising with the Crown over pest management issues which are best dealt with or coordinated at a national level
- Liaising with Crown land occupiers – in particular the Department of Conservation – to coordinate pest management programmes
- Liaising with other regional councils on cross-boundary issues pertaining to pest management, and on matters which are relevant to more than one region
- Encouraging other authorities to adopt policies and practices, which will avoid, remedy or mitigate adverse effects associated with pests
- Coordinating education initiatives with other agencies
- Making submissions on documents prepared by other authorities.

Who pays for implementing the Plan?

The Biosecurity Act 1993 requires that those who benefit from pest control, or those who exacerbate a pest problem, should be required to pay for pest management.

Achieving the purpose and objectives of this Plan benefits landowners and occupiers (private benefits) and the community collectively (public good benefits). In general, the pests in this Plan have the potential to significantly impact the economic, biodiversity, recreation, amenity and cultural values of the region as a whole; and the regional community has an interest in protecting these values.

The dominant public good aspects of the Plan favour the use of a general rate to fund the administration, monitoring and inspection functions of the Plan as well as to invest in biological control. Some direct pest control will also be regionally funded if it is prioritised as being for the public good of the region, such as the management of new incursions.

Many pests, however, can be managed on individual properties, and the occupiers are both the principal beneficiaries of pest control and the exacerbators of the pest problem. In these cases, occupiers will be responsible for the costs of controlling these pests. Bay of Plenty Regional Council may provide a service delivery option but the full costs of these services may be recovered from the occupier.

The Plan will be administered in a fair and consistent manner, regardless of land tenure. If pest control is required of a landowner, such as for the control of a Containment pest, compliance will be expected regardless of the legal status of the land or who owns the land.

How implementation of the Plan will be funded

(a) **Bay of Plenty Regional Council**

Activities undertaken by Bay of Plenty Regional Council are generally funded by a combination of general rates, investment income and user fees and charges. Council implemented the previous 2003 – 2008 Plan through this combination of funding.

Actual funding levels for the Plan, including a breakdown of work programmes, are set through the Ten Year Plan/ Annual Plan processes. This information is freely accessible and people can make submissions on funding or operational issues through this process.

(b) **Landowners and occupiers**

This Plan imposes costs on landowners and occupiers. These costs are related to control activities required through the rules of the Plan. The costs incurred by the Plan have been assessed and are provided in the cost-benefit analysis[5].

(c) **The Crown**

The Crown funds the management of Agency pests in this Plan, including preventing them crossing our national border, eradicating new incursions and preventing their further spread. The Crown also assists with joint-funding and in-kind resourcing for the control of other pests. These costs are not part of the Plan itself, but are a result of coordinated pest management programmes.

(d) **Cost recovery**

Section 135 of the Biosecurity Act 1993 enables Bay of Plenty Regional Council to recover the costs of administering the Act and performing the functions, powers and duties under this Plan. This includes user charges and cost recovery from occupiers in the event of non-compliance with legal directions. In addition, Bay of Plenty Regional Council may supply specific pest management services requested by a landowner or occupier, in which case full cost recovery from the occupier may apply.

[5] Jon Sullivan and Melissa Hutchison (2010) Pest impact assessment and cost benefit analysis for the proposed Bay of Plenty Regional Pest Management Strategy

Estimated costs for Council of implementing the Plan

The Council's costs of administering and implementing the Plan are incurred through the following activities:

- Providing advice and information
- Undertaking and investing in research
- Monitoring and surveillance
- Enforcing the Plan's rules
- Undertaking direct control and other assistance
- General administrative functions.

Summary of estimated total costs for Council of implementing the Plan

Implementation activity	Annual cost*
Direct pest plant programmes**	$636,018
Direct pest animal programmes**	$271,009
Biological control and research	$140,000
Education, advice and information	$200,000
General monitoring and surveillance	$100,000
Compliance and enforcement	$288,000
Administration	$245,000
New incursion response	$150,000
TOTAL	**$2,030,027**

* *The summary of Pest Management Plan costs is indicative only. Setting the budget occurs through Council's Ten Year Plan/Annual Plan processes. Costs do not include GST (Goods and Services Tax).*

** *Details of activities and costs are specified in the cost-benefit analysis.*[6]

Compensation

No compensation shall be payable by Bay of Plenty Regional Council relating to losses incurred by landowners or occupiers as a direct result of this Plan's implementation, including the removal of pests as required under Plan rules.

The operational plan

This Plan is a high-level strategic document that outlines the overall outcomes Council wants to achieve from pest management over a five year period.

Bay of Plenty Regional Council will also prepare an annual operational plan. The operational plan will outline the nature and scope of activities that we intend to undertake in the implementation of the Plan for each year the Plan is in place.

- Operational targets will be set in the operational plan, as well as specific performance measures, to ensure we are on track to meet our pest management outcomes and objectives. We will monitor our progress against the targets and performance measures, and publically report on this progress each year

[6] Jon Sullivan and Melissa Hutchison (2010) Pest impact assessment and cost benefit analysis for the proposed Bay of Plenty Regional Pest Management Strategy

How an increase in birds was monitored

To establish whether the number of birds has increased since pest control work began, independent contractors carried out two bird counts - the first in 2005 and another in 2008.

Bird count stations were placed 200 metres apart along the same road during both tests.

Birds seen and heard were recorded within a 100 metre radius of the stations. The 2005 and 2008 counts were conducted between 9am and 1 pm, and the date and weather conditions were recorded at each station.

Only 16 different species of bird were observed in 2005 and a total of 472 counted. During the monitoring period in 2008, 29 different species of bird were observed and a total of 897 counted. Approximately half the birds counted in 2008 were native, with tui, kereru, grey warbler and the shining cuckoo having the greatest increase in numbers.

The increase in bird varieties and total number of birds, suggests conditions for bird species have dramatically improved in the Lake Tarawera area since pest control began.

CASE STUDY

Native birds return to Tarawera

A decade of rodent control at Lake Tarawera has led to a new abundance of bird life in the area.

In February 2000, rats had become such a problem at Tarawera that they were running freely across properties during the day. Many residents believed the high rat population was responsible for the decrease in birdlife in the area.

Species such as the tui, kereru and grey warbler were becoming less abundant.

In 2000, residents approached the Bay of Plenty Regional Council about the rat problem. This initiated a community project between the Council and Tarawera residents to tackle pest control.

The Lake Tarawera Pest Control group began work in June 2000. Various bait stations were trialied in the area, but most were unsuitable for the conditions. The bait stations currently being used are made by a local resident.

Today the group is funded by the Department of Conservation, the Bay of Plenty Regional Council and donations from Lake Tarawera property owners. Landowners are asked to buy bait stations and the group supplies the bait. The group requires approximately $15,000 per year to complete pest control work.

Approximately 75 percent of Lake Tarawera property owners have now joined the project.

There are 540 rat bait stations that are checked and filled by 20 volunteers. The group's work has helped eradicate almost all rodents in the area, resulting in the return of many native birds.

The group's Coordinator Bob Scopes has seen quail gather in a covey of over 50 birds on his property – something not seen since the late 1950s.

Figures

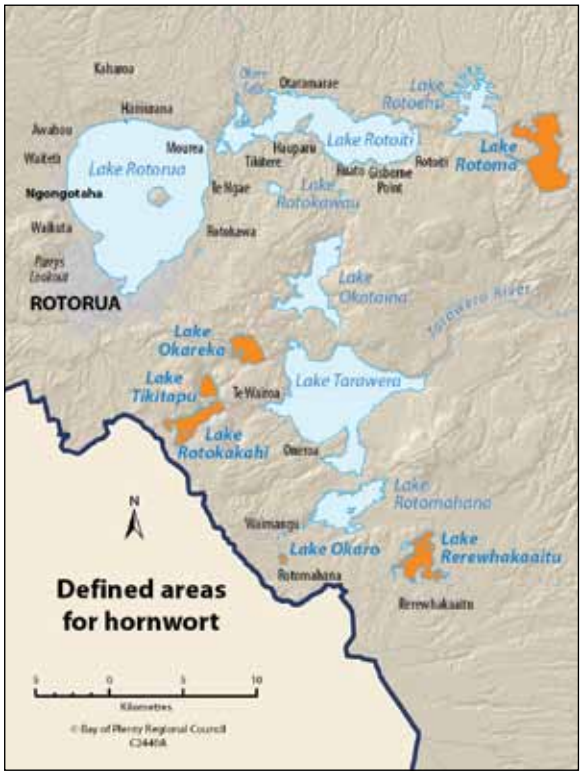
Figure 1: The Bay of Plenty region

Figure 2: Defined areas for woolly nightshade

The containment area for woolly nightshade is the entire Bay of Plenty region, except for the two small areas surrounding Tauranga shown in the map below. These areas represent the woolly nightshade core infestation, and the Section D (1) rule does not apply.

Figure 3: *Egeria densa*, lagarosiphon and hornwort defined areas

The defined areas for *Egeria densa*, lagarosiphon and hornwort control are shown in the maps below. Section D rules apply to these three aquatic plant pests in the lakes defined.



Paper wasps and nest

Appendices

Appendix 1: Statutory and policy framework

The Biosecurity Act 1993

The Biosecurity Act 1993 is the over-arching piece of legislation that deals with the exclusion, eradication, and management of pests and unwanted organisms in New Zealand. While the Act places no requirement on regional councils to control pests, it does specify how a regional pest management plan must be set out if a council chooses to develop one.

Bay of Plenty Regional Council is satisfied that this Plan complies with all requirements of the Biosecurity Act 1993, and that it is the most effective and efficient course of action for managing pests in the region. A full cost-benefit analysis has been undertaken for the pests included in this Plan[7] and Bay of Plenty Regional Council considers the benefits of intervention outweigh the costs.

Other statutes, regulations and pest management strategies

There are other statutes and regulations that relate to pest management in New Zealand, such as the Wildlife Act 1953, Conservation Act 1987 and the Freshwater Fisheries Regulations 1983. Bay of Plenty Regional Council is satisfied that the Plan is not inconsistent with these and nothing in this plan should be interpreted so as to affect or derogate from other rules of law relating to pest animal management.

At present, there are operative Regional Pest Management Strategies in the neighbouring Hawke's Bay, Gisborne District and Waikato regions, and national strategies for bovine tuberculosis, varroa mite and American foulbrood. At the national level, consultation between central and local government is needed to avoid inconsistencies and conflict. Ongoing cross boundary communication assists in avoiding potential inconsistencies at the regional level.

Policies and plans

The Ministry of Agriculture and Forestry (MAF) has a lead role in pest management systems throughout New Zealand. The Ministry is responsible for developing, monitoring, implementing and reviewing strategic directions. It has also developed a National Plan of Action that outlines the policy direction for pest management in New Zealand, and this Plan is consistent with the policy direction.

The Bay of Plenty Regional Policy Statement (RPS) is currently being reviewed. This Plan will contribute to achieving a variety of policies and objectives in the RPS. Any actions taken to implement the Plan will be done within the provisions of this and any other Plan prepared by Bay of Plenty Regional Council and any relevant District Plans prepared by territorial authorities.

[7] Jon Sullivan and Melissa Hutchison (2010) Pest impact assessment and cost benefit analysis for the proposed Bay of Plenty Regional Pest Management Strategy

Appendix 2:
Species managed in the Regional Pest Management Plan

Agency pests	Eradication/ Exclusion pests	Containment pests	Restricted pests	
Cape tulip*	Alligator weed*	African feather grass	Agapanthus	Parrot's feather*
Didymo	Horse nettle	Apple of Sodom	Aluminium plant*	Periwinkle
Hydrilla	Kudzu vine	Asiatic knotweed*	Arum lily	Plectranthus
Johnson grass	Marshwort*	Blackberry (defined areas)	Banana passionfruit*	Prickly pear cactus
Manchurian wild rice*	Nassella tussock*	Boneseed*	Blue morning glory*	Privet*
Phragmites*	Noogoora bur	Chilean rhubarb*	Bushy asparagus*	Purple nutsedge
Pyp grass*	Purple loosestrife*	Climbing spindle berry*	Californian rush*	Rum cherry*
Phytophthora taxon agathis (PTA)	Senegal tea*	Coast tea tree	Cathedral bells*	Saltwater paspalum
Salvinia*	Spartina	Darwin's barberry*	Cestrum species (four)	Selaginella *
Water hyacinth*	Water poppy*	*Egeria densa**	Chilean flame creeper*	Shield pennywort
White bryony	White edged nightshade*	Gorse (defined areas)	Chinese fan palm	Smilax*
Rainbow lorikeet	Brown bullhead catfish	Green goddess lily*	Climbing asparagus*	Snow poppy*
Feral sika deer	Koi carp	Hornwort *	Climbing dock	Strawberry dogwood
	Perch	Italian buckthorn	Coastal banksia	Sydney golden wattle
	Rooks	Lagarosiphon	Crack willow*	Tree of heaven*
		Lantana*	Elaeagnus	Taiwan cherry
		Lodgepole pine*	Elephant's ear	Thistle species other than variegated thistle
		Old man's beard*	*Elodea canadensis*	Tradescantia
		Ragwort (defined areas)	English ivy	Tuber ladder fern*
		Royal fern*	Firethorn*	Velvet groundsel
		Variegated thistle	German ivy	Wilding conifers (excluding Lodgepole pine)
		Wild ginger – yellow and kahili*	Grey willow*	Wonder tree
		Wild kiwifruit	Heather*	Argentine and Darwin ants
		Woolly nightshade (defined areas)*	Himalayan balsam	Eastern Rosella
		Yellow flag iris*	Houttuynia	Hedgehog
		Feral Goats	Japanese honeysuckle*	Ferrets
		Rudd	Japanese spindle tree*	Wild cats
		Tench	Japanese walnut	Gambusia
		Wallabies	Jasmine	Magpies
			Lilium formosanum	Wild mice
			Mexican feather grass	Possums
			Mexican waterlily*	Feral rabbits
			Mignonette vine	Rainbow skinks
			Mile-a-minute*	Rats (Ship and Norway)
			Mistflower	Stoats
			Monkey apple*	Wasps (common wasp, German wasp, Asian paper wasp, Australian paper wasp)
			Moth plant*	
			Pampas*	Weasels

* These species are listed in the National Pest Plant Accord. The full list of species on the Accord is available on the Ministry of Agriculture and Forestry's website (www.maf.govt.nz).

Appendix 3: Other pests and pest management programmes

Unwanted organisms

An unwanted organism is any organism that a Chief Technical Officer believes is capable of causing unwanted harm to any natural or physical resources or human health. The Ministry of Agriculture and Forestry takes a coordinating role in maintaining the national list of unwanted organisms.

The list of unwanted organisms is available on the Ministry of Agriculture and Forestry website at www.maf.govt.nz. Unwanted organisms are banned from sale, propagation and distribution under sections 52 and 53 of the Biosecurity Act 1993.

National Pest Plant Accord

The Ministry of Agriculture and Forestry is responsible for coordinating, developing and managing the National Pest Plant Accord. The Accord is a list of approximately 150 plants that have been declared unwanted organisms, which regional councils have agreed to monitor to prevent their sale, propagation or distribution. This work is undertaken to prevent breaches of section 52 and 53 of the Biosecurity Act 1993.

Some species included in this Plan are also listed on the Accord. These species have been identified in the rules of this Plan, as well as in the Appendix 2 list of Plan species.

The full list of species on the Accord is available on the Ministry of Agriculture and Forestry's website (www.maf.govt.nz). Bay of Plenty Regional Council undertakes regular surveillance for these plant species.

National Interest Pest Responses Programme

The Ministry of Agriculture and Forestry leads the National Interest Pest Responses programme which aims to eradicate selected established pests from New Zealand. These pests are selected for national response because of their potential to have a significant impact on the economic, environmental, social and cultural values of New Zealand.

All species in the Agency Pest classification of this Plan are part of the programme. Programme information and information on these pests can be found on the Ministry of Agriculture and Forestry's website (www.maf.govt.nz).

Site-led pest management

This Plan only deals with species-led pest management, identifying particular species of pests and establishing methods to manage them over all or part of the region.

Site-led management is where the emphasis is on the control of all pests that threaten a particular area or site. The sites may be specific places such as areas of bush, or may be wider habitats such as coastal dunes or wetlands. The site-led approach aims to protect values of specific areas, and facilitates integrated pest management by including a wide range of pests. This type of biodiversity protection and enhancement will be managed through a separate Bay of Plenty Regional Council Biodiversity Programme.

Biological control

Bay of Plenty Regional Council considers biological control to be an essential tool in pest management. While it will never eradicate a pest, it may reduce its population to a level where it is no longer a threat or where management control methods can be used more effectively.

We are a member of a national group consisting of regional councils, unitary authorities and the Department of Conservation that contributes annual funding toward a collective biological control of weeds programme, managed by Landcare Research.

The Environmental Risk Management Authority regulates the deliberate importation, development or release of new organisms into New Zealand under the Hazardous Substances and New Organisms Act 1996. This Act is designed so that the legal importation and release of new organisms can be assessed to determine the effects on people and the environment.

All biological control agents are exhaustively researched and tested to ensure they are host specific. Following testing, small colonies are imported into New Zealand and quarantined. They are then assessed to ensure they are free of parasites or diseases before rearing programmes commence. Biological control agents are reared in containment in preparation for field release, and then distributed to regional councils and other organisations participating in the biological control programme.

Use of chemicals

The use of chemicals, 1080 in particular, is a topical and contentious issue in the Bay of Plenty region. Bay of Plenty Regional Council often receives requests to exclude the use of 1080 as an allowable pest management tool, and to look for a better alternative.

The use of 1080 is supported by Bay of Plenty Regional Council as it is currently the only effective tool in some pest management situations. It is used via broadcasting, ground baiting and bait station application. However, we are aware of the issues around the use of 1080 and other chemicals. We monitor developments in, and participate in research on, alternative methods of pest management that could be used. If alternatives do arise that provide effective control for relevant pests, these alternatives will be used in preference.

Pest management in the coastal marine area

Marine pests generally arrive in an area through ballast water, marine aquaria and hull fouling. Hull fouling generally occurs on commercial vessels, international residential vessels, national residential vessels and fishing boats, including the equipment associated with all four.

The management of marine pests is particularly challenging because incursions are not always detected, or at least are not detected early enough to allow for eradication. Once established, controlling pests in the marine area is technically difficult. For that reason most pest management effort in the marine area is aimed at pathway management as well as avoiding incursions through effective border control.

The question of who has responsibility for managing pests in the marine area has been a source of some debate over the years. In February 2011, the Ministry of Agriculture and Forestry released a Pest Management National Plan of Action which included a table of responsibilities to reduce uncertainty around marine pest management. The responsibilities have been adopted by Cabinet and regional council chief executives as a matter of policy.

The table below sets out these agreed responsibilities in the marine environment[8]. Leading an intervention does not mean doing it alone but means being responsible for bringing together the parties with the necessary powers, functions and resources to agree “what needs to be done” and “who will do what”.

[8] Ministry of Agriculture and Forestry (2011) Pest Management National Plan of Action.

Type	Circumstance		Lead intervention decision-maker	Reason for role
Population management (Species-led management)	Pest not previously detected in New Zealand.		MAF	Manages border, national high-risk site surveillance and national incursion responses.
	Pest already in New Zealand and an objective has been set to eradicate or contain nationally.		MAF	Leads national pest programmes and national surveillance.
	Pest already present in New Zealand and there has been a decision not to eradicate or contain nationally.	Pests affecting public goods, and either not previously in the region or established, but tools to manage are available.	Regional council to coordinate joint decision-making with Crown agencies and interested parties (depending on nature of the pest).	Accountable for regional public interest and has regional capacity to act, but multiple interests and beneficiaries will likely be involved.
		Pests affecting a specific sector, industry or private interest, and either not previously in the region or established, but tools to manage are available.	Industry and/or interested parties to co-ordinate joint decision-making with those best placed to provide support.	Industry is the primary beneficiary but may need capabilities of other parties to be effective.
	Pests widespread in the region and there has been a decision not to eradicate or contain regionally.		Becomes site management issue (see below).	Widespread pests that are not the subject of pest-led programmes can only be managed in specific places to meet site managers' priorities.
Pathway / vector management	Prevention of pest establishment in New Zealand (at border activity – ballast water, biofouling, hitch-hiker organisms, goods and containers).		MAF	Manages border, national high-risk site surveillance and national incursion response.
	Risk to any national or regional value associated with inter-regional vector movement.			Requires national focus as automatically multiregional.
	Risk to coastal marine areas of the Sub-Antarctic Islands and Kermadec Islands (risks associated with vectors, in particular, vessels and their equipment).		Minister of Conservation	Minister of Conservation has the responsibilities, functions and powers of a regional council under section 30(1) (d) of the Resource Management Act 1991 for these specific areas. The Department of Conservation (DOC) may act on behalf of the Minister.
	Risk to any national or regional value associated with intra-regional movement of vectors (for example, of structures, equipment and vessels).		Regional Councils	Have regional capacity and powers to act in the public interest.
	Risk to any national or regional value associated with development of marinas, wharves, jetties and moorings and the on-going maintenance of such facilities.			Have powers under the Resource Management Act (for example, can include conditions in resource consents).
	Risk to any national or regional value associated with dumping of organic material from vessels (within the 12 nautical mile limit and on land).			Administer the Resource Management (Marine Pollution) Regulations 1998.
	Risk to any national or regional value associated with dumping of organic material from vessels and offshore installations in the Exclusive Economic Zone (EEZ) (from the 12 to 200-mile nautical limit).		Maritime New Zealand	Has authority and responsibility in the EEZ under the Maritime Transport Act 1994.

Type	Circumstance	Lead intervention decision-maker	Reason for role
Site/place management (Management to protect values of specific places)	Marine reserves, marine parts of wildlife management reserves and sanctuaries, reserves and national parks administered by DOC.	DOC	Administers these protected areas under the Marine Reserves Act 1971, Wildlife Act 1953, Marine Mammals Protection Act 1978, Reserves Act 1977 and National Parks Act 1980.
	Coastal marine areas of the Sub-Antarctic Islands and Kermadec Islands.	Minister of Conservation	Minister of Conservation has the responsibilities, functions and powers of a regional council of section 30(1)(d) under the Resource Management Act 1991 for these areas. DOC may act on behalf of the Minister.
	Marine protected areas (MPA) administered by bodies other than DOC.	The primary administering body with the necessary powers.	The MPA policy provides for marine protected areas to be established under various statutes with potentially multiple administering agencies. Some agencies will have the necessary administering powers and functions and others will not.
	Places recognised by formal regional policy as being of special value to regional communities (not being sites as above).	Regional councils	Accountable to regional community and have regional capacity and powers to act in the public interest.
	Privately owned structures occupying marine and other environments.	Structure owners	Directly responsible as occupiers to meet rules under the Biosecurity Act 1993 and have capacity to act effectively on site in a way compatible with site use.
	Other sites	Party or parties with the incentives to act and necessary powers to achieve desired objective for the site.	Beneficiaries acting in their own interest.

Council's role in managing pests in the marine environment

Bay of Plenty Regional Council has adopted the lead intervention decision-maker roles for the marine environment as outlined in the table above. These default roles will form the basis of our response to managing pests in the marine environment.

We will also participate in the Top of North Marine Biosecurity Partnership, a regional partnership facilitated by MAF which covers the northern North Island. The partnership aims to prevent marine pest incursions from other parts of the country and minimise the spread of those already established within the northern North Island.

We are yet to fully assess marine pest issues or individual marine pest threats likely to be faced in this region. When there is certainty in risks and our operational requirements in managing these risks, this Plan will be updated.

Appendix 4: Obligations and responsibilities

Bay of Plenty Regional Council

Bay of Plenty Regional Council is the management agency responsible for implementing this Plan. This involves developing and administering systems for implementing the rules, funding mechanisms and monitoring of the Plan. Council is also responsible for identifying pests, and promoting the alignment of pest management activities between regions.

Landowners and occupiers

Landowners and occupiers are required to control pests on their land in the manner prescribed in the rules in this Plan.

Crown land

Central government agencies occupying Crown estate are significant beneficiaries and exacerbators to pest management in the region. While the Biosecurity Act 1993 does not bind the Crown to any rules in a plan, the government has agreed that the Crown will meet its good neighbour obligations.

The Crown will be bound once strategies have been aligned with a national policy direction, likely to be provided in 2012. Until this time the Crown will be encouraged to comply with the rules in the Plan.

New Zealand Transport Agency

The New Zealand Transport Agency is responsible for land associated with the National State Highway network. The Agency is a Crown entity and is required to comply with the rules in the Plan.

KiwiRail

KiwiRail is the occupier of land which forms the railway corridor in the Bay of Plenty. KiwiRail is considered to be a Crown agency and is required to comply with the rules in the Plan.

Rail and road controlling authorities

The construction and maintenance of roads and rail lines exacerbate pest problems as they are recognised as corridors for the spread of pest plants and pest animals.

In this Plan the responsibility for roadside verge control for all formed roads is the responsibility of the roading authority, in common with most pest management strategies in New Zealand. Responsibility for pest control on unformed roads lies with the land occupier who physically occupies the land.

Territorial authorities

Seven territorial authorities are wholly or partly contained within the Bay of Plenty region. They are Kawerau District Council, Ōpōtiki District Council, Rotorua District Council, Taupō District council, Tauranga City Council, Western Bay District Council and Whakatāne District Council.

Each territorial authority will be bound by the rules in this Plan unless they have a programme for the control of pests on their land that is approved by Bay of Plenty Regional Council. Each territorial authority will be responsible for meeting the costs of complying with this Plan.

Bay of Plenty Regional Council is not seeking any contributions towards the administration of this Plan from the territorial authorities.

Public

Everyone has a responsibility not to spread pests or unwanted organisms and to abide by the rules in this Plan. By growing pest plants in gardens, by dumping garden rubbish or pets in areas of bush or by releasing pest animals for sport, individuals become exacerbators and thus adversely affect economic, cultural and environmental values in the region.

Appendix 5: Effects of implementation

The Act requires Council to specify the effects of implementing the Plan on the following:

Relationship of Māori with their environment

This Plan will have beneficial effects because the adverse impacts of pests will be avoided, remedied, or mitigated. The Plan will also contribute to the protection of native flora and fauna. No species of native flora or fauna will be the focus of control under this Plan.

Potential adverse effects of implementing the Plan include those on tikanga (safety for people who may breach tapu associated with areas), kaitiakitanga (effects of manipulating habitats), taonga (effects of chemicals on water, fish, shellfish and indigenous birds) and waahi tapu (effects of chemicals on special places). However, the risk of adverse effects on the environment is considered small in comparison to the benefits of pest control. Many of the pesticides and herbicides currently in use in the region are biodegradable and, if used in the prescribed manner, will not have significant environmental effects.

The environment

The Plan's implementation will avoid or reduce the impacts that pests have on the environment, and in many cases will assist with the protection of significant biodiversity values in the Bay of Plenty. The Plan will also protect recreation and amenity values in the region.

The implementation of the Plan will require landowners and occupiers to control a wide range of pests. A variety of methods can be employed, including manual, mechanical, chemical and non-chemical methods. While there is some public concern over the environmental effects of pesticides, the risk to the environment and public health is low when they are applied according to the manufacturers' directions. For many pests, there is no practical alternative to the use of pesticides. Bay of Plenty Regional Council will consider the use of all control methods, including organic control methods, when recommending control programmes.

Bay of Plenty Regional Council is committed to ensuring best environmental practice and recognised humane methods for animal pest management. Appropriate consideration will always be given to animal welfare during pest control operations, and alternative measures will be considered where they can achieve a desired outcome.

Marketing of New Zealand products

The effects of the Plan's implementation on the overseas marketing of New Zealand products should be very minimal. The control of pest plants should facilitate increased agricultural production in some cases. Similarly, the control of pest plants and animals in the conservation estate should increase the recreational and aesthetic values associated with such areas, which may benefit tourism.

Appendix 6: Regulatory management

Powers conferred for Plan implementation

To achieve the purpose of the Plan and to give effect to its rules, Bay of Plenty Regional Council will use the statutory functions, powers and duties available under Part VI of the Biosecurity Act 1993 outlined in the table below. Pursuant to section 103, the Chief Executive (as Principle Officer) has appointed authorised persons, and may delegate powers to any authorised person subject to section 105 of the Act.

Administrative Powers	**Biosecurity Act 1993 reference**
Powers of Bay of Plenty Regional Council / Chief Executive	
The power to exempt land occupiers from Plan Rules	80D
The appointment of Authorised and Accredited Persons	103
Delegation to Authorised Persons	105
Power to act on default (undertake necessary work on failure to comply with a section 122 notice and to recover costs)	128
Liens (statutory land charge may be placed on property if section 128 costs not paid, or prosecution is an option)	129
Declaration of a controlled area	131
Options for cost recovery	135
Failure to pay	136
Powers of an Authorised Person	
Power to request information from land occupiers	43
Require assistance from any person	106
Inspection (entry to land)	109, 110, 112
Entry in respect of offences	111
Record information	113
General powers	114
Application of articles or substance from aircraft	114A
Use of dogs or devices (traps and bait stations)	115
Seize evidence	118
Seize abandoned goods	119
Intercept baggage etc	120
Examine organisms	121
Apply articles or substances to places	121A
Give notices (serve notices on occupiers to remove pests)	122
Declare restricted places	130

Exemption process

Bay of Plenty Regional Council may, upon the written request of a landowner or occupier or road and rail controlling authorities, exempt any person from any requirement in any Plan rule. Before granting an exemption, Bay of Plenty Regional Council must be satisfied that:

1. The requirement has been substantially complied with and that further compliance is unnecessary; OR
2. The action taken or provision made is as effective or more effective than actual compliance with the requirement; OR
3. The prescribed requirements are clearly unreasonable or inappropriate in the particular case; OR
4. Events have occurred that make the prescribed requirements unnecessary or inappropriate in the particular case.

In all cases Bay of Plenty Regional Council must be satisfied that granting the exemption will not significantly prejudice achieving the Plan objectives.

On receipt of any request, Bay of Plenty Regional Council will advise that person within five working days of its decision whether or not to grant an exemption and any conditions that may be attached. All dispensations will be reported publically.

Bay of Plenty Regional Council will take a precautionary approach to granting exemptions. It will encourage pre-application consultation with likely affected parties to address possible concerns, and will seek to resolve outstanding issues through informal processes wherever possible. Regard will be given to:

- Soil conservation or erosion control effects of plant pests in erosion prone sites (except quarries)
- Regeneration of indigenous organisms
- Prevention or mitigation of flood damage
- Effective suppression of pest spread by grazing or hedging
- Whether the pest is being used for valid scientific research
- Whether the pest plant is being used for recognised herbal use.

Glossary / Definitions

Abandoned	In relation to wild kiwifruit, means being untended or unmanaged for a period longer than 12 months.
Agencies	For the purposes of this Plan, means central or local government bodies, Crown entities or any other government organisation.
Authorised person	A person appointed an Authorised Person under section 103 of the Biosecurity Act 1993.
Bed	In relation to *Egeria densa*, lagarosiphon and hornwort defined areas, bed means the space of land which the waters of the lake cover at its highest level without exceeding its margin.
Beneficiary	The receiver of benefits accruing from the implementation of a pest management measure or the Plan.
Biological control	The introduction and establishment of living organisms, used to assist in the control of another organism.
Chief Technical Officer	A person appointed a Chief Technical Officer under section 101 of the Biosecurity Act 1993.
Control	To either: (a) Limit or decrease the extent or density of a plant or animal population by an approved method; or (b) Stop the growth and/or spread of a plant or animal by an approved physical, mechanical, chemical or biological method.
Costs and benefits	Includes costs and benefits of any kind, whether monetary or nonmonetary.
Destroy	To immediately kill an animal or extinguish all growth of a plant.
Effect	Unless the context otherwise requires, the term “effect” includes: (a) Any positive or adverse effect; and (b) Any temporary or permanent effect; and (c) Any past, present, or future effect; and (d) Any cumulative effect which arises over time or in combination with other effects; regardless of the scale, intensity, duration or frequency of the effect, and also includes: (e) Any potential effect of high probability; and (f) Any potential effect of low probability which has a high potential impact.
Environment	Includes: (a) Ecosystems and their constituent parts, including people and their communities; and (b) All natural and physical resources; and (c) Amenity values; and (d) The aesthetic, cultural, economic, and social conditions that affect or are affected by any manner referred to in paragraphs (a) to (c) of this definition.
Exacerbator	A person, who by their action or inaction, contributes to the creation, continuance or aggravation of a pest management problem.

Feral	Means: (a) Any animal other than a cat that has reverted to a wild state from domestication and is free-ranging; or (b) Any cat that is living without direct or indirect (sheltering under buildings, scavenging food) assistance from humans.
Monitoring	To observe, measure and record the population levels and trends of a particular pest population.
Occupier	Means: (a) In relation to any place physically occupied by any person, means that person; and (b) In relation to any other place, means the owner of the place; and (c) In relation to any place, includes any agent, employee, or other person, acting or apparently acting in the general management or control of the place.
Pest	An organism specified as such in this Plan, but excludes dead plants or animals.
Risk goods	Means any organism, organic material, or other thing, or substance, that (by reason of its nature, origin, or other relevant factors) it is reasonable to suspect constitutes, harbours, or contains an organism that may: (a) Cause unwanted harm to natural and physical resources or human health; or (b) Interfere with the diagnosis, management, or treatment, of pests or unwanted organisms.
Road	A road as defined in section 315 of the Local Government Act 1974, which includes the land contained within the legal boundaries. A formed road is one that has a formed carriageway and is under the control of and maintained by a road controlling authority. An unformed road is one that is not under the control of or maintained by a road controlling authority whether or not it has a formed carriageway.
Sub-regional area	An area within the Bay of Plenty region that is specifically defined as part of a rule in this Plan, and that applies to a pest, or pests, listed in this Plan.
Surveillance	To survey areas to establish the absence, presence or extent of pests.
Vector	Any organism or thing which carries another organism into an area, or onto or into another host.
Wild kiwifruit	Any unmanaged plant material, self-propagated or abandoned plant of the *Actinidia* species.
Wild green-goddess lily	A self-propagated or abandoned plant of *Zantedeschia aethiopica cv* Green Goddess.
Wild mice and rabbits	Any mouse or rabbit that is not being managed and under control by way of containment.
Wilding conifers	For the purposes of this Plan, refers to self-propagated Scots pine, Douglas fir, Corsican pine, mountain pine, muricata pine, maritime pine, European larch, radiata pine, ponderosa pine, white pine. Excludes lodgepole pine.
Zero density	When there are no known animals or plants left of the pest species of concern, in the area of concern, at the end of annual pest control operations. Zero density is a status slightly less than eradication because of the risk of re-infestation from, for example, viable dormant seed. It also acknowledges imperfect surveillance, monitoring and detection.

Scientific names of all species in the Plan

Common name	Scientific name
African feather grass	*Pennisetum macrourum*
Agapanthus	*Agapanthus praecox*
Alligator weed	*Alternanthera philoxeroides*
Aluminium plant	*Lamium galeobdolon 'Variegatum'*
Apple of Sodom	*Solanum linnaeanum*
Argentine ants	*Linepithema humile*
Arum lily	*Zantedeschia aethiopica*
Asiatic knotweed	*Fallopia japonica*
Banana passionfruit	*Passiflora tarminiana* and *P.tripartita*
Blackberry	*Rubus fruiticosus agg*
Blue morning glory	*Ipomoea indica*
Boneseed	*Chrysanthemoides monolifera*
Brown bullhead catfish	*Ameiurus nebulosus*
Bushy asparagus	*Asparagus aethiopicus*
Californian bulrush	*Schoenoplectus californicus*
Cape tulip	*Moraea flaccida*
Cathedral bells	*Cobaea scandens*
Cats (feral)	*Felis catus*
Cestrum	*Cestrum elegans, C. fasciculatum, C. nocturnum, C. aurantiacum*
Chilean flame creeper	*Tropaeolum speciosum*
Chilean rhubarb	*Gunnera tinctoria*
Chinese fan palm	*Trachycarpus fortunei*
Climbing asparagus	*Asparagus scandens*
Climbing dock	*Rumex sagittatus*
Climbing spindleberry	*Celastrus orbiculatus*
Coast tea tree	*Leptospermum laevigatum*
Coastal banksia	*Banksia integrifolia*
Crack willow	*Salix fragilis*
Darwin ants	*Doleromyrma darwiniana*
Darwin's barberry	*Berberis darwinii*
Didymo	*Didymosphenia geminata*
Eastern rosella	*Platycercus eximius*

Common name	Scientific name
Egeria densa	*Egeria densa*
Elaeagnus	*Elaeagnus x reflexa*
Elephant's ear	*Alocasia brisbanensis*
Elodea canadensis	*Elodea canadensis*
English ivy	*Hedera helix*
Ferrets	*Mustela furo*
Fire thorn	*Pyracantha angustifolia*
Gambusia	*Gambusia affinis*
German ivy	*Senecio mikanioides*
Goats (feral)	*Capra hircus*
Gorse	*Ulex spp*
Green goddess lily	*Zantedeschia aethiopica 'Green Goddess'*
Grey willow	*Salix cinerea*
Heather	*Calluna vulgaris*
Hedgehog	*Erinaceus europaeus*
Himalayan balsam	*Impatiens glandulifera*
Hornwort	*Ceratophyllum dimersum*
Horse nettle	*Solanum carolinense*
Houttuynia	*Houttuynia cordata*
Hydrilla	*Hydrilla verticillata*
Italian buckthorn	*Rhamnus alaternus*
Japanese honeysuckle	*Lonicera japonica*
Japanese spindle tree	*Euonymus japonicus*
Japanese walnut	*Juglans ailantifolia*
Jasmine	*Jasminum polyanthum*
Johnson grass	*Sorghum halepense*
Koi carp	*Cyprinus carpio.*
Kudzu vine	*Pueraria lobata*
Lagarosiphon	*Lagarosiphon major*
Lantana	*Lantana camara*
Lilium formosanum	*Lilium formosanum*
Lodgepole pine	*Pinus contorta*
Magpie	*Gymnorhina hypoleuca*
Manchurian wild rice	*Zizania latifolia*

Common name	Scientific name
Marshwort	*Nymphoides geminata*
Mexican devil	*Ageratina adenophora*
Mexican feather grass	*Nassella tenuissima*
Mexican water lily	*Nymphaea mexicana*
Mice (feral)	*Mus musculus*
Mignonette vine	*Anredera cordifolia*
Mile-a-minute	*Dipogon lignosus*
Mistflower	*Ageratina riparia*
Monkey apple	*Syzygium smithii*
Moth plant	*Araujia hortorum*
Mynah	*Acridotheres tristis*
Nassella tussock	*Nassella trichotoma*
Noogoora bur	*Xanthium strumarium*
Old man's beard	*Clematis vitalba*
Pampas grass	*Cortaderia selloana, C. jubata*
Parrots feather	*Myriophyllum aquaticum*
Perch	*Perca fluviatilis*
Periwinkle	*Vinca major*
Phragmites	*Phragmites australis*
Plectranthus	*Plectranthus ciliatus*
Possums	*Trichosurus vulpecula*
Prickly pear cactus	*Opuntia monacantha*
Privet	*Ligustrum sinense L. lucidum*
PTA	*Phytopthora* taxon *agathis*
Purple loosestrife	*Lythrum salicaria*
Purple nutsedge	*Cyperus rotundus*
Pyp grass	*Ehrharta villosa*
Rabbits (feral)	*Oryctolagus cuniculus*
Ragwort	*Senecio jacobaea*
Rainbow lorikeet	*Trichoglossus haematodus*
Rainbow skink	*Lampropholis delicata*
Rats (Ship and Norway)	*Rattus rattus R. norvegicus*
Rooks	*Corvus frugilegus*
Royal fern	*Osmunda regalis*
Rudd	*Scardinius erythropthalmus*
Rum cherry	*Prunus serotina*
Saltwater paspalum	*Paspalum vaginatum*

Common name	Scientific name
Salvinia	*Salvinia molesta*
Selaginella	*Selaginella kraussiana*
Senegal tea	*Gymnocoronis spilanthoides*
Shield pennywort	*Hydrocotyle verticillata*
Sika deer (feral)	*Cervus nippon*
Smilax	*Asparagus asparagoides*
Snow poppy	*Eomecon chionantha*
Spartina	*Spartina spp*
Stawberry dogwood	*Cornus capitata*
Stoats	*Mustela erminea*
Sydney golden wattle	*Acacia longifolia*
Taiwan cherry	*Prunus campanulata*
Tench	*Tinca tinca*
Tradescantia	*Tradescantia fluminensis*
Tree of heaven	*Ailanthus altissima*
Tuber ladder fern	*Nephrolepis cordifolia*
Variegated thistle	*Silybum marianum*
Velvet groundsel	*Senecio petasitis*
Wallabies	*Macropus spp*
Wandering Jew	*Tradescantia fluminensis*
Wasps	*Vespula spp Polistes spp*
Water hyacinth	*Eichhornia crassipes*
Water poppy	*Hydrocleys nymphoides*
Weasels	*Mustela nivalis*
White bryony	*Bryonia cretica*
White-edged nightshade	*Solanum marginatum*
Wild ginger	*Hedychium gardnerianum, H.flavescens*
Wild green-goddess lily	*Zantedeschia aethiopica cv Green Goddess*
Wild kiwifruit	*Actinidia spp*
Wonder tree	*Idesia polycarpa*
Woolly nightshade	*Solanum mauritianum*
Yellow flag iris	*Iris pseudacorus*

Bay of Plenty Regional Council
5 Quay Street
PO Box 364
Whakatāne 3158
NEW ZEALAND

Website: www.boprc.govt.nz

Phone: 0800 884 880
Fax: 0800 884 882

GDS11-3665