Taranaki Regional Council Biosecurity Strategy

2017 – 2037

Taranaki Regional Council

Private Bag 713

Stratford

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At a glance

Our vision

Taranaki has a high performing, integrated system for managing the risks and impacts of pests and other harmful organisms to the economy, environment and human health.

Agencies, community groups and individuals work cooperatively, taking an integrated, efficient and cost effective approach that is based on sound science and a social mandate to undertake that work.

Together we are making a significant contribution to protecting our region, people, economy and natural resources by preventing the introduction or establishment of new pests and by reducing the damage caused by pests and other harmful organisms introduced in the past.

(refer section 3)

Five priorities

We will achieve the vision by implementing the following strategic priorities for action:

Pathways and exclusion

Eradication

Sustained control

Regional leadership

Description

Undertake risk assessments, surveillance and exclusion programmes to prevent the establishment of new invasive (and harmful) species to Taranaki or the exacerbation of existing problems

For invasive species not yet established in the region, increase the focus on reducing the infestation level of invasive species to zero levels in Taranaki in the short to medium term to prevent their establishment

Implement regulatory response, including application of good neighbour rules, that provide for the ongoing control of 'pests' under the RPMP to reduce their impacts and spread to other properties

Facilitate and support the efforts of others in the community contributing to pest outcomes through community and site led programmes that exclude, eradicate, contain, reduce or control invasive species to protect a site's values

Working with others

On the region's behalf, , coordinate and lead regional responses through biosecurity planning, biological control, research, advocacy and liaison, and other assistance

Key actions (over life of the Strategy)

- Prepare risk assessments and plans for harmful organisms that are likely to have significant impacts and are not yet present in the region
- Monitor high risk pathways to ensure the early detection of harmful organisms that are likely to have significant impacts on the region
- Support national pathway initiatives to reduce the potential spread of harmful organisms and their impacts
- Identify any new infestations of 'Eradication Programme' pests
- Undertake direct control of known infestations of 'Eradication Programme' pests
- Monitor and enforce compliance with RPMP rules for 'Sustained Control Programme' pests
- As part of the Self-help Possum Control Programme, maintain possum populations at very low levels
- Expand Old Man's Beard Programme, to support land occupiers undertaking control adjacent to the Kaupokonui and Waingongoro rivers
- Expand Self-help Possum Control Programme to support community driven initiatives, including landscape predator control
- As part of an urban pest project, expand support for district councils and urban land occupiers to control predators
- Work with and support land occupiers and community groups undertaking pest control to protect regionally- significant biodiversity values
- Undertake biosecurity planning, including development and review of regional pest management plans
- Contribute to and facilitate biological control and research for harmful organisms established and widespread in the Taranaki region
- Provide advice and information to avoid, remedy or mitigate the spread of harmful organisms and their impacts
- Undertake advocacy and liaison to support government or industry-led pest initiatives

(refer sections 4 to 8

Outcomes

Key outcomes delivered by the Strategy by 2037 that contribute to the vision are:

- To aim to have no new harmful organisms established in the region (noting that achieving this outcome is largely dependent upon the actions of others)
- Climbing spindleberry, Giant reed, Madeira vine and Senegal tea eradicated from the region
- Wide spread pests and weeds having regionally significant impacts are being managed to an appropriate level that, at the very least, reduces adverse impacts on neighbours
- Across the ring plain (over 32% of the region), possums and predators are being maintained at very low levels to protect remnant indigenous ecosystems and wildlife
- Biosecurity policy in the region is informed by strong science and robust information.

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Preface

Over the last 180 years the introduction of exotic economically important plants and animals has helped to shape Taranaki's landscape, people and economy. They include pasture grasses, plantation forestry and introduced cattle, sheep and other animals. However, over that time, Taranaki' has also been under constant pressure from other exotic plants and animals that because of their biological characteristics or impacts are generally recognised to be 'pests'.

Protecting Taranaki from harmful pests, weeds and diseases is vital to protecting our economy, environment, health and social and cultural well-being. Under the Biosecurity Act 1993, the Taranaki Regional Council (the Council) has a key role in biosecurity. However, many others – nationally, regionally and/or individually – also have responsibilities and/or an interest in pest management.

This proposed Strategy, relates to that part of the biosecurity system for which the Taranaki Regional Council has a mandate to be involved. Its purpose is to seek the community's views and establish a strategic framework across all the Council's biosecurity related activities. As such it covers not just the regulatory component detailed in the *Proposed Pest Management Plan for Taranaki* but also the many other programmes and activities that fall under the wider biosecurity umbrella.

Through this Strategy, the Council aims to achieve smart and integrated management of the plethora of 'pest' risks in Taranaki through a large suite of new and existing biosecurity programmes. It should be read in conjunction with the *Proposed Pest Management Plan for Taranaki*, which is the region's 'rulebook' for 14 species for which regulatory management is considered appropriate.

Key features of this Strategy include:

- A vision for biosecurity in the Taranaki region, including principles and priorities underpinning the Council's biosecurity programmes and activities
- Increased focus on pathway and surveillance programmes to prevent new 'pests' entering the region
- Increased focus on eradicating four plant species not yet established in the region and for which eradication is technically feasible
- A proposal to expand the Self-help Possum Control Programme to deliver predator control for possums, rats and mustelids across 275,000 hectares
- New programmes to roll back heavy infestations of Old man's beard along the Kaupokonui and Waingongoro rivers
- New programmes targeting pest control in urban areas to promote biodiversity outcomes
- Continued enforcement of rules for Sustained Control Programme pests (but note introduction of good neighbour rules, which the Crown must comply with)
- Continuing to work with others to support community pest initiatives and site-led programmes.

Over time the Council has committed significant resources to the management of legacy pests that are impacting production and biodiversity values. Through this Strategy, a change in the way we undertake pest management is proposed. The Council is seeking to increase its focus on new pests while they are a small problem. The aim is to avoid them becoming a much larger problem later. This should help us to become more resilient to pest impacts.

The Council will continue to work closely with land owners to manage the impacts of pests on their neighbours. However, through this Strategy, there is an opportunity to enhance existing programmes and improve the outcomes we wish to achieve for pest management for the region.

Do you think that there is a need for change in the focus and resourcing of the Council's biosecurity programme? Your views and comments will provide us with valuable feedback to help us to set a vision, establish our priorities, and map out the programmes and activities necessary to meet the community's future biosecurity needs.

We look forward to hearing your views.

David MacLeod

Chair, Taranaki Regional Council

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Table of contents

Contents

At a g	lance.		i
Our v	ision		i
(refer	sectio	n 3)	i
Five p	rioriti	es	i
•			i
Pat	hways	and exclusion	i
Era	dicatio	on	i
Sus	Sustained control		i
Wo	rking	with others	i
Reg	gional	leadership	i
Outco	mes		i
•			i
Prefac	:e		i
Table	of cont	tents	iii
1. I	ntrodu	ction	7
1.1	Title		7
1.2	Purp	oose	7
1.3	Sco	pe and application	7
1.4	Stru	cture	8
2. B	Backgro	ound	9
2.1	Bios	security – a layered defence	9
2.2	Pest	t management in Taranaki	9
2	2.2.1	Biosecurity issues of significance	12
2	2.2.2	Pest infestation curve model	12
2.3	Cou	ncil's biosecurity framework	13
2	2.3.1	Biosecurity Act 1993	13
2	2.3.2	National Policy Direction for Pest Management	13
2	2.3.3	Regional pest management plan	13
2	2.3.4	Regional pathway management plan	14
2	2.3.5	Small-scale management programme	14
2	2.3.6	Local Government Act 2002	14
2	2.3.7	Other Council strategies and plans	15
2.4	Wid	er biosecurity framework outside Council	16
2	2.4.1	Ministry for Primary Industries	16
2	2.4.2	Department of Conservation	16

2	2.4.3	Territorial local authorities	16
2	2.4.4	New Zealand Transport Authority	17
2	2.4.5	KiwiRail	17
2	2.4.6	Others	17
2.5	Ove	view of statutory roles and responsibilities for biosecurity management in Taranaki	18
3. 1	Taranak	vision and priorities for biosecurity	19
3.1	A vis	ion for biosecurity in Taranaki	19
3.2	Bios	ecurity principles	20
3.3	Bios	ecurity priorities	20
4. F	Pathway	s and exclusion	21
4.1	Wha	t we want to achieve	21
4.2	Wha	t we will do	21
4	4.2.1	Risk assessments and contingency planning	22
4	4.2.2	Pathway surveillance	23
4	4.2.3	Incursion response	24
2	4.2.4	Support national pathway initiatives	25
4.3	Path	way and exclusion targets (key performance indicators)	27
5. E	Eradicat	on	29
5.1	Wha	t we want to achieve	29
5.2	Wha	t we will do	29
5	5.2.1	Surveillance and monitoring of Eradication Programme pests	30
5	5.2.2	Direct control of Eradication Programme pests	31
5.3	Erad	ication targets (key performance indicators)	32
6. 9	Sustaine	d control	33
6.1	Wha	t we want to achieve	33
6.2	Wha	t we want to do	33
6	6.2.1	Compliance monitoring and inspections	34
6	6.2.2	Enforcement action	35
6.3	Sust	ained Control targets (key performance indicators)	36
7. \	Working	with others (community and site led initiatives)	37
7.1	Wha	t we want to achieve	37
7.2	Wha	t we will do	37
7	7.2.1	Self-help Possum Control Programme	38
7	7.2.2	Landscape predator control on the ring plain	40
7	7.2.3	Urban projects	41
7	7.2.4	Old Man's Beard Programme – Kaupokonui and Waingongoro	42
7	7.2.5	Community and site-led biodiversity programmes	43
7	7.2.6	Other support and assistance services	45
7.3	Com	munity and site-led targets (key performance indicators)	46
8. (Other le	adership responses	47
8.1	Wha	t we want to achieve	47

8.2 Wł	nat we will do	47
8.2.1	Biosecurity planning	48
8.2.2	Biological control and research	49
8.2.3	Provision of advice and education	51
8.2.4	Advocacy and liaison	52
8.3 Lea	adership targets (key performance indicators)	54
9. Strateg	gy monitoring and review	55
Definitions	and acronyms	57
References.		61
Appendix 1	: Summary of the means for achieving individual pest management objectives	63
List of	e biosecurity continuum	7
	e Taranaki region	
Figure 3: Pe	est infestation curve	12
Figure 4: Le	gislative and planning framework contributing to the Biosecurity Strategy	15
Figure 5: Pla	anning, implementation, monitoring and review of the Biosecurity Strategy	55
List of		40
	anaki Regional Council's place in biosecurity management	
Table 2: RPI	MP rules for Sustained Control Programme pests in Taranaki	33

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1. Introduction

1.1 Title

This document is entitled the *Taranaki Regional Council Biosecurity Strategy 2017-2037* (the Strategy). It has been prepared by the Taranaki Regional Council (the Council).

The Strategy is a **non statutory** document that complements and supports the *Regional Pest Management Plan for Taranaki* (the RPMP).

1.2 Purpose

The purpose of this Strategy is to set out the Council's strategic direction and framework relating to its biosecurity responsibilities for the next 20 years. In particular, the Strategy:

- sets out the Council's leadership responsibilities, vision and priorities for biosecurity in the Taranaki region, and
- outlines and integrates, across all things biosecurity, the non-regulatory and regulatory programmes and activities that the Council will either lead or participate in.

1.3 Scope and application

Biosecurity is defined as "...the exclusion, eradication or effective management of risks posed by pests and diseases to the economy, environment and human health" 1

Biosecurity encompasses a broad suite of activities – from pre-border to pest management – with many national and local agencies having very separate roles and responsibilities (refer Figure 1). It is also addressed under a plethora of legislation – most noticeably the Biosecurity Act 1993 (BSA). However, as noted in sections 2.2 and 2.3, other legislation applies and other agencies also have a role.

The Strategy addresses the Council's biosecurity roles and responsibilities (and not those of other agencies).

Unless the context relates otherwise, for the purposes of this Strategy 'biosecurity' refers to the management of all harmful organisms and not just those legally defined as 'pests' in a RPMP. The BSA definition of a pest only relates to "...an organism specified as a pest in a pest management plan".

The Strategy sets out the Council's strategic directions and priorities for pest management over the next 20 years, including mandatory and discretionary programmes and activities. On occasion the Council will be the lead agency; on other occasions, the Council may have a supporting role where it is contributing to the programmes and activities of other agencies.

The Strategy does not contain rules. Rules relating to pest management are set out in the RPMP.

Biosecurity from local to global



Figure 1: The biosecurity continuum

7

¹ Biosecurity Strategy for New Zealand, 2003.

The Strategy applies to the Taranaki region as shown on SO Plan 13043 deposited with the Chief Surveyor of the Taranaki Land District (refer Figure 2) The region covers 723,610 hectares on the North Island's west coast. The boundaries of the region conform to those of water catchments and extend from the Mohakatino catchment in the north to the Waitotara catchment in the south and inland to, but not including the Whanganui catchment.



Figure 2: The Taranaki region

1.4 Structure

The Strategy has nine sections.

Section 1 introduces the Strategy, including its purpose, scope, and structure.

Section 2 sets the scene in relation to pest management in Taranaki, including the risks from pests and other harmful organisms, the Council's legislative mandate to act, plus the legislative roles and responsibilities of other key players in the region.

Section 3 sets out a vision, principles and priorities for managing biosecurity risks in Taranaki. Five priority areas are identified to give effect to that vision and principles, these are: pathways; eradication; sustained control; working with others; and leadership.

Section 4 sets out the suite of pathway and exclusion programmes, actions and targets to managing the risk of invasive species being introduced to and spreading across the region.

Section 5 sets out the suite of programmes, actions and targets for eradication programmes to prevent invasive species already present in the region from becoming established.

Section 6 sets out the suite of regulatory programmes, actions and targets relating to managing the externality impacts of established 'pests' to be managed via Sustained Control Programmes.

Section 7 sets out the suite of regulatory and non regulatory community and site-led programmes, actions and targets where the Council is largely working with others to achieve common pest management outcomes.

Section 8 sets out other programmes, actions and targets (not already addressed) relating to the Council's other 'leadership' responsibilities for biosecurity.

Section 9 outlines the monitoring and review provisions of the Strategy.

A definition of terms and acronyms used in the Strategy are presented at the back of the Strategy.

2. Background

2.1 Biosecurity – a layered defence

Taranaki is but a small part of New Zealand's wider biosecurity system. It involves many players, each with their own roles and responsibilities.

New Zealand's biosecurity system is widely acknowledged as being one of the world's best. It is made up of three broad areas of activity: pre-border, at the border, and post-border. This Council's roles and responsibilities are confined to the latter area –the post-border.

Pre-border

Pre-border activities result in the vast majority of biosecurity risks being managed offshore as exporting countries take action to ensure their export products meet our biosecurity import requirements. The Ministry for Primary Industries is charged with managing risks offshore, developing international standards and rules, trade and bilateral agreements, monitoring emerging risks, and setting import health standards.

At the border

The Ministry for Primary Industries is also charged with intercepting biosecurity risks at the border. Activities include inspections at airports, seaports, mail centres and along the coastline for ensuring compliance with rules and for overseeing national readiness, surveillance, responses and management of biosecurity risks at the border.

Post-border

There are two aims here: to reduce the likelihood of harmful pests or diseases from establishing in New Zealand, and to reduce or contain the harm caused by those that have.

Activities include monitoring and surveillance activities, and controlling weeds and animal pests. Many participants are involved in this part of the system. They include not just the Council but also central government, industry, iwi, community groups, district councils, and the public.

2.2 Pest management in Taranaki

Over the last 180 years, the introduction of economically important plants and animals has helped to shape Taranaki's landscape, people and economy. Sixty percent of the region is now covered by exotic grasses with introduced cattle, sheep and other animals underpinning the local economy. However, over that time, Taranaki's farmed and natural landscapes have also been under constant pressure from a wide range of largely exotic plants and animals that because of their biological characteristics or impacts are generally recognised to be 'pests'.

'Legacy' pests refer to harmful organisms that are widespread and historically have been a problem for many years, particularly in relation to impacts on agricultural production. In Taranaki, legacy pests include harmful organisms such as Ragwort, Old man's beard, possums, goats and wasps. However, there are many more harmful species, not yet in the regions that also have the potential to arrive and exacerbate existing pest problems, e.g. Velvetleaf, Didymo.

'Pest' impacts and the significance of those impacts will vary according to the species. However, typically their impacts can be grouped around the following themes:

- industries is compromised by a wide range of harmful organisms. These harmful organisms cost the country billions of dollars in lost revenue and control costs. For example, pastoral weeds are conservatively estimated to cost the New Zealand economy \$1.2 billion per annum in lost animal production and control costs. The total direct economic cost of vertebrate pests to the primary sector is estimated at about \$1 billion per year, but with multipliers included could be as high as \$3.3 billion (1.96% of GDP). Examples of harmful organisms already present in Taranaki having significant economic impacts would include Ragwort, thistles, rabbits and possums.
- Biodiversity: Weeds pose a threat to one-third of all New Zealand nationally threatened plant species. There are more than 300 weeds of conservation concern in New Zealand. Possums, stoats, rats and cats are among some of the threats facing Taranaki's native plants, birds,

² Royal Society of New Zealand, 2014.

reptiles and bats. The long term costs of loss of native biodiversity from invasive vertebrate, invertebrate, freshwater, marine and microorganism species are difficult to monetarised but are significant nonetheless.

- Natural resource (soil and water): Aquatic
 weeds and pest fish in Taranaki rivers and lakes
 can destabilise aquatic habitats, and modify water
 flow with negative consequences for drainage,
 irrigation, power generation, and recreational
 activities. In the marine environment, invasive
 species such as *Undaria* and *Grateloupia* displace
 native species and modify coastal habitats.
 Invasive marine species also pose threats to
 aquaculture, commercial fishing and other
 maritime industries, including recreational
 pastimes.
- Amenity (recreation and lifestyle): Invasive ants such as Argentine ants or fire ants can have a very significant impact on lifestyle. Wasps and aquatic weeds such as Egeria, Lagarosiphon and Hornwort are examples of locally established pests already reducing recreational experiences in the region.

- Human health: Some pests can directly impact on human health, e.g. poisonous weeds such as Hemlock, attacks by wasps or magpies causing injury, or bites from exotic spiders and ants.
 Other pests may have indirect impacts on human health by being a vector for diseases.
- Animal health and welfare: Some animal pests mays be a vector for diseases that impact on animal health and well-being, e.g. Bovine tuberculosis, while some weeds may be poisonous to livestock. Foot-and-Mouth Disease is one of the biggest biosecurity threats facing New Zealand. 3
- Social and cultural wellbeing: Includes impacts on wahi tapu sites but also includes potential impacts on biodiversity (e.g. mahinga kai species), natural resources, amenity and human health values etc.

Controlling invasive species is an important part of protecting the region's natural environment and productive capacity of land. It is not something that agencies such as the Council can or should be tackling on their own. It is something all of us must take responsibility for.



Pest management in Taranaki – a responsibility that we all share. Council officers talking to local farmers about possum control.

10

³ The Ministry of Primary Industries is the lead Government agency for border control and preventing the introduction of diseases such as Foot and Mouth Disease to New Zealand.

Biosecurity and pest management are crucial to New Zealand's environmental and economic wellbeing



2.2.1 Biosecurity issues of significance

For the purposes of this Strategy, biosecurity issues of regional significance to Taranaki are:

- Managing existing threats: Invasive and harmful organisms threaten our economy and environment, despite investing heavily in biosecurity and pest management systems.
- Looking to the future: More emphasis needs to be given to surveillance and monitoring to increase the chances of successful eradication of new incursions when a species' distribution is still limited; and to prevent the recovery of existing pests after control has been applied.
- Building partnerships and knowledge: More emphasis needs to be given to aligning and supporting the management efforts across the biosecurity system. This recognises that harmful organisms are managed across New Zealand and the region by many organisations and responsibilities.

 Addressing priorities: Pest management systems need to be dynamic, responsive and adaptable. Resources for managing harmful organisms are finite, requiring a 'future focus' in pest management that prioritises prevention, early intervention, and pathway management over ongoing management of established, widespread invasive species.

2.2.2 Pest infestation curve model

The pest infestation curve model (Figure 3) demonstrates basic pest population dynamics and is widely used by agencies to help determine the most appropriate approach to managing invasive species. Generally, the lower a harmful organism is situated on the curve, the more cost effective it will be to control, and eradication may be feasible. The higher a harmful organism is on the curve, the more difficult and costly it will be to control, although there may be benefit in controlling the species in specific areas or sites where it is not yet established, or to protect particular values.

As a species moves through the continuum, the management approach should respond accordingly, from concerted initial efforts to prevent its establishment or spread, to strategically focused efforts on a site-led basis to protect particular values or sites.

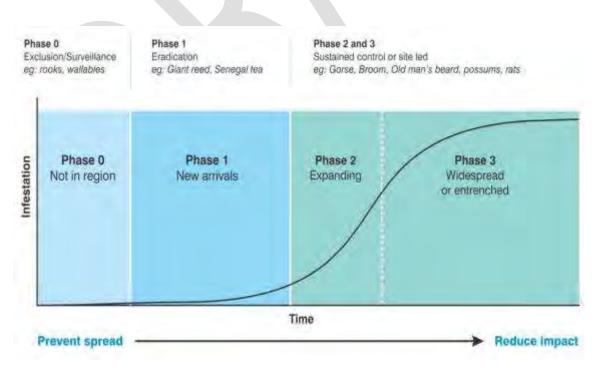


Figure 3: Pest infestation curve

2.3 Council's biosecurity framework

Regional pest management in the Taranaki region sits within the wider biosecurity framework. The Council works closely with the community and other key agencies (refer section 2.4 below) to manage biosecurity threats.

Set out below are the legislation and policy instruments that underpin or authorise the Council's biosecurity related programmes and activities.

2.3.1 Biosecurity Act 1993

The Biosecurity Act 1993 (BSA) provides a mandate and a set of powers and tools for pest control that aims to protect a broad suite of values including agricultural and environmental.

Under section 12B of the BSA regional councils provide "...leadership in activities that prevent, reduce, or eliminate adverse effects from harmful organisms that are present in New Zealand (pest management) in their region".

The ways in which a regional council provides leadership include—

- (a) promoting the alignment of pest management in the region
- facilitating the development and alignment of regional pest management plans and regional pathway management plans in the region
- (c) promoting public support for pest management, and
- (d) facilitating communication and co-operation among those involved in pest management to enhance effectiveness, efficiency, and equity of programmes (section 12B(2) of the BSA).

Regional councils are not necessarily required under the BSA to carry out pest management for their region. Any involvement is at their discretion. However, the imposition of any rules or access to the regulatory powers [Part 6] of the Act is undertaken subject to the preparation of a regional pest management plan (refer section 2.2.3 below), regional pathway management plan (refer section 2.2.4 below) or small scale management programme (refer section 2.2.5 below).

The tools and powers available to regional councils under the BSA are also available to government agencies/Ministers, i.e. national pest and pathway management plans.

2.3.2 National Policy Direction for Pest Management

The National Policy Direction for Pest Management (NPD) was promulgated on 17 August 2015 and has the effect of regulation.

The stated purpose of the NPD is to ensure that activities under Part 5 of the BSA [Pest Management] provide the best use of available resources for New Zealand's best interests, and align with each other to help achieve the purpose of Part 5.

The NPD provides direction to regional councils on the setting of good neighbour rules in regional pest management plans (refer section 2.2.3 below) plus directions on the setting of objectives, programme descriptions, the analysis of benefits and costs, funding allocations, and timing of inconsistency determinations.

Pursuant to sections 71(a)(i) and 91(a)(i) of the BSA any proposed regional pest or pathway management plan must not be inconsistent with the NPD.

2.3.3 Regional pest management plan

Under the BSA, the imposition of any rules for pest management must be subject to the preparation of a national or regional pest management plan.

Consequently the Council has prepared a regional pest management plan (RPMP) entitled *Proposed Pest Management Plan for Taranaki 2017.*⁴

The purpose of the RPMP is to provide the regulatory framework for efficient and effective management or eradication of 16 animal and plant pest species in the Taranaki region so as to:

- minimise the actual or potential adverse or unintended effects associated with those organisms, and
- maximise the effectiveness of individual pest management action by way of a regionally coordinated approach.

The RPMP identifies which organisms are classified as pests and will be managed on a regional basis. There are many organisms in the Taranaki region considered undesirable or a nuisance. However, the BSA definition of a pest only relates to "...an organism specified as a pest in a pest management plan".

Only in a pest management plan is it possible to include a rule for pest management. The RPMP, when operative, will empower the Council to exercise the

13

⁴ The RPMP replaces the previous 'Pest Management Strategy for Taranaki – Animal' (2007) and the 'Pest Management Strategy for Taranaki – Plant' (2007).

relevant service delivery, advisory, enforcement and funding provisions available under the BSA. The RPMP also identifies the costs and funding sources for administering and implementing the Plan.

The RPMP review process involves the preparation of a **proposed** plan, which provides an opportunity for the regional community and other affected parties to have input into determining appropriate pest management programmes and funding levels for the next ten years.



The Plan is the Council's 'rulebook' for pest management in the region. Under the BSA, rules have the effect of regulation. Both this Strategy and the Plan should be read together.

2.3.4 Regional pathway management plan

In 2012 an Amendment to the BSA introduced national and regional pathway management plans. These plans provide a statutory mechanism for developing rules to prevent harmful organisms from being transported into new or different areas. Regional pathway management plans may apply to a region or number of regions.

Pathway management plans are a new and untried initiative and statutory mechanism, e.g. at the time of writing this Strategy (February 2017) a *Proposed*

Fiordland Pathway Management Plan has just being developed - the first of its kind in the country.

In the future the use of BSA powers to manage pest pathways instead of individual organisms may become more prevalent. In the meantime, through this Strategy Council, will adopt a number of regulatory and non-regulatory methods that manage pathways.

2.3.5 Small-scale management programme

Subject to an organism being an 'unwanted organism' and the Council preparing a public notice, the Council can immediately access the Part 6 powers of the BSA and undertake direct control of an organism without needing to prepare or review a pest or pathway management plan.

A small scale management response is subject to the pre-requisites of section 100v of the BSA, which requires the Council to be satisfied that:

- (a) a declared 'unwanted organism'⁵ is present and, without action, could cause serious impacts
- (b) the organism can be eradicated or effectively controlled within 3 years
- (c) the programme is not inconsistent with the NPD
- (d) any process requirements in the NPD for declaring the programme were complied with
- (e) the taking of the measures, including any compensation, costs less than an amount prescribed by Order in Council,⁶ and
- (f) the taking of the measures is unlikely to result in significant monetary loss to any person (other than a person who failed to comply with biosecurity law and contributed to the presence or spread of the organism).

2.3.6 Local Government Act 2002

The Local Government Act 2002 (LGA) sets out the statutory purpose of local government and the role of local authorities. It also provides, in the form of Long Term Plans (LTPs), the framework for the direction and priorities of each local authority.

Through LTPs councils secure funding for nonregulatory (operational) activities (with specific

⁵ Refer to MPI's register of unwanted organisms on the website https://www.mpi.govt.nz/protection-and-response/finding-and-reporting-pests-and-diseases/registers-and-lists/.

⁶ Pursuant to the Biosecurity (Small Scale Organism Management) Order 1993, the maximum amount for the purposes of section 100v(2)(e) of the BSA is \$500,000.

measures subject to the work programming / budgeting and community consultation process).

As noted earlier, community decisions on its priorities and resourcing for biosecurity works and the nature and extent of such measures remains, of necessity, a matter for regional council/community to determine under the LGA processes. While the RPMP sets out the regulatory framework for pest management, a large number of non regulatory programmes and activities are actually authorised under the LTP.

2.3.7 Other Council strategies and plans

Regional councils also have responsibilities under the Resource Management Act 1991 (RMA) to sustainably manage the natural and physical resources of the region, including the Coastal Marine Area.

The focus of the RMA is on managing adverse effects on the environment through regional policy statements, regional and district plans, and resource consents. The RMA, along with regional policies and plans, can be used to manage activities so that they do not create or exacerbate biosecurity risk, e.g. coastal discharges and disposition activities spreading marine pests.

The BSA cannot over-ride any controls imposed under the RMA, for example, bypassing resource consent requirements. RMA strategies and plans such as the *Regional Policy Statement for Taranaki, Regional Coastal Plan for Taranaki,* and the *Regional Fresh Water Plan for Taranaki* may include provisions that impact on and/or regulate pest management activities, e.g. discharges of pesticides, insecticides, herbicides, and piscicides.

Finally, the Council has prepared the *Biodiversity Strategy for Taranaki*. This non-statutory strategy outlines, amongst other things, non-regulatory and regulatory pest management actions and programmes that the Council will either lead or participate in to achieve its biodiversity outcomes.

Figure 4 below shows the principal statutes, strategies and plans underpinning the Council's biosecurity roles and responsibilities, including this Strategy.

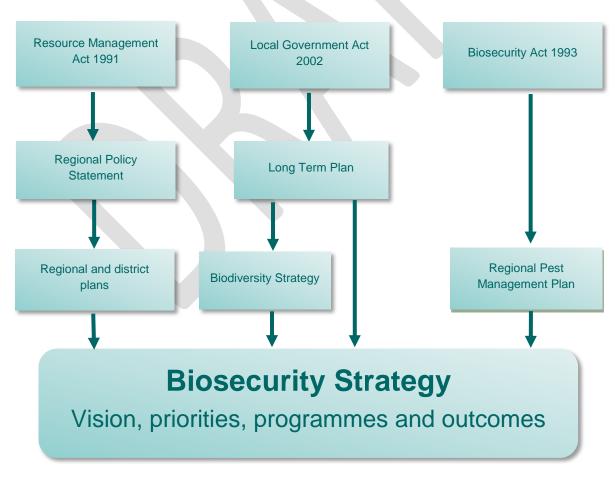


Figure 4: Legislative and planning framework contributing to the Biosecurity Strategy

2.4 Wider biosecurity framework outside Council

Other agencies and groups (in addition to regional councils) also have statutory roles and obligations in relation to biosecurity. As part of this Strategy, the Council is seeking not to duplicate the work of other agencies, but rather identify activities and programmes to work cooperatively, provide support and add value where appropriate.

The key agencies/groups and their roles are outlined briefly below. These roles are identifiable from the functions listed in legislation or from the programmes that agencies implement.

2.4.1 Ministry for Primary Industries

The Ministry for Primary Industries (MPI) is the Government department charged with leadership of New Zealand's biosecurity system.

MPI's responsibilities include certain pre and post border roles that are important to prevent the introduction of new species to New Zealand. MPI also has a lead role administering the BSA and undertaking pest and disease surveillance.

National policy instruments and policies prepared and/or administered by MPI include:

- National Policy Direction for Pest Management 2015: New policy instrument under the BSA to ensure that activities under Part 5 of the BSA (including RPMPs) are aligned and making the best use of available resources. Directions address common terminology, setting of good neighbour rules, setting of objectives, and the development of cost benefit analysis and determining funding allocations.
- Biosecurity 2025 Direction Statement: Non statutory strategy setting out high level actions for promoting biosecurity outcomes across New Zealand
- Pest Management National Plan of Action 2010: Non statutory strategy setting out high level recommendations to improve pest management in New Zealand.

MPI-led programmes identified and of relevance to this Strategy include the National Biosecurity Capacity Network, the Marine High-Risk Site Surveillance Programme, the Invasive Ants Surveillance Programme, the National Pest Plant Accord, the National Pest Pet Accord, National Interest Pest Response, and Freshwater Pests Partnership Programme (refer sections 4 to 8 below).

2.4.2 Department of Conservation

The Department of Conservation (DOC) is funded and empowered, in its own right, to mange pests and other harmful organisms on the public conservation estate.

DOC is the principal central government agency involved in the conservation of biodiversity. Its role is broad and multifaceted operating under a number of different statutes, including the Conservation Act 1987, the National Parks Act 1980, the Wildlife Act 1953 and the Reserves Act 1977.

DOC's statutory responsibilities can be grouped as follows:

- management of the public conservation estate. In Taranaki, DOC is responsible for 146,973 hectares of Crown land (or 21% of the region), including Egmont National Park.
- freshwater fisheries, including management of pest freshwater fish under the Noxious Fish (Freshwater Fish) Regulations 1983
- promotion of conservation off the public conservation estate through funding and advocacy.

DOC is required to control pests on land that they occupy or administer in accordance with any good neighbour rules set out in the RPMP.

2.4.3 Territorial local authorities

There are three territorial local authorities (district councils) in Taranaki - New Plymouth District Council, Stratford District Council (excluding parts of the district that lie in the Whanganui catchment), and South Taranaki District Council.

Each territorial authority manages a number of councilowned reserves and undertakes direct management of harmful organisms impacting on the values within parks, reserves and other council administered lands.

Territorial authorities are also road controlling authorities in their district. With respect to roads, territorial authorities are jointly responsible for 3,504 kilometres of local roads⁷ in the Taranaki region and are required to control pests on land that they occupy or administer in accordance with any RPMP rules.

⁷ Taranaki Regional Council, 2015(c).

2.4.4 New Zealand Transport Authority

The New Zealand Transport Authority (NZTA) is the Government agency responsible for managing 391 kilometres of state highways⁸ in the Taranaki region. The land on which state highways lie, including those parts of road, roadway or road margin extending to adjacent property boundaries, accounts for approximately 1,278 hectares in the Taranaki region.

NZTA is required to control pests on land that they occupy or administer in accordance with any RPMP rules.

2.4.5 KiwiRail

KiwiRail is the Crown agent responsible for managing New Zealand's railway infrastructure. There is approximately 214 kilometres of railway line in the Taranaki region accounting for 763 hectares of railway land.⁹

KiwiRail is required to control pests on land that they occupy or administer in accordance with any RPMP rules.

2.4.6 Others

Everyone has responsibilities for pest management. At the individual level, many people manage their land to keep it free of weeds and pests, particularly where they are the direct beneficiary of that work. Private land occupiers are required to control pests on land that they occupy or administer in accordance with any RPMP rules.

At the industry level, others involved in the wider biosecurity system include industries such as OSPRI and Kiwifruit Vine Health, which have prepared and are implementing national pest management plans under the BSA. Other examples include the Plant Nurseries Association involvement in the National Pest Plant Accord, Port Taranaki's involvement in marine pest surveillance and management programmes, and the many non-governmental organisations or community groups undertaking pest management for environmental protection.



National biosecurity strategy and plan.

⁸ Taranaki Regional Council, 2015(c).

⁹ Taranaki Regional Council, 2015(c).

2.5 Overview of statutory roles and responsibilities for biosecurity management in Taranaki

Table 1 below provides a summary of respective roles and responsibilities for biosecurity – across the system and across environment types. Lead statutory responsibilities in Table 1 are highlighted in bold.

 Table 1: Taranaki Regional Council's place in biosecurity management

Pre-border	At the border	Post border (pest management)	
MPI [Biosecurity – import standards]	MPI [Biosecurity – surveillance & incursion response]	MPI [Fisheries management] DOC [Marine reserves] Port Taranaki/shipping & fishing industries Regional councils [BSA plans & RMA coastal plans]	Marine
		DOC – [Freshwater fish and whitebait management] MPI [Fisheries management] River/lake bed owner Regional councils [BSA plans]	Freshwater
		DOC [Wildlife protection, species recovery, mainland islands, pest control]	Crown land
		Regional councils MPI Occupiers Territorial authorities - parks and reserves Road controlling authorities (NZTA and TLAs) DOC [Wild animal control] KiwiRail Industry and other sector groups, e.g. quarries & plant nurseries etc	Private land

3. Taranaki vision and priorities for biosecurity

Having regard to Taranaki's biosecurity issues of significance, this section sets out the vision, principles and priorities underpinning the Council's biosecurity programmes and activities.

3.1 A vision for biosecurity in Taranaki

The Council's vision for biosecurity in the Taranaki region involves three inter-related outcomes:

Building pest resilience for Taranaki¹⁰

Taranaki has a high performing, integrated system for managing the risks and impacts of pests and other harmful organisms to the economy, environment, cultural and human health.

Agencies, tangata whenua, community groups and individuals work cooperatively, taking an integrated, efficient and cost effective approach that is based on sound science and a social mandate to undertake that work.

Together we are making a significant contribution to protecting our region, people, economy and natural resources by preventing the introduction or establishment of new pests and by reducing the damage caused by pests and other harmful organisms introduced in the past.

What do you think?

 Do you agree or disagree with the Draft Strategy's vision for biosecurity in Taranaki? Why?

A vision for biosecurity – protecting our region, our people, our economy and our unique natural resources.

¹⁰ Vision to be confirmed following targeted and public consultation on this Strategy and the 'Proposed Pest Management Plan for Taranaki'.

3.2 Biosecurity principles

Set out below are key principles critical to the success of any Council biosecurity activity, regardless of scope and scale: ¹¹

Aligned to outcomes and social mandate
Biosecurity/pest management is the means to
achieve or contribute to a range of social,
economic and environmental outcomes – it is not
an end in itself. Biosecurity activities are
prioritised based upon who has a social mandate
through legislation and policy instruments to
undertake that work, and to a level that is
commensurate with that mandate.

2 Adaptive

Biosecurity systems identify and respond to emerging changes in risk or management opportunities at all levels and in a timely way. New Zealand (and Taranaki) faces an increasing total pest management burden with growing complexity and uncertainty. Adaptation and continuous assessment and improvement are necessary at all levels to deal with new and emerging pest issues and minimise both control costs and impacts¹² by:

- preventing the spread of harmful organisms, especially by human activity
- early detection and intervention to control harmful organisms.

3 Effective and efficient

Biosecurity/pest management demands are greater than can be addressed by available capacity and resources. Those involved in pest management therefore need to use the most cost-effective pest management approaches; identify priorities; avoid inappropriate trade-offs and perverse outcomes; and use robust decision-making processes to ensure the best use of available resources.

4 Strong relationships

Pest management is everyone's business and cannot succeed without a broad base of public support and participation. Co-operation is critical to success and depends on trust and a sense that relationships are valued and responsibilities are shared equitably. As far as possible, decisions and planning must be consistent at local, regional and national levels to ensure resources target

priorities for biosecurity/pest management identified at each level. Where the activities contribute to common goals, alignment can help all parties better achieve their respective goals, including iwi who are partners with the Crown through Te Tiriti o Waitangi and kaitiaki (quardians) of Taranaki's taonga.

3.3 Biosecurity priorities

For the purposes of this Strategy, the Council has arranged its biosecurity programmes and activities into five priority areas, namely:

- Pathways and exclusion risk assessments, surveillance and exclusion programmes to prevent the establishment of new invasive (and harmful) species to Taranaki or the exacerbation of existing problems
- 2 Eradication responses to reduce the infestation level of invasive species to zero levels in Taranaki in the short to medium term to prevent their establishment. Studies¹³ show that late control for newly naturalised plants is on average 40 times more expensive than earlier control
- 3 Sustained control regulatory response, including application of good neighbour rules, that provide for the ongoing control of 'pests' under the RPMP to reduce their impacts and spread to other properties
- Working with others community and site led programmes to exclude, eradicate, contain, reduce or control invasive species to protect a site's values¹⁴
- 5 Other leadership responses including biosecurity planning, biological control, research, advocacy and liaison, and other assistance.

Sections 4-8 of the Strategy identify the suite of programmes, activities and targets for these priority areas. The proposed programmes and activities add value and/or contribute to the Council's vision for biosecurity in the region.

¹¹ As adapted from the 'Pest Management National Plan of Action'.

¹² For example a Department of Conservation study suggests that 'late site-led weed control costs alone may be 40 times more costly than early control.

¹³ Harris, S and Timmins, S.M, 2009.

¹⁴ Site-led work, for the purposes of this Strategy, involves weed and animal pest control work to protect regionally significant biodiversity values.

4. Pathways and exclusion

The concept underpinning the pathway approach in pest management is to prevent harmful organisms from reaching a destination in the first place rather than responding after the species has arrived, then, becomes established, and becomes a problem. However, even with 'established' problems in the region there is still an opportunity to modify behaviours and practices to avoid exacerbating problems in other parts of the region.

MPI is responsible for avoiding the introduction or establishment of organisms not yet present in New Zealand and to manage risks inter-regionally where national values are at risk. However, for species already present in New Zealand, responsibility for pathway management is generally dependant on the regions or the affected industry assuming responsibility. Therefore the Council's focus will be on managing pathways for harmful organisms present in New Zealand but not yet established in Taranaki and, as appropriate, support measures to reduce the spread of other harmful organisms already in the region.

In Taranaki, 'high risk' pathways for the accidental or deliberate spread of harmful organisms include:

- visitors to the region accidentally introducing fragments of aquatic weeds via 'dirty' equipment and gear
- people deliberating releasing aquatic weeds when cleaning their aquariums and fish ponds
- invasive weeds and seeds transported via machinery, livestock and fodder or in contaminated stock feed, crop and pasture seeds (e.g. Velvetleaf), and other material (e.g. garden waste)
- nursery, landscaping and gardening industries and the accidental introduction and spread of invasive ants, reptiles and weeds
- intentional release of wild animals (such as wallabies, deer and pigs) and pest fish for hunting and fishing purposes
- intentional release/escape of pets into the wild, e.g. lorikeets, red-eared slider turtle
- accidental import of harmful organisms in and around Port
 Taranaki through ballast water discharges, biofouling of boat
 hulls, or as 'stowaways' where they secrete themselves in vessels
 and goods, e.g. Undaria, Northern Pacific sea star etc.



Rook control at Eltham. Council responses to any sightings and takes control action to prevent their establishment in the region.

4.1 What we want to achieve

Avoid the introduction or establishment of harmful organisms present in New Zealand but not yet present in Taranaki, and reduce the spread of other harmful organisms already in the region over the duration of this Strategy.

4.2 What we will do

To achieve the pathway and exclusion objective, the Council will:

- 1. Undertake risk assessments and contingency planning for harmful organisms not yet present in the region
- 2. Undertake surveillance of high risk pathways to ensure the early detection of harmful organisms in the region
- 3. In the event surveillance identifies the presence of new harmful organisms to the region, consider the appropriate incursion response
- 4. Support national pathway initiatives to change people's behaviours and reduce the potential spread of harmful organisms and their impacts.

4.2.1 Risk assessments and contingency planning

Maintain Fresh water biosecurity partnership programme for Taranaki

Actio	Action 1: Undertake risk assessments and contingency planning for harmful organisms not yet present in the region			
Risk	assessment and contingency planning activities	Status	Lead responsibility	
1.	Prepare <i>Risk Assessment Inventory</i> of potential invasive plants and animals present in New Zealand but not yet present or established in Taranaki and which are likely to have regionally significant adverse and unintended impacts	Proposed	Policy / Environment Services	
2.	Maintain a process for adding to or deleting from the list of potential invasive plants and animals present in New Zealand but not yet present or established in Taranaki according to the following criteria: species established in adjacent or nearby regions or on known pathways significance and severity of likely impacts should the species become established in the region likely public benefits exceed private (individual) benefits of control Council is best placed to manage the pest.	Proposed	Environment Services	
3.	Annually review and update Risk Assessment Inventory	Proposed	Environment Services	

Explanation

The most effective form of pest management is to avoid a problem becoming a problem in the first place. The first step in this process is to undertake forward planning to clearly identify potential and likely threats so as to ensure systems and processes are in place to promote early detection and action. The Council will therefore undertake risk assessments and prepare a *Risk Assessment Inventory* of potential invasive plants and animals present in New Zealand but not yet present or established in Taranaki, for which there is a high risk they may spread to this region, and which would have regionally significant adverse and unintended impacts.¹⁵

Active

Environment Services

The purpose of risk assessments are to inform and support the Council's regional surveillance, incursion response and social marketing activities by:

- increasing public awareness of the risks posed by the introduction of new weeds and pest animals to Taranaki
- promoting social responsibility to avoid practices or actions that may contribute to the spread of these species
- providing an objective, evidence-based foundation for policy development and determining the best allocation of resources to particular species or locations, including the targeting of key pathways and developing a contingency response such as the *Regional Didymo Action Plan for Taranaki*.

Pest risk assessments are a desktop exercise synthesising information from a range of existing sources on a candidate species, including:

- description, taxonomy and general biology
- history of introduction and spread in New Zealand
- current and potential distribution
- current and potential pathways
- current and potential costs and benefits
- management options, including current control practices, feasibility of eradication, and legislative management responses.

Examples of harmful organisms not yet present in Taranaki and capable of causing serious adverse and unintended impacts on people, the environment and the economy include alligator weed, didymo, Chilean needle grass, and wallabies.

¹⁵ Noting that MPI are responsible for border security and managing risks posed by organisms not yet present in New Zealand.

4.2.2 Pathway surveillance

Action 2: Undertake surveillance of	of high rick nathways to ancura	the early detection of	harmful arganism in the region
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Path	Pathway surveillance activities		Lead responsibility
5.	Annual monitoring of lakes with high recreational use, in the summer period, to detect presence of any new aquatic weed species	Active	Science Services
6.	Annual monitoring of rivers with high recreational use, in the summer period, to detect presence of didymo	Active	Science Services
7.	Support MPI's Marine High – Risk Site Surveillance Programme at Port Taranaki to detect high risk invasive marine species	Active	MPI / Science Services
8.	Liaise with and support MPI's Invasive Ants Surveillance Programme at Port Taranaki	Active	MPI / Environment Services
9.	Annual monitoring of commercial outlets (nurseries and pet shops) to support implementation of the National Pest Plant Accord and National Pest Pet Biosecurity Accord	Active	Environment Services
10.	Provide public hotline and respond to any public reporting of potential pests, including provision of a weed identification service	Active	Environment Services

Explanation

The Council already undertakes a lot of monitoring and surveillance. However, its systems are geared towards species already widespread and well known. At the time of writing, Council surveillance for new or uncommon species was heavily dependant upon passive surveillance, which largely relies on members of the public alerting the Council. This reduces the chances of early detection and response.

Through this Strategy, the Council is seeking to better coordinate and be more proactive in relation to surveillance of potential pathways for new pests into the region. In particular, the Council will focus its efforts on the most likely entry points for new problems recognising that the introduction of invasive species can be accidental or deliberate. This includes Port Taranaki, which is a major pathway for potential pests into the region with ships and goods coming from overseas or from other parts of New Zealand.

Key pathways targeted for surveillance are:

- Lakes: Council will annually monitor lakes with high recreational use Lake Rotorangi, Lake Rotomanu, Lake Ratapiko, Lake Opunake and Lake Rotokare –to detect presence of any new aquatic weed species.
- Rivers: Council will annually monitor high recreational use rivers Waiwhakaiho, Manganui, Patea, Waingongoro,
 Hangatahua (Stony) and Kaupokonui rivers and Kapuni and Mangaoraka streams to detect presence of didymo.
- Port: Council will support and assist MPI's Marine High-Risk Site Surveillance Programme and Invasive Ants Surveillance Programme. 16
- Commercial outlets: Council is a signatory to the National Pest Plant Accord and National Pest Pet Biosecurity Accord and, in accordance with the accords, will inspect all plant nurseries and pest stores annually (refer section 4.2.4 for further information).

Passive or general surveillance, which relies on public reportings or enquiries of unusual or unknown organisms, will remain the cornerstone of biosecurity within Taranaki. The Council provides a free public hotline for such reportings and will respond to any public reporting of potential pests either by liaising with MPI, investigating itself, or through the provision of a weed identification service. The Council may also identify and respond to reports of unusual or unknown organisms identified through its other programmes responsibilities (e.g. in association with farm visits, freshwater and coastal monitoring programmes).

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¹⁶ MPI's marine programme is undertaken annually at 11 major ports and marinas around the country, including Port Taranaki. The surveillance is designed to detect the presence of exotic and potentially invasive marine species not yet present in New Zealand. On average, a new marine species arrives in New Zealand every year and any one of these could become a pest. Refer https://www.mpi.govt.nz/protection-and-response/finding-and-reporting-pests-and-diseases/surveillance-programmes/.

4.2.3 Incursion response

Action 3: In the event surveillance identifies the presence of new harmful organisms to the region, consider the appropriate incursion response

Incur	ncursion response activities Status Lead responsibility				
11.	Undertake a feasibility study and make a determination on Council undertaking an incursion response	Active	TRC / Policy / Environment Services		
12.	Where appropriate: undertaking section 100v small scale management action, or with the permission of the land occupier, undertake direct control of harmful organism	Active	Environment Services		
13.	If appropriate, consider the preparation of a Pathway Plan for Taranaki to impose pathway rules relating to the spread of new pests or invasive species	Active	Policy		
14.	Review the Pest Management Plan of Taranaki to include new species and/or rules relating to the control of species now present in Taranaki.	Active	Policy		
15.	Liaise and, as appropriate, support MPI-led eradication responses including the National Interest Pest Response and the National Biosecurity Capability Network	Active	Environment Services		

Explanation

On the detection of a new harmful organism in Taranaki (including but not confined to those species identified in the *Risk Assessment Inventory* of potential invasive plants and animals), the Council will undertake a feasibility study as part of its consideration and determination on the appropriate management response. The management responses available to Council range from 'Do nothing' (e.g. it is technically infeasible to meet a control objective such as eradication, other agencies have the mandate and/or are better placed to lead the management response, or the costs would outweigh the benefits) to undertaking an incursion response.

In the event that an incursion response is considered appropriate, the immediate courses of action available to the Council are:

- section 100v small-scale management responses subject to an organism being an unwanted organism and the Council preparing a public notice, the Council can immediately access the Part 6 powers of the BSA and undertake direct control of an organism (without needing to prepare or review a pest/pathway plan)
- undertake immediate control of the organism where Council has the permission of the land occupier. In such circumstances it would not be necessary to access the Part VI powers of the BSA, however, preparation of a pest or pathway management plan may still be necessary if the incursion response is significant and/or long term.

In addition to the above, but subject to a much longer timeframe, the Council could seek to access Part 6 powers under the BSA by:

- undertaking and preparing pathway plans, which provide a statutory mechanism for developing rules to prevent harmful organisms from being transported into new or different areas, and/or
- amending the RPMP to identify new species for which an eradication (or sustained control) objective is appropriate for Taranaki. Refer to Section 8.2.1 for further information on biosecurity planning.

The MPI-led *National Interest Pest Responses* aim to eradicate 11 selected established pests from New Zealand. These pests were selected for national response because of their potential to have a significant impact on our economic, environmental, social and cultural values and include: Salvinia; Water hyacinth; Johnson grass; Cape Tulip; Pyp grass; Phragmites; Hydrilla; White bryony; and Manchurian wild rice.¹⁷ None of these species are currently present in Taranaki but, in the event that infestations were identified, Council would liaise directly with MPI to ensure the infestations are eradicated from the region.

In addition to the above the Council is part of the *National Biosecurity Capability Network* that would provide field support to MPI and AsureQuality in the event of a biosecurity outbreak such as Foot and Mouth Disease.¹⁸

¹⁸ Refer https://www.asurequality.com/our-services/pest-and-disease-management-solutions/national-biosecurity-capability-network-nbcn/ for further information.

¹⁷ Refer <u>http://www.biosecurity.govt.nz/pests/surv-mgmt/mgmt/prog/nipr</u> for further information.

4.2.4 Support national pathway initiatives

Action 4: Support national pathway initiatives to change people's behaviours and reduce the potential spread of harmful organisms and their impacts

Othe	Other pathway activities		Lead responsibility
16.	Provide advisory, inspectorial and compliance services to enforce sections 52 and 53 relating to prohibitions on the sale, distribution, release and propagation of 'unwanted organisms' and 'pests'	Active	Environment Services
17.	Undertake and provide advisory, educational and monitoring services to support MPI's National Pest Plant Accord	Active	Environment Services
18.	Undertake and provide advisory, educational and monitoring services to support MPI's National Pest Pet Biosecurity Accord	Proposed	Environment Services
19.	Undertake and provide advisory and educational services to support MPI's Freshwater Pests Partnership Programme	Active	MPI, DOC, Environment Services
20.	Consider supporting any other national initiatives that contribute to pathway objectives set out in this section of the Strategy.	Active	Environment Services

Explanation

MPI is the lead agency for a number of national pathway initiatives. DOC is the lead agency for pest fish. As appropriate, the Council will provide advisory, inspectorial and compliance services within the region to support national pathway initiatives, including:

- National Pest Plant Accord: This Accord is a MPI-led agreement between the Nursery and Garden Industry Association, regional councils, and other government departments with biosecurity responsibilities to regulate the propagation, distribution and sale of 150 high-risk plant species listed in the Accord that have been declared 'unwanted organisms'.¹⁹ In accordance with its commitments under the Accord, the Council:
 - undertakes routine surveillance and inspections of plant nurseries and retail outlets
 - provides advice and information on the species listed in the Accord list
 - undertakes compliance activities to enforce sections 52 and 53 of the BSA – prohibiting the sale, release or propagation of plant species contained on the Accord list
 - participates in the development of identification and information packages in support of the Accord and consider recommendations on particular species to be included in the Accord list.
- National Pest Pet Biosecurity Accord: This Accord is a new MPIled agreement between the Pet Industry Association of New Zealand, the New Zealand Companion Animal Council, regional councils, and other government departments with biosecurity responsibilities to regulate the breeding, distribution and sale of pet species listed in the Accord that are already present in New



Council officer inspecting a nursery to ensure harmful plants are not being spread via the garden retail trade.

25

¹⁹ The full list of species on the National Pest Plant Accord is available on MPI's website (http://www.biosecurity.govt.nz/pests/surv-mgmt/mgmt/prog/nppa/list).

Zealand and present an unacceptable biosecurity risk.²⁰ In accordance with its commitments under the Accord, the Council:

- undertakes routine surveillance and inspections of pet shops and other outlets
- provides advice and information to members of the public and commercial interests in relation to the species
 listed in the Accord list to reduce the frequency of risky public behaviour such as pet releases into the wild, and
 to promote the responsible management of risk species by the pet industry
- undertakes compliance activities to enforce sections 52 and 53 of the BSA prohibiting the sale, release or breeding of pest pet species contained on the Accord list
- actively participate in the development of identification and information packages in support of the Accord and consider recommendations on particular species to be included in the Accord list.
- Freshwater Pests Partnership Programme: This MPI-led Programme, which is a partnership between MPI, DOC, Fish
 and Game New Zealand, regional councils, affected industry, and specific Maori entities, aims to slow the spread of
 freshwater pests throughout New Zealand and, in particular, maintain the North Island free of didymo for as long
 as possible. Council's responsibilities under the Programme include:
 - participate in MPI's Check, Clean, Dry communications programme²¹ maintain signs and install new ones at appropriate places, undertake community outreach (at events, school visits, liaison with local businesses (such as sports stores) and clubs. MPI supplies each region with annual funding to hire advocates to spread the 'Check, Clean, Dry' message at waterways and events
 - prepare and maintain regional response preparedness plans in the event didymo is discovered in the Regions' waterways, it is imperative for Council to be prepared and be able to act early to limit adverse effects (e.g. through a similar process to managing a civil defence emergency response)
 - undertake didymo surveillance and monitoring in high risk waterways carried out as part of the Council's regional river and water way water quality and sampling programme (refer section 4.2.2 above).

Refer to sections 8.2.3 and 8.2.4 for further information on awareness campaigns at the local/community level and advocacy and liaison activities.



An example of a young colony of didymo. To date no didymo has been found in the region.

²⁰ Accidental or deliberate release of pets (often as they 'out-grow' their owners) such as fish, reptiles and amphibians, or newly imported animals that may become pest issues in the future. Refer to MPI's website http://www.mpi.govt.nz/protection-and-response/finding-and-reporting-pests-and-diseases/keeping-watch/stopping-pests-becoming-pests/ for further information.

²¹ Refer to MPI's website (http://www.mpi.govt.nz/funding-and-programmes/other-programmes/campaigns/check-clean-dry/) for further information.

4.3 Pathway and exclusion targets (key performance indicators)

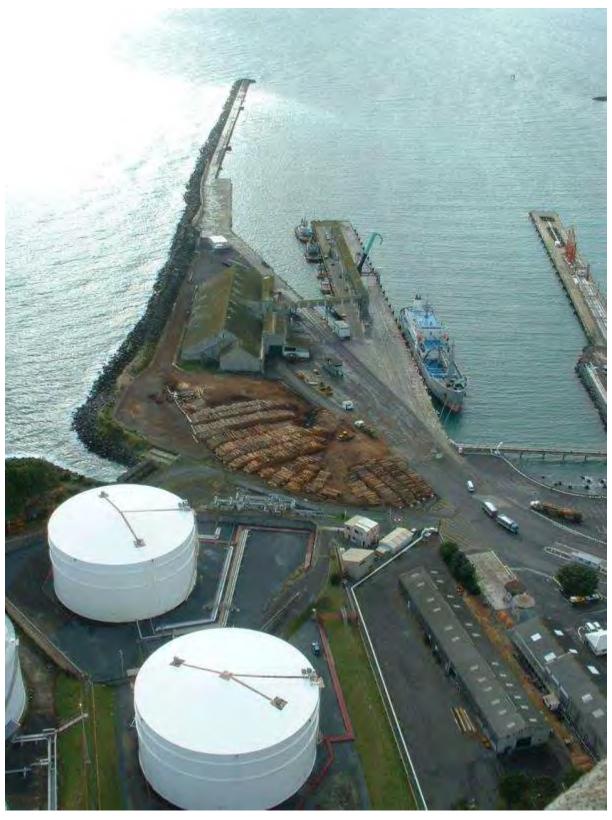
Targets	Measures
No new harmful organism species established in the region ²² All public reports of suspected new harmful organisms are responded to within 5 days	Number of incursion and other management responses Number of public enquiries (and other measures of increased public awareness)
	Number of identified actions being implemented (where applicable)

What do you think?

The Taranaki Regional Council is proposing to increase its focus on surveillance and pathways to avoid the introduction of new 'pests' from other regions. This will involve a shift in focus from some legacy pests (the ones already established). It will also require additional resourcing.

- 2. Do you agree or disagree with that direction? Why?
- 3. Do you agree or disagree that these actions and measures are the right ones having regard to the Council's mandate and capacity?
- 4. What other actions could Council (and/or others) take to prevent new pests entering Taranaki from other regions?

²² Note, the introduction or establishment of new harmful organisms to Taranaki - from overseas or other parts of New Zealand- is largely outside the control of the Council. Achieving the target is largely dependent upon the actions of others including MPI and the actions of industries and individuals outside the region. Accordingly this target is aspirational. As far as is practicable, the Council will monitor the effectiveness of its pathway and exclusion programmes by monitoring the number of detections and incursions by new harmful organisms in the region.



Port Taranaki surveillance programmes check to ensure there are no new potentially invasive species coming from overseas or from other parts of the country via shipping or risk goods. On average, a new marine species arrives in New Zealand every year and any one of these could become a pest.

5. Eradication

The concept underpinning regional eradication programmes is to prevent invasive species, not yet established in Taranaki, from becoming established and imposing significant impacts on the region. The intention is to remove all individuals of these pests from the region, and eliminate the possibility of any further reproduction or propagation within the region.

Eradication is only possible if the infestation is found when the populations are very small and their distribution is limited, and where control is technically feasible.

Statutory instruments available to the Council for achieving eradication objective are pest management plans and small scale management programmes. In relation to the RPMP, four species have been identified as 'pests' for which the Council will undertake eradication programmes. They are:

- Climbing spindleberry
- Giant Reed
- Madeira (Mignonette) vine
- Senegal tea.

In accordance with the RPMP, and in recognition of the wider public benefits (rather than individual benefits) of eradicating these species, the Council assumes responsibility for the control of these species rather than relying on the land occupier. Through their inclusion as a 'pest' in the RPMP, Council can access Part 6 regulatory powers under the BSA, including entry onto land to undertake works.

5.1 What we want to achieve

Reduce known infestation levels of Climbing spindleberry, Giant reed, Madeira vine and Senegal tea to zero levels in the Taranaki region, by 2037, and avoid regionally significant impacts on the environment, economy and people.

5.2 What we will do

To achieve the eradication objective, the Council will:

- Undertake surveillance and monitoring to identify infestations of 'Eradication Programme' pests and ensure the effectiveness of eradication measures
- Undertake direct control of known infestations of 'Eradication Programme' pests.

For a fuller description of the pests and the eradication programmes, please refer to the RPMP.









Four plant species – Climbing spindleberry, Giant reed, Madeira vine, and Senegal tea – to be eradicated in Taranaki by 2037.

5.2.1 Surveillance and monitoring of Eradication Programme pests

Action 1: Undertake surveillance and monitoring to identify infestations of 'Eradication Programme' pests and ensure the effectiveness of eradication measures

Surv	Surveillance and monitoring activities		Lead responsibility
21.	Prepare and maintain eradication plans for all sites with known infestations of Climbing spindleberry, Giant reed, Madeira vine, and Senegal tea	Active	Environment Services
22.	Monitor the location and extent of known infestations of Eradication Programme pests	Active	Environment Services
23.	Re-inspect the effectiveness of direct control activities for Eradication Programme pests	Active	Environment Services
24.	Respond to any reportings of previously unknown or new infestations of Eradication Programme pests	Active	Environment Services
25.	Annual monitoring of commercial plant nurseries and retail outlets to ban the propagation, sale and distribution of Climbing spindleberry, Giant reed, Madeira vine, and Senegal tea	Active	Environment Services
26.	Provide public hotline and respond to any public reporting of Climbing spindleberry, Giant reed, Madeira vine and Senegal tea infestations	Active	Environment Services

Explanation

The successful eradication of pests that are present in very low numbers within the Taranaki region relies on effective surveillance and monitoring. Over time the Council has been gathering information on the location of species that have been identified in the RPMP as 'Eradication Programme' pests – these being Climbing spindleberry, Giant reed, Madeira vine, and Senegal tea. The Council maintains a database identifying known infestations. However, inevitably, more infestations are likely to be identified over time because the infestations are new or not previously known about.

Key surveillance and monitoring activities for Climbing spindleberry, Giant reed, Madeira vine, and Senegal tea are:

- Eradication plans: Council will prepare and maintain site-specific plans setting out the programme to destroy known infestations of Eradication Programme pests, including location, methods, timing, resources and control techniques
- *Property inspections*: annually inspect and monitor properties with known infestations of Eradication Programme pests to establish the extent of any infestations and to identify any remedial action that needs to be undertaken
- Commercial outlets: annually inspect all plant nurseries and retail outlets to prohibit the propagation, sale and distribution of Eradication Programme pests
- Education: promote public reportings by undertaking a public awareness campaign and providing information to individuals or the community to assist them to identify Eradication Programme pests and encourage public reportings of any infestations to the Council.

Through this Strategy, passive or general surveillance will continue to have an important role. However, the Council will seek to be more proactive in relation to surveillance by annually promoting public awareness and encourage the reporting of any suspected infestations. Council respond to any public reporting of previously unknown or new infestations of Climbing spindleberry, Giant reed, Madeira vine, and Senegal tea, responding to all public complaints on the plant within five days of receipt

5.2.2 Direct control of Eradication Programme pests

Action 2: Undertake direct control of known infestations of Eradication Programme pests

ACIIO	Action 2. Ondertake direct control of known intestations of Efaulcation Programme pests			
Direc	Direct control (eradication) activities		Lead responsibility	
27.	As soon as practicable, undertake initial direct control of known infestations of Climbing spindleberry, Giant reed, Madeira vine and Senegal tea	Active	Environment Services	
28.	Annually monitor known sites and undertake further direct control for any re- infestations	Active	Environment Services	
29.	Where appropriate, undertake direct control of other harmful organism not yet established or widespread in the region	Active	Environment Services	

Explanation

In accordance with the RPMP, responsibility for the control of Climbing spindleberry, Giant reed, Madeira vine and Senegal tea lies with the Council (rather than the land occupiers). This is based upon eradication being considered a technically feasible objective for Taranaki and in recognition that this Council is best placed to undertake that control given the wider public good of achieving that objective.

Eradication generally requires repeat treatments to successfully address subsequent re-infestations. To achieve the objective for eradication programmes, the Council will prepare eradication plans for known infestation sites AND:

- undertake direct control to eradicate known (as at 1 July 2017), and any new infestations of Climbing spindleberry, Giant reed, Madeira vine and Senegal tea that are discovered over the duration of the Strategy
- annually inspect sites with known infestations and re-treat any re- infestations of Climbing spindleberry, Giant reed, Madeira vine and Senegal tea.

In addition to the above, Council will consider undertaking the direct control of other harmful organism not yet established or widespread in the region. They include any of the incursion responses identified in section 4.2.3 above for 'new' species but, subject to suitable partnership arrangements may also include localised eradication operations with affected land occupiers for any new weed incursion such as Boneseed and Moth plant, with DOC for pest fish such as gambusia, and Port Taranaki and DOC for marine pests such as *Undaria* and *Grateloupia*. The objective of such operations is to prevent the spread of small localised infestations to other areas where they would then have much larger adverse effects.

For further information on Eradication Programme pests please refer to the relevant sections of the RPMP.



In the past, Council has worked with the Port
Taranaki and DOC to remove
Undaria from the Port.
Undaria is spread by
fragments on infested boats
and mooring.

5.3 Eradication targets (key performance indicators)

Targets	Measures
Direct control of 100% of known infestation sites (as at 1 July 2017) of Climbing spindleberry, Giant reed, Madeira vine and Senegal tea All public reports in relation to the suspected presence of Climbing spindleberry, Giant reed, Madeira vine and Senegal tea are responded to within 5 days	Number of known sites controlled Proportion of known sites controlled Proportion of sites requiring re-treatment Number of direct control measures Number of new infestations identified and being actively managed Number of public enquiries (and other measures of increased public awareness) Number of identified actions being implemented (where applicable)

What do you think?

Eradicating any 'pest' or 'weed' species from a region is technically difficult and challenging. The Taranaki Regional Council is proposing to increase its efforts to eradicate four 'weeds' already present in Taranaki but not yet established. Again this will involve a shift in focus from some legacy pests (the ones already established). It will also require additional resourcing.

- 5. Do you agree or disagree with increased focus on the eradication of Climbing spindleberry, Giant reed, Madeira vine and Senegal tea? Why?
- 6. Do you agree or disagree that these actions and measures are the right ones having regard to the Council's mandate and capacity?
- 7. What other actions could Council (and/or others) take to eradicate pests or weeds in the region?

6. Sustained control

The concept underpinning regional sustained control programmes is that, for harmful organisms already established and having significant externality impacts across the region, regulatory intervention in the form of rules is necessary to support and coordinate the individual actions of land occupiers to protect agricultural production and/or environmental values.

Sustained control programmes involve the Council providing a suite of inspectorial, compliance monitoring and enforcement activities for 'legacy' pests identified in the RPMP and for which land occupiers are required to undertake control. In relation to the RPMP, 14 species (refer Table 2) are declared to be 'pests' in the Taranaki region for which rules are set out in the RPMP. Their inclusion as a 'pest' in the RPMP, allows Council to set rules and access the Part 6 powers of the BSA to enforce those rules.

The RPMP contains two types of rules:

- Good neighbour rules (GNR): these apply to all land occupiers - both Crown and private. Section 2 of the BSA defines good neighbour rule as "... a rule to which the following apply:
 - (a) it applies to an occupier of land and to a pest or pest agent that is present on the land; and
 - (b) it seeks to manage the spread of a pest that would cause costs to occupiers of adjacent land; and
 - (c) it is identified in a regional pest management plan as a good neighbour rule; and
 - (d) it complies with the directions in the national policy direction relating to the setting of good neighbour rules."
- General rules: these apply to private land occupiers only (excludes the Crown)²³ and apply to pest species for which the community has determined that additional control requirements are appropriate to maximise the effectiveness of individual pest actions across the region.

Table 2: RPMP rules for Sustained Control Programme pests in Taranaki

Pest species	Good neighbour rule	General rule
Brushtail Possums	GNR	General
Common and purple pampas	GNR	-
Giant buttercup	GNR	-
Giant gunnera	GNR	General
Gorse	GNR	-
Nodding, Plumeless & Variegated thistles	GNR	-
Old man's beard	GNR	General
Wild broom	GNR	-
Yellow and Kahili ginger	GNR	General
Yellow ragwort	GNR	General

6.1 What we want to achieve

Manage Sustained Control Programme pests in Taranaki to a level that minimises their adverse externality impacts on neighbouring production and or environmental values over the duration of the Strategy.

6.2 What we want to do

To achieve the Sustained Control objective the Council will:

- 1. Undertake compliance monitoring and inspections to ascertain compliance with RPMP rules to control 'Sustained Control Programme' pests
- 2. Enforce compliance with RPMP rules for 'Sustained Control Programme' pests.

For a fuller description of the pests and the sustained control programmes, please refer to the RPMP.

²³ Pursuant to section 69(5) of the BSA, the Crown (e.g. the Department of Conservation) is only liable to meet costs and obligations relating to good neighbour rules.

6.2.1 Compliance monitoring and inspections

Action 1: Undertake compliance monitoring and inspections to ascertain compliance with RPMP rules to control 'Sustained Control Programme' pests

Com	Compliance monitoring and inspection activities		Lead responsibility
30.	Undertake inspections of properties in the Self-help Possum Control Programme to ensure possum numbers are being maintained below 10% residual trap catch (RTC)	Active	Environment Services
31.	At least two times a year inspect Category C properties to ensure land occupiers are complying with general and or good neighbour rules relating to pest plants.	Active	Environment Services
32.	Annually inspect roadside margins, quarries and other gravel producers to ensure land occupiers are complying with RPMP rules relating to pest plants	Active	Environment Services
33.	Annually inspect plant nurseries and retail outlets to ensure no pest plants are being propagated, sold or offered for sale.	Active	Environment Services
34.	Respond to any public complaint relating to Sustained Control pests following the identification of a problem either by the public or by an Authorised Person of the Council	Active	Environment Services
35.	Maintain record of the number of public complaints pertaining to individual pest species, instances of non-compliance with the RPMP rules, and the Council's response	Active	Environment Services

Explanation

The responsibility for control of 12 Sustained Control pests lies with the land occupier who must meet the requirements set out in the rules of the RPMP. These rules may apply to part of the property (e.g. boundary situations) or the whole property, or part of the region (e.g. rural areas) or the whole region.

The Council's compliance monitoring and inspection activities include:

- Self-help Possum Control Programme: Council will annually inspect properties in the Programme to ensure possum numbers are being maintained below 10% residual trap catch (RTC). This will involved randomly selecting and representatively monitoring possum prone habitat across the more than 4,000 properties in the Programme (in 2015/2016, this involved almost 1,500 trap catch, wax tag and chew-bite inspections)
- Category C properties: this refers to an inspection category assigned to properties identified through recent
 inspections as having failed to comply with RPMP rules for pest plants and for which regular effective control is
 required. Council will inspect Category C properties at least twice a year to ensure pest plants are being effectively
 managed (as at 30 June 2016, there were 186 Category C properties)
- Roadside verges and rail corridors: this involves visual drive-by inspections to ensure compliance with RPMP rules for pest plants.
 All state highways and rural roads are inspected and advice provided to the administrative agency (the New Zealand Transport Agency and the district councils respectively) directing them to undertake any necessary pest plant control work
- Plant nurseries, retail outlets quarries and other gravel producers:
 Council will annually inspect all plant nurseries, plant retail outlets, quarries and gravel producers. As part of this programme, Council will also be seeking to work with affected industries to develop biosecurity hygiene and monitoring programmes to assist them with meeting their BSA and RPMP requirements
- Response to public complaints: The Council will respond to any
 public complaint relating to Sustained Control pests following the
 identification of a problem either by the public or by an Authorised
 Person of the Council as they go out and about in the region. All
 complaints received will be responded to within five days and,
 where appropriate, advice given or enforcement action taken.



Ragwort was once a much larger problem in the region and on many dairy farms. Through the inspection and compliance regime most 'problems' are now of a

The Council records and takes action in response to any public complaint received in relation to pests and other harmful organisms. Responding to public complaints is an integral part of the Council's inspectorial and enforcement activities.

6.2.2 Enforcement action

Action 2: Enforce compliance with RPMP rules to control 'Sustained Control Programme' pests

Enfo	Enforcement activities		Lead responsibility
36.	As appropriate, issue Notices of Direction to identify remedial action that must be undertaken by the occupier to ensure compliance with any RPMP rule	Active	Environment Services
37.	As appropriate, undertake default action under section 128 of the BSA to manage or destroy 'Sustained Control Programme' pests to the required level	Active	Environment Services
38.	As appropriate, prosecute the occupier to enforce compliance with RPMP rules	Active	Environment Services
39.	Consider, on a case-by-case basis, granting and recording exemptions to compliance with any RPMP rule in accordance with section 78 of the BSA	Active	Environment Services
40.	Maintain record of the exemptions to rules, including relevant conditions	Active	Environment Services

Explanation

To ensure adverse externality impacts for the 12 Sustain Control programme pests on neighbours are being properly managed, the Council will undertake the appropriate enforcement response for non-compliance with RPMP rules.

Instances of non-compliance are initially identified through inspections and compliance monitoring (refer section 6.2.1). At that time a Notice of Direction will be served under section 122 of the BSA identifying remedial action that must be undertaken by the occupier. In instances of continued non-compliance, the Council will consider further enforcement action. Depending upon the individual circumstances of the case, the Council may undertake one or both enforcement options:

- undertake default action under section 128 of the BSA. Default action involves the Council undertaking the works or measures specified in a Notice of Direction and recovering the costs and expenses of that work from the occupier to whom the Notice was given, or
- prosecute the occupier under section 154N of the BSA.

Under section 78 of the BSA, the Council may, upon the written request of an occupier, exempt any person from any requirement in any RPMP rule. Before granting an exemption, the Council will be satisfied that that the granting of the exemption will not significantly prejudice the attainment of the objectives of the RPMP AND that:

- the requirements have been substantially complied with and that further compliance is unnecessary,
- the action taken or provision made in respect of the matter to which the requirement relates is as effective or more effective than actual compliance with the requirement,
- the prescribed requirements are clearly unreasonable or inappropriate in the particular case, or
- events have occurred that make the prescribed requirements unreasonable or inappropriate in the particular case.

On receipt of any request, the Council will advise that person within 10 working days of its decision whether to exempt him or her from any requirement in any RPMP rule. Any exemption may be subject to conditions ensuring that:

- measures are taken to minimise any adverse and unintended effects of the pest plant; or
- any beneficial effects associated with the pest are safeguarded or enhanced.



Council staff annually inspect road and railway corridors when they are out and about in the region..

6.3 Sustained Control targets (key performance indicators)

Targets	Measures
Reduce the densities of Sustained Control Programme pests where they are having impacts on adjacent agricultural production and or environmental values All public reports in relation to infestations of Sustained Control Programme pests are responded to within 5 days	Number of Category C properties and inspections Number of plant nurseries and retail outlets inspected Number of other property inspections Number of public complaints/enquiries Number of enforcement actions Number of exemptions

What do you think?

Separate to this Strategy is the RPMP, which contains good neighbour rules requiring land occupiers to control 12 harmful species declared to be pests. This includes the Crown. Previously RPMP rules could not impose costs and obligations on the Crown.

8. Do you agree or disagree with that the 12 species declared to be pests warrant rules being imposed for land occupiers to control them? Why?

7. Working with others (community and site led initiatives)

Not all biosecurity responses require a species-led approach. The impacts of most harmful organisms differ from property to property, from place to place, and from land use to land use, according to the significance of their impacts on the values associated with any particular site or place (e.g. production weeds such as gorse are not a significant biodiversity problem). In most cases, given finite resources and differing priorities, a site-led approach is the most appropriate course of action, i.e. the harmful organism does not have to be managed everywhere but only in those places or sites where it is capable of having a particularly significant adverse effect on certain values associated with a site or place.

The concept underpinning site-led responses is that for certain sites and places, Council support is appropriate to protect values of regional significance and because there is a public benefit. In such cases, the Council will work with others to protect those values by providing a suite of advisory, extension, direct control, and other assistance to work with and support others to deliver biosecurity outcomes

Council support may vary significantly in scale. The Selfhelp Possum Control Programme is landscape in scale, specific to possums, and involves rules (refer section 6.2 above). The Council is also investigating expanding upon this Programme to address not only possums but other predators. However, most other site led/community initiatives are smaller in scale and rely on voluntary actions of people to take pest management action on a plethora of 'legacy' pests such as possums, feral goats, mustelids, and Woolly nightshade to achieve biodiversity and/or public amenity outcomes.



Possums are one of New Zealand's worst pests due to the extent and severity of damage they cause to both production and biodiversity values, and as a vector for Tb.

7.1 What we want to achieve

Working with and supporting others to contain, reduce or control harmful organisms within an area or site to an extent that protects the regionally and locally important values of the area or site over the duration of the Strategy.

7.2 What we will do

To achieve the 'working with others' objective, the Council will:

- 1. Support rural land occupiers as part of the Taranaki Self-help Possum Control Programme to maintain possum populations within acceptable limits (10% RTC) on land already included in the Programme
- 2. Investigateand trial expanding the Self-help Possum Control Programme to target other pests
- 3. Support district councils and urban land occupiers to control possums as part of an urban halo project, including the New Plymouth Urban Pest Control Programme
- 4. Undertake initial control of Old man's beard along the Kaupokonui and Waingongoro rivers and support rural land occupiers to undertake the on-going control of the plant
- 5. Support other parties to control any harmful organism that is capable of causing:
 - damage to a site or place with regional or locally significant biodiversity values
 - significant impacts on public amenity values (particularly threats to children's health and safety).

7.2.1 Self-help Possum Control Programme

Action 1: Support rural land occupiers as part of the Self-help Possum Control Programme to maintain possum populations within acceptable limits (10% RTC) on land already included in the Programme.

Self-	help Possum Control Programme activities	Status	Lead responsibility
41.	Undertake initial control of possums on rateable land included in the Self-help Possum Control Programme and reduce possum populations to at least a 5% RTC	Active	Environment Services
42.	Provide ongoing advisory and extension support to private land occupiers to ensure possums are maintained below a 10% RTC	Active	Environment Services
43.	Undertake monitoring of possum density levels and trends in at least 15% of properties in the Self-help Possum Control Programme by 30 June every year to ensure compliance with RPMP rules and the effectiveness of the programme	Active	Environment Services
44.	Enforce, if appropriate, RPMP rules in instances of non compliance	Active	Environment Services
45.	Continue to cooperate with Crown agencies where their land is contained inside or adjacent to areas in the Self-help Possum Control Programme	Active	Environment Services

Explanation

The Taranaki Self-help Possum Control Programme is the single largest biosecurity programme carried out by the Council, both in terms of area covered and cost. The Council spends approximately \$1.4 million per annum on implementing the Programme, which covers all initial and maintenance operations scheduled for that year. As at 30 June 2016, the Programme covers over 4,000 properties covering 240,200 hectares – 32% of the region.

Through the Self-help Possum Control Programme most rateable rural land on the ring plain and coastal terraces in the region is under programmed possum control. Once initial control on the eligible rateable land has been completed by the Council, rules apply requiring the land occupier to maintain possum numbers below 10% RTC.

The sustained suppression of possum populations requires coordination at a regional scale. The benefits of that control accrue to a wider community than just the affected land occupiers hence the partnership approach.

Implementation of the Self-help Possum Control Programme involves three parts:

- Land occupier engagement: Given the application of RPMP rules after initial control, new areas are included in the Programme only following Council consultation with affected land occupiers that confirms at least 75% of private land occupiers, covering at least 75% of the land area targeted, support being included in the Programme.
- Initial possum control: This involves the Council undertaking the initial control of possums on properties to be included in the Programme and reducing possum population levels in that area to a very low level of at least a 5% RTC.²⁴
- Possum control maintenance: Following the Council undertaking initial possum control, the land occupier is responsible for controlling possums below a 10% RTC in accordance with RPMP rules (refer section 6.2.2 above).



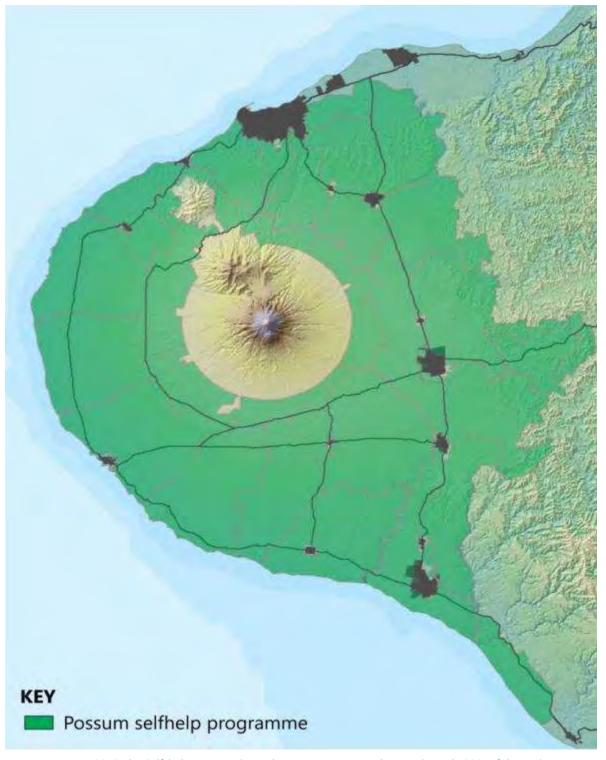
Regular property-specific advice and assistance is provided to all occupiers in the Self-help Possum Control Programme.

38

²⁴ Over time the Self-help Possum Control Programme has been incrementally increased to cover rural areas of the ring plain and much of the coastal terraces (refer map overleaf). However, the Programme has probably now reached its full extent based upon the cost effectiveness of possum control having regard to topography, vegetation cover and the relative benefits and costs of sustained control.

The Council will support land occupiers' possum control maintenance through an advisory, inspectorial and enforcement service and the provision of possum control products, materials and equipment at cost. As appropriate, the Council may in limited circumstances undertake further possum control where the sustainability or effectiveness of the Programme is threatened or where an added level of possum control is needed to protect Key Native Ecosystems (refer sections 7.2.4 and 7.2.5 of this Strategy).

The map below shows the geographic extent of the Self-help Possum Control programme.



By June 2016, the Self-help Possum Control Programme covered approximately 32% of the region.

7.2.2 Landscape predator control on the ring plain

Action 2: Investigate and trial expanding the Self-help Possum Control Programme to target other pests			
Land	Landscape predator control activities Status Lead responsibility		
46.	Investigate public and private interest in landscape predator control to reduce possums, rat and mustelid populations on the ring plain	Proposed	Environment Services
47.	Subject to public and private support, develop with other potential partners a landscape predator control programme based upon the Self-help Possum Control Programme	Proposed	Environment Services
48.	If appropriate, consider the inclusion of predator control rules as part of a review of the RPMP	Proposed	Policy

Explanation

In 2016, the Government has recently announced *Predator Free New Zealand 2050*, The Predator Free 2050 programme aims to rid New Zealand of possums, rats and stoats by 2050. Through the programme the Government is seeking to support²⁵ large-scale collaborative predator control projects.

Through the Self-help Possum Control Programme most rateable rural land on the ring plain and coastal terraces in the region is under programmed possum control. Through this Strategy, it is proposed that Council investigate Government and local interest/support in expanding that programme to control other predators such as rats and mustelids. The predator control would seek to support and complement other significant biodiversity initiatives such as Project Taranaki Mounga and the urban pest control currently being undertaken in the New Plymouth urban area (refer section 7.2.3 below). In so doing native flora and fauna species would have a much greater level of protection – from the mountain to the sea – covering almost 275,000 hectares on the Taranaki Ring Plain and Mount Taranaki.

Any proposal would seek to incrementally establish landscape predator control across properties already doing possum control.²⁶ It would build on the Self-help Possum Control Programme and involve the following component parts:

- Land occupier engagement: Given the proposed application of RPMP rules after initial control, new areas are included in the Programme only following Council consultation with affected land occupiers that confirms at least 75% of private land occupiers, covering at least 75% of the land area targeted, support being included in the Programme.
- Initial predator control: This involves the Council undertaking the initial control of possums, rats and mustelids on properties to be included in the Programme and reducing predator population levels in that area to very low levels
- Predator control maintenance: Following the Council undertaking initial predator control, the land occupier would
 be responsible for controlling possums, rats and mustelids in accordance with RPMP rules (note the imposition of
 any new rules is subject to a review or variation to the RPMP in accordance with the BSA).

The Council will support land occupiers' predator control maintenance through an advisory, inspectorial and enforcement service and the provision of control products, materials and equipment at cost. As appropriate, the Council may in limited circumstances undertake further predator control where the sustainability or effectiveness of the Programme is threatened or where an added level of possum control is needed to protect Key Native Ecosystems (refer sections 7.2.4 and 7.2.5 of this Strategy).

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²⁵ Funding will be allocated to initiatives on the basis of attracting \$2 from other sources (including the private sector, philanthropists and local government) for every \$1 of Crown funding

²⁶ This would involve including 10,000 – 20,000 hectares into the Programme with the aim of it eventually covering the area currently covered by the Self-help Possum Control Programme. This would ensure the programme is affordable by spreading resourcing requirements over a longer period of time.

7.2.3 Urban projects

Action 3: Support the district councils and urban land occupiers to control possums as part of an urban halo project, including the New Plymouth Urban Possum Control Programme

Urba	Urban halo activities		Lead responsibility
49.	In conjunction with the New Plymouth District Council, establish a network to undertake integrated possum control across parks, reserves, walkways and adjacent participating properties in the New Plymouth urban area	Active	Environment Services
50.	Undertake initial possum control on participating private properties in the New Plymouth Urban Possum Control Programme	Active	Environment Services
51.	Provide ongoing advisory and extension support to the district council and participating private land occupiers to ensure possums are maintained at low levels	Active	Environment Services
52.	Undertake monitoring to determine the outcomes of possum control on indicator (bird) species levels and trends within the Urban Programme	Active	Environment Services
53.	Consider request from district councils to establish and support new halo projects in other urban areas	Proposed	Environment Services

Explanation

Urban projects refer to pest control carried out along city parks, reserves, walkways and adjacent properties to protect and enhance biodiversity values in the city. They are an opportunity to improve biodiversity within the urban landscape.

At the time of writing this Strategy, the Council has applied the concept only to the New Plymouth urban area, however, the concept has wider application. The New Plymouth Urban Possum Control Programme was set up in 2015 and involves this Council, New Plymouth District Council and willing land occupiers establishing an integrated pest control network along city parks, reserves, walkways and adjacent properties to deliver sustained possum control across much of the city. District councils, as managers of parks and reserves, undertake significant possum and pest control work. Through urban projects there is an opportunity to broaden the area under sustained control by including nearby and adjacent private land to broaden and maximise the biodiversity outcomes possible in an urban setting.

The Programme involves:

- Targeted assistance to establish integrated possum control in parks, reserves, walkways and participating adjacent properties with the urban areas bordering the Waiwhakaiho River and the Te Henui and Huatoki streams
- Land occupier participation is voluntary. Under the programme, the Council commissioned contractors to work with residents to choose a safe and efficient control method for their property. There are signs in key places to advise the public of the programme, control methods and any precautions they need to take.
- The Council met all of the costs of the initial possum control on private properties and now supports residents in the programme to maintain possum control.
- Subsequent monitoring has revealed a significant reduction in possum numbers (e.g. the possum 'bite rate' on a line of wax tags in the Waiwhakaiho catchment reduced from 7.5% to 2.1% after urban control took place.)

The New Plymouth Urban Possum Control Programme contributes to a vision where, from the mountain to the sea, there is effective and sustained possum control that is contributing to biodiversity outcomes. It complements the work being done further up in the catchment by farmers in the Self-help Possum Control Programme, and by DOC inside the Egmont National Park,

As previously noted the concept has wider application and the Council will consider developing similar type programmes in other urban areas upon expression of interest from the relevant district council. The extent and form of any Council assistance will be determined on a case-by-case basis taking into account the outcomes sought, the resources required, the fair and equitable allocation of costs, degree of public support, and the anticipated regional benefits.

7.2.4 Old Man's Beard Programme – Kaupokonui and Waingongoro

Action 4: Undertake initial control of Old man's beard along the Kaupokonui and Waingongoro rivers and support rural land occupiers to undertake the on-going control of the plant

Kaop	Kaopokonui Old Man's Beard Programme activities		Lead responsibility
54.	Undertake initial control of Old Man's Beard on rateable land adjacent to the Kaupokonui Stream	Active	Environment Services
55.	Undertake initial control of Old Man's Beard on rateable land adjacent to the Waingongoro River	Active	Environment Services
56.	Provide ongoing advisory and extension support to private land occupiers to ensure they are complying with RPMP rules relating to the control of Old Man's Beard	Active	Environment Services
57.	Undertake compliance monitoring and, where necessary, enforce, RPMP rules in instances of non compliance	Active	Environment Services
58.	Consider at the next review of the RPMP, applying the 'Self-help' concept to the Patea River currently excluded from the RPMP rules for Old Man's Beard.	Proposed	Policy

Explanation

In previous pest management strategies, rules applied requiring the control of Old man's beard in all areas except for within 50 metres of three of the region's rivers; the Kaupokonui, the Patea and the Waingongoro. In these catchments the plant was considered too widespread in these areas for landowners to effectively control. However, in recent times the Council has implemented the Kaupokonui and Waingongoro Old Man's Beard Programme.

The Kaupokonui and Waingongoro Old Man's Beard Programme seeks to emulate the success of the Council's Self-help Possum Control Programme by incrementally undertaking an intensive initial control operation along the Kaupokonui Stream and the Waingongoro River and thereafter supporting land occupiers in the on-going control of the plant.

The programme represents a significant step in reducing infestations of Old man's beard in the region and involves the following component parts:

- Aerial surveillance and field monitoring to identify infestations of Old man's beard along the Kaupokonui Stream and Waingongoro River
- Land occupier support: Given the application of RPMP rules, all affected landowners were approached, given information on the programme and invited to sign up to an agreement. The affected landowners included the South Taranaki District Council which has some riparian reserves through Kaponga. Ninety percent of affected landowners signed up to the programme
- Initial weed control: This involved the Council funding the direct control of Old man's beard (to achieve a 95% reduction).
- Ongoing maintenance: Following the Council undertaking initial weed control, the land occupier is responsible for controlling Old man's beard in accordance with RPMP rules (refer section 6.2.2).

The Council will support land occupiers' weed control maintenance through an advisory, inspection and enforcement service and the provision of control products, materials and equipment at cost. As appropriate, the Council may in limited circumstances undertake retreatment where the sustainability or effectiveness of the Programme is threatened or where an added level of weed control is needed to protect Key Native Ecosystems (refer sections 7.2.4 and 7.2.5 of this Strategy).

Old Man's Beard is currently identified as a Sustained Control Programme pest in the Proposed RPMP. The Proposed RPMP now includes rules that require the control of Old man's beard across Taranaki (including the Kaupokonui and Waingongoro rivers) with the exception of the mid to lower reaches of the Patea River. Over the life of this Strategy, and in association with reviews of the RPMP, the Council may consider extending the 'Self-help' concept to target the Patea River.

7.2.5 Community and site-led biodiversity programmes

Action 5(a): Support other parties, including land occupiers, community groups, QEII, district councils, and Department of Conservation, to control any harmful organism that is capable of causing damage to a site or place with regional or locally significant biodiversity values

Biodi	Biodiversity Programme activities		Lead responsibility
59.	Consider on a case-by-case basis supporting or undertaking appropriate control of harmful plants and or animals having impacts on the regionally significant values associated with privately-owned Key Native Ecosystems	Active	Environment Services
60.	Consider on a case-by-case basis supporting community groups to undertaking appropriate control of harmful plants and or animals having impacts on the regionally significant values associated with privately-owned Key Native Ecosystems	Active	Environment Services
61.	Provide ongoing advisory and extension support to private land occupiers to ensure possums are maintained appropriate levels	Active	Environment Services
62.	Consider on a case-by-case basis supporting DOC to undertake appropriate control of harmful plants and or animals where there will be mutually significant benefits to co-ordinating our respective programmes, including possum control in and around the Egmont National Park	Active	Environment Services

Explanation

The Council has prepared the *Taranaki Regional Council Biodiversity Strategy*. As part of that mandate, the Council assesses and identifies sites that contain biodiversity values of regional significance (Key Native Ecosystems) and applies a targeted non regulatory approach to prioritise the protection of these sites. Through that approach, biodiversity plans

are prepared and all harmful plants and animals, irrespective of their 'pest' status, are controlled to a level that protects the biodiversity values of the KNE.

There are thousands of invasive plant and animal species already widespread in the region that is capable of having significant adverse effects. The cost of managing these species everywhere, irrespective of the values being affected, or the severity of those effects, would be disproportionate to the benefits. Through a site-led approach the Council is seeking to focus its efforts and resources to where it can make the greatest 'public good' gains. In particular, the Council is seeking to focus on supporting the work being undertaken by individuals and community groups to protect indigenous biodiversity values that are particularly threatened or rare in the region.

Specific management measures that Council will implement include:



Waikirikiri Lagoon restoration project. Council works with a wide variety of partners to protect values associated with Key Native Ecosystems such as Waikirikiri Lagoon

- Key Native Ecosystems programme: This programme involves Council working with individuals and community groups to protect designated terrestrial sites and places that are regionally significant for their biodiversity values. Council support may be in the form of site-specific pest management advice and information, the provision of pesticides and equipment, or undertaking the direct control itself.
- Self-help Possum Control Programme: This Programme involves coordinated sustained possum control that contributes to protecting privately-owned remnant forests and wetlands over most of the ring plain and coastal terraces. Refer section 7.2.1 for further information.
- Integrated pest management: The Department of Conservation is separately empowered and resourced to manage the public conservation estate. However, on occasion there will be significant benefits in undertaking and coordinating our respective programmes, e.g. possum control in and around the Egmont National Park.

For a fuller description of the Council's biodiversity programmes and activities refer to the *Taranaki Regional Council Biodiversity Strategy*.



As at 30 June 2016, there are 218 Key Native Ecosystems of which 172 sites are privately owned. At the time of writing this Strategy 101 sites have biodiversity plans (in yellow) and are being actively managed by land occupiers with Council support to address any pest and weed threats.

7.2.6 Other support and assistance services

Action 5(b): Support other parties to control any harmful organism that is capable of causing significant impacts on public amenity values (particularly threats to children's health and safety)

Ame	Amenity Programme activities		Lead responsibility
63.	As time and resources permit, undertake direct control of wasps and magpies where they pose a particular threat to children's health and safety	Active	Environment Services
64.	Assistance with funding applications, or provision of 'seeding' funds	Active	Environment Services
65.	Assistance with or provision of project implementation expertise	Active	Environment Services
66.	Provision of written resources that provide direction and training on pest management, site manipulation and habitat restoration	Active	Environment Services
67.	Preparation of site (or species) management plans (e.g. for soil conservations pests such as goats and rabbits)	Active	Environment Services
68.	Provision of materials, such as traps, bait stations and bait (e.g. in association with site led biodiversity projects for control of possums, mustelids, feral cats, rats and deer)	Active	Environment Services
69.	Promote the removal of environmental pest plants through a 'swap a plant' scheme in conjunction with public awareness campaigns	Proposed	Environment Services

Explanation

On a case-by-case basis, and as time and resources permit, Council will provide other support and assistance to land occupiers, schools, community groups, and district councils to facilitate the control of harmful organisms causing significant impacts on public amenity values, including:

- provision of material or undertaking direct control for harmful organisms that pose a threat to children's health and safety, e.g. wasps and magpies
- preparation of site (or species) management plans to manage pest threats to riparian and soil conservation values, e.g. possums, goats and hares
- assistance to community groups with funding applications to control harmful organisms



- assistance with or provision of project implementation expertise (e.g. contacting other landowners in the project area, or organising and coordination of control events)
- provision of written resources that provide direction and training on pest management, site manipulation and habitat restoration
- provision of materials, such as traps, bait stations and bait (e.g. in association with site-led biodiversity projects for control of possums, mustelids, feral cats, rats and deer)
- 'swap a plant' scheme in conjunction with a public awareness campaign to promote the removal and destruction of environmental pests (e.g. Giant gunnera, Old man's beard and Wild Ginger) by the Council 'swapping' an environmentally acceptable alternative species for the pest.

The level of Council involvement will be project dependent. In its considerations as to what action (and level of support) is necessary, appropriate, and cost effective, the Council will have regard to the following matters:

- an occupier has endeavoured to achieve effective pest control but has failed despite his or her best efforts
- control undertaken by the Council will be as effective or more effective than the control undertaken by the occupier, or
- an occupier is neither the beneficiary of the control nor an exacerbator of the problem.

7.3 Community and site-led targets (key performance indicators)

1	Targets	Measures
	Less than 10% RTC across rural area covered by the Self-help Possum Control Programme	Area of ring plain or coastal terraces maintained under the Self-help Possum Control Programme at levels <10% RTC
	Increase in the number of sites and land area where sustained pest and weed control is being undertaken	The number of properties and areal extent undertaking sustained pest and weed control to protect biodiversity values

What do you think?

This Strategy includes a proposal to expand upon the Self-help Possum Control Programme to deliver predator control for possums, rats and mustelids across 273,000 hectares. This proposal is subject to leveraging additional funds from external programmes including the government's new *Predator Free 2050* objective and Wild for Taranaki's Restoring Taranaki.

- 9. Would you support or oppose the proposal? Why.
- 10. Would you support or oppose a review of the Pest Management Plan to include rules that require land occupiers to maintain low predator numbers following the Council undertaking initial control?

8. Other leadership responses

Section Eight sets out other activities undertaken by the Council to give effect to its leadership responsibilities under section 12B of the BSA. The ways in which the Council provides leadership in the region include:

- (a) promoting the alignment of pest management in the region
- (b) facilitating the development and alignment of regional pest management plans and pathway management plans in the region
- (c) promoting public support for pest management
- (d) facilitating communication and co-operation among those involved in pest management to enhance effectiveness, efficiency, and equity of programmes (section 12B(2) of the BSA).

The suite of leadership activities undertaken pursuant to sections 12B and 13 of the BSA, not already covered by sections 4 to 7 of this Strategy, include:

- 1 biosecurity planning development and or consideration of strategies and plans addressing pests and pathways
- biological control biological control research and action to reduce the infestation levels of legacy pests in Taranaki in the long term
- advice and information non regulatory response to promote and empower others to undertake effective control of 'pests' to reduce their impacts and spread to other properties
- 4 advocacy and liaison support programmes and activities of others to promote more effective pest management.

8.1 What we want to achieve

Provide leadership on biosecurity matters for Taranaki, where there is a public good to the region, and where such activities prevent, reduce or eliminate adverse effects from harmful organisms that are present in New Zealand.

8.2 What we will do

To achieve the leadership objective the Council will:

- 1. Undertake biosecurity planning, including facilitating the development and alignment of regional pest management plans and regional pathway plans
- 2. Contribute to and facilitate biological control and research for harmful organisms established and widespread in the Taranaki region to reduce or mitigate their impact
- 3. Provide advice and information, to avoid, remedy or mitigate the spread of harmful organisms, their impacts, and to reduce the infestation levels of legacy pests in Taranaki in the long term
- 4. Undertake advocacy and liaison to support government or industry-led initiatives to change peoples' behaviours and:
 - reduce the potential spread of pests and diseases not yet present or established in the region
 - avoid or mitigate adverse effects on third parties caused by the dispersal of pests already present or established in the region.

8.2.1 Biosecurity planning

Action 1: Undertake biosecurity planning, including facilitating the development and alignment of regional pest management plans and regional pathway plans

Bios	Biosecurity planning activities		Lead responsibility
70.	Prepare pest management plan that delivers efficient and effective management of the Council's pest management functions	Active	Policy
71.	Prepare operational plan and update relevant standard operating procedures.	Active	Policy
72.	Undertake ten-yearly review of Pest Management Plan for Taranaki in 2027	Active	Policy
73.	Undertake five-yearly interim review of pest management plan	Active	Policy
74.	Consider preparing and making other pest management plans, strategies, pathway management plans, including those prepared by other parties.	Active	Policy
75.	Consider section 100v and other responses	Active	Policy / Environment Services
76.	Through advocacy and liaison provide policy input into legislation, strategies and other plans that are relevant to biosecurity in the Taranaki region	Active	Policy

Explanation

Biosecurity planning is the preparation, adoption and maintenance comprehensive and publicly considered policies, plans and strategies that will deliver to the Taranaki community, efficient and effective management of the Council's biosecurity functions under sections 12B and 13 of the BSA.

Under section 12B of the BSA, Council is responsible for facilitating the development and alignment of regional pest management plans and regional pathway management plans in the region.

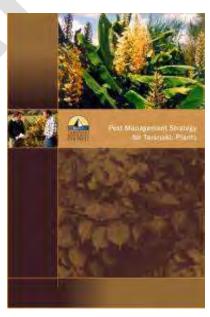
Regional councils are not necessarily required under the BSA to prepare a pest management plan but, on behalf of its local community, the Council has determined to prepare a Proposed RPMP. The RPMP provides the regulatory framework for efficient and effective management or eradication of specified animal and plant organisms in the Taranaki region. The RPMP identifies which organisms are classified as 'pests' and will be managed on a regional basis. Only in a pest management plan is it possible to have a rule under the BSA for pest management.

The RPMP, when operative, will empower the Council to exercise the relevant service delivery, advisory, enforcement and funding provisions available under the BSA. After five years an interim review is required with a full review to be carried out after 10 years (i.e. 2027).

The effectiveness of the Council's biosecurity strategies and plans will be reviewed every five and ten years.

In accordance with section 13 of the BSA, the Council will also consider RPMP proposals prepared by other parties for the Taranaki region.

Council will also consider other policy responses that support our biosecurity vision and priorities, including preparation and input into other policy instruments such as national legislation, national and regional pest/pathway management plans, and small-scale management responses.



The Plan is the Council's 'rulebook' for pest management in the region. Both this Strategy and the Plan should be read

8.2.2 Biological control and research

Action 2: Undertake biological control and research, where appropriate, for harmful organisms established and widespread in the Taranaki region to reduce or mitigate their impacts

Biolo	Biological control and research activities		Lead responsibility
77.	Release, propagate and re-distribute appropriate biological control agents, managing release sites, collecting data and training field staff.	Active	Environment Services
78.	Regularly monitor the effectiveness of released biological control agents. Where biological control agents have successfully been propagated and have become established, consideration will be given to their further distribution	Active	Environment Services
79.	Provide financial and logistical support in relation to research for additional biological control agents as identified by the regional collective	Active	Environment Services

Explanation

Biological control agents include predators, parasites, or diseases that directly kill the organism or reduce their health and ability to propagate or breed.

The effectiveness of biological control has historically been fraught with unanticipated negative effects and lack of success (e.g. mustelid control of rabbits). However, biocontrol has made significant advances in New Zealand in the last 10-20 years, with many new agents approved, successfully released and now doing the job intended. In particular, advances in biocontrol agent testing has minimised non-target effects and increased confidence in the use of biocontrol (e.g. use of Rabbit Haemorrhagic Disease (RHD) to control rabbits).

Biocontrol is especially useful for widespread species where other means of suppressing their populations over a wide area are costly or ineffective (e.g. wasp control). Due to the ecology of most biocontrol agents and their hosts, the biocontrol only reduces infestations (i.e. it will not eradicate the pest).

The ideal ecological result is to create an equilibrium between the populations of the pest and the biocontrol agent where the pest density is maintained to acceptable low levels. This will substantially reduce the adverse effects of the pest. There may still be an ongoing cost of maintaining control in the form of monitoring, but the cost of control is much less than using other control methods for the same result. Currently, the Council undertakes biological control programmes for the following weeds:

Target species	Biological control agents
Blackberry	Blackberry rust
Broom	Gall mite, psyllids, seed beetles
Californian thistles	Green thistle beetles
Giant Buttercup	Buttercup fungus
Gorse	Seed weevil, soft shoot and hard shoot moths, spider mite, thrips- European and Portuguese, pod moths
Mist Flower	Mist flower fungus
Nodding Thistle	Crown weevil, gall fly and receptacle weevil
Old Man's Beard	Leaf fungus, leaf miner, sawfly Pink Ragwort
Ragwort	Cinnabar moth, ragwort flea beetle
Scotch Thistle	Gall fly
Tradescantia	Stem, leaf and tip beetles
Woolly nightshade	Lace bugs.

The Council remains committed to exploring opportunities for appropriate biocontrol agents, and will participate, as appropriate, in the national search for new and improved biocontrol agents. This may include financial and logistical support in relation to research for additional biological control agents. Should other suitable biological control agents

be developed during the duration of the Strategy, the Council may undertake to release, propagate and re-distribute those agents.

In addition to biological control, the Council may consider supporting research initiatives (directly or in-kind contributions) to assist with the refinement of current pest control methods and practices, (e.g. baits and bait application rates).



Council officer inspecting the effectiveness of Buddleja leaf weevil biological control release site at Lake Mangamahoe.

8.2.3 Provision of advice and education

Action 3: Provide advice and information, to reduce the infestation levels of legacy pests in Taranaki in the long term

Advi	Advice and education activities		Lead responsibility
80.	Respond to public requests for information or enquiries in relation to the identification of harmful organisms, their impacts, and appropriate control options	Environment Services	
81.	In conjunction with property visits, provide property specific advice on the control of pests and other harmful organisms, including specific measures to prevent the introduction and spread of invasive species when undertaking property inspections and other pest management activities	Active	Environment Services
82.	Promote awareness of how to identify unwanted organisms and how to report detections	Active	Environment Services
83.	Provide technical advice, best practice control methods and information on safe disposal methods of pests on the Council's website and through the preparation and distribution of pamphlets and other educational material. The provision of advice is not restricted to species within the RPMP but extends to species recognised as having a detrimental impact on production, human health or environmental values	Active	Environment Services
84.	Undertake, on request, talks and presentations to interested community groups to increase awareness and capacity on effective pest control techniques and methodologies, including weed hygiene (e.g. botanical societies, horticultural groups and gardening clubs, fishing clubs, water-user groups, hunting groups/clubs, tangata whenua representatives)	Active	Environment Services
85.	Annually undertake a public awareness campaign in the media to assist the community to identify Eradication Programme pests and encourage public reportings of any infestations to the Council	Active	Environment Services
86.	As appropriate, organise timely and relevant media and publicity programmes to highlight other pest management issues, including new threats or report on success stories	Active	Environment Services
87.	Annually participate in MPI's Check, Clean, Dry communications programme	Active	Environment Services
88.	Provide public hotline and respond to any public reporting of potential pests, including provision of a weed identification service	Active	Environment Services

Explanation

The purpose of advisory, education and social marketing activities is to promote general awareness and understanding of the issues and the risks that introduced organisms pose to a place or area and to encourage people to change behaviours or take specific actions to avoid, mitigate or remedy pest management impacts.

The provision of technical advice and information allows occupiers to make informed decisions and can lead to more self-responsibility for pest management. The Council will undertake the following advisory and educational activities:



Public requests may relate to the identification of plants, information on their control or assistance in calibrating spray equipment and such like

8.2.4 Advocacy and liaison

Action 4: Undertake advocacy and liaison to minimise the effects of cross boundary issues and promote complementary, efficient and effective pest management in Taranaki.

Advo	ocacy and liaison activities	Status	Lead responsibility
89.	Have regard to relevant strategies and plans and promote alignment where appropriate in policy development and the implementation of Council biosecurity programmes and activities	Active	Policy / Environment Services
90.	Liaise with MPI: on national biosecurity matters marine surveillance and incursion responses	Active	Policy / Environment Services
91.	Liaise with adjacent regional councils and DOC	Active	Policy / Environment Services
92.	Prepare submissions and undertake other advocacy on pest management and cross boundary issues of interest to this region	Active	Policy

Explanation

The aim of advocacy and liaison is to promote the purpose of this Strategy by minimising the effects of cross-boundary issues and promoting complementary, efficient and effective pest management.

Harmful organisms (and their impacts) are not constrained by administrative and catchment boundaries. For example, water quality may be affected by the discharge of pesticides and herbicides, pest techniques may be affected by the availability of appropriate management tools, and management approaches and techniques may be constrained by administrative boundaries. The actions elsewhere in the country or by other parties, including neighbouring regions, Government agencies, including MPI and DOC, and sector groups, may directly or indirectly impact on effective pest management in this region. The Council aims to minimise adverse cross-boundary pest management issues by promoting complementary, and efficient and effective pest management and working collaboratively with neighbouring regions and other agencies with pest management responsibilities.

The Council will undertake the following advocacy and liaison activities:

- pursuant to section 71(a) of the BSA, have regard to any national or regional pest management plan concerning the same organism, any regulation, or any regional policy statement, or regional plan prepared under the Resource Management Act and not be inconsistent with them or their intent
- liaise, as appropriate, with MPI over pest management issues best dealt with or co-ordinated at the national level. In particular, the Council will participate in the National Pest Plant Accord and the National Pest Pet Accord, which involves regional councils collectively enforcing a national ban on the sale, propagation and distribution of a list of recognised harmful plants and pets, which have been declared 'unwanted organisms' (refer section 4.2.4 above)
- in conjunction with other regional councils, work with MPI (as the lead agency) in relation to potential marine biosecurity issues which may affect the Taranaki region (refer section 4.2.4 above)
- liaise, as appropriate, with Horizons and Waikato regional councils and DOC on cross-boundary issues pertaining to pest and pathway management
- liaise, as appropriate, with other regional councils on matters of pest management which are relevant to more than
 one region, including representation on Bio-Managers, New Zealand Biosecurity Institute, Bionet plus appropriate
 communication and consultation and consideration of potential inter-regional pathway plans and any existing and
 new Memoranda of Understanding between this Council and neighbouring councils
- liaise and work with rail and road controlling authorities to address pest dispersal through transport corridors. advocate and encourage other authorities involved with pest management issues to adopt policies, practices or measures which will avoid, mitigate or remedy adverse effects associated with pests
- make submissions with regard to documents prepared by other authorities in relation to pest management.

Coordination with other pest management plans will be achieved through consultation and communication between the Council and other persons or organisations proposing and implementing plans.

Yellow bristle grass – A case study

In many parts of Taranaki, weeds have established on road and rail verges. The spreading of road metal obtained from a number of different sources (which have sometimes been weed contaminated) along transport corridors is one example of how this has happened in the past. Topsoil re-spread as part of road reinstatement work has also been a significant potential source of weed spread to previously uninfested areas while traditional road verge maintenance practices of mowing vegetation and spraying around marker pegs and water tables are probably linked to the unintentional spread of some aggressive weeds such as Yellow bristle grass and Giant buttercup. Conversely, Council can provide advice and information to adjacent land owners to promote practices to minimise the spread of weeds from adjacent rail and road corridors.

The control of Yellow bristle grass is one potential pest that presents many practical challenges to pest plant management on road reserves. On one hand the application of rules to destroy the weed is not considered appropriate as the control is difficult (due to limited effective herbicides) and can exacerbate the problem (e.g. by resulting in bare land that is then re-infested). Instead of rules the Council is working closely with NZTA, district councils and Federated Farmers to develop and implement a set of best practice guidelines for farmers, roading authorities and roading contractors alike. During the implementation period of the RPMP Council will assist in the development of these guidelines. Examples of roadside vegetation management issues to consider for yellow bristle grass, for example, include:

- determining if cleaning of mowing equipment is practicable (between leaving an infested area and before arriving at a new, uninfested area);
- work with maize contractors, in particular, to reduce spread during maize harvest;
- change mowing frequency (e.g. before end of December and not again until March/April), to remove seed heads at critical times of the year and to create overall a thicker, more dense sward of vegetation and/or grass where seeds will struggle to germinate and establish;
- less reliance on spraying roading marker pegs, guard rails and other structures in order to avoid bare ground situations, particularly in late summer/autumn spraying;
- selection of non-invasive hardy, low growing broadleaf plants that can be hydro-seeded onto bare areas and add value to ecosystems (e.g. fescue/clover mixes);
- mowing a thin strip (bare minimum) of the road reserve (for safety/visibility reasons only) in order to create a vegetation barrier (e.g. hedging foliage) or buffer zone (e.g. 2m to 6m wide of taller vegetation) between the mown strip and neighbouring paddock to reduce the chances of seed dispersal and germination;
- identifying areas where 'do nothing' (no mowing or spraying) may be a viable option; and
- restrictions on grazing 'the long acre' (December to May) and taking hay from road verge areas, thereby reducing the opportunity for spread.

8.3 Leadership targets (key performance indicators)

Targets	Measures
Regional pest management plan is in place in accordance with statutory requirements	Operative pest management plan is in place Active participation in national or regional groups Number of biosecurity related submissions prepared

Council officer working with Tiaki Te Mauri O Parininihi Trust in the Parininihi/Whitecliffs area.



Strategy monitoring and review

This Strategy is a non-statutory document (i.e. not a formal statutory plan or policy under the BSA) to guide Council's biosecurity programmes and actions.

The Biosecurity Strategy can be implemented using existing resources (staff time and operational budgets). The Strategy builds on many existing programmes and activities. However, some new focus and activities are proposed – largely in association with pathway and eradication programmes – which will require additional resourcing. This will largely be achieved by shifting resources within existing programmes (for example the Council's initial control operations in the Self-help Possum Control Programme are now large completed and the programme is now in a maintenance phase). Future decisions on the overall level of resourcing will be made by the Council during the preparation of its annual plan and Long Term Plan.

The Council will monitor the implementation and effectiveness of the Strategy by:

- (a) for exclusion and eradication programmes, surveying and mapping the presence and distribution of known infestations
- (b) for sustained control programmes, recording the number of public complaints pertaining to individual pests and instances of non-compliance with RPMP rules
- (c) for community and site-led programmes, recording the direct control and other forms of assistance to support the efforts of others to control unwanted organisms
- (d) for other 'leadership' responses, maintaining a record of liaison and advocacy undertaken plus other response activities, including the release and distribution of biological control agents.

Progress on implementing targets in the Strategy will be annually monitored and reported on through the annual planning process under the Local Government Act (Figure 5). A more comprehensive review will also be undertaken after ten years, and in conjunction with the review of the RPMP to ensure the Strategy continues to be relevant, effective and efficient.

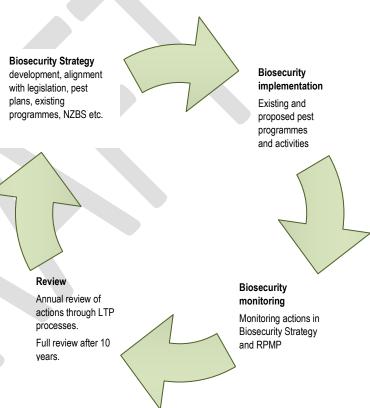


Figure 5: Planning, implementation, monitoring and review of the Biosecurity Strategy



Definitions and acronyms

This section provides the meaning of words used in this Strategy. When a word is followed by an asterisk (*), the meaning which follows is the meaning provided in section 4 [interpretation section] of the Biosecurity Act 1993 or *National Policy Direction for Pest Management 2015*.

Authorised person* A person appointed an authorised person under Section 103 of the Act.

Animal means any mammal, insect, bird or fish, including invertebrates, and any living organism except a plant or human.

Appropriate means as determined to be appropriate by the Taranaki Regional Council or its officers acting under delegated authority.

Biological control means the introduction and establishment of living organisms, which will prey on, or adversely affect a pest.

Biological diversity (or biodiversity) means the variability among living organisms, and the ecological complexes of which they are a part, including diversity within species, between species, and of ecosystems.

BSA means the Biosecurity Act 1993.

Chief Technical Officer* means a person appointed a chief technical officer under Section 101 of the Act.

Crown²⁷

- (a) means her Majesty the Queen in right of New Zealand; and
- (b) includes all Ministers of the Crown and all departments; but
- (c) does not include:
 - (i) an Office of Parliament;
 - (ii) a Crown entity; or
 - (iii) a state enterprise named in the First Schedule to the State-Owned Enterprises Act 1986.

Crown land refers to land vested in the Crown and administered by a Minister, and includes all land forming part of any national park, any reserve within the meaning of the Reserves Act 1977, and all unoccupied lands of the Crown.

Direct control means pest control undertaken by or funded by the Taranaki Regional Council.

District council means a district council constituted under Part 1A of the Local Government Act 2002.

DOC refers to the Department of Conservation.

Effect* includes any positive or adverse effect, temporary or permanent effect, past, present or future effect, cumulative effect which arises over time or in combination with other effects – regardless of the scale, intensity, duration or frequency of the effect, potential effect of high probability, potential effect of low probability which has a high potential impact.

Enforce means to compel observance with the law.

Environment* includes: ecosystems and their constituent parts, including people and their communities, all natural and physical resources, amenity values, the aesthetic, cultural, economic and social conditions that affect or are affected by any of the above.

Eradicate, in relation to an organism, means to totally clear the organism from New Zealand, or a region or part of a region.

Eradication means to reduce the infestation level of the subject that is present in New Zealand to zero levels in an area in the short to medium term.

Exacerbator means a person, who by his or her activities or inaction, contributes to the creation, continuance, or exacerbation of a pest management problem.

Exclusion means to prevent the establishment of the subject that is present in New Zealand but not yet established in an area.

Externality impacts, in relation to pest management, are adverse and unintended effects imposed on others.

Exotic means a species, subspecies or lower taxon occurring outside its natural range (past or present) and dispersal potential.

²⁷ Public Finances Act 1989.

Good neighbour rule* refers to a rule to which the following apply:

- (a) it applies to an occupier of land and to a pest or pest agent that is present on the land; and
- (b) it seeks to manage the spread of a pest that would cause costs to occupiers of adjacent land; and
- (c) it is identified in a regional pest management plan as a good neighbour rule; and
- (d) it complies with the directions in the national policy direction relating to the setting of good neighbour rules.

Harmful organisms refer to the full range of organisms capable of having adverse and unintended impacts on marine, freshwater or terrestrial environments and includes:

- (a) pest animals or plants identified in a national or regional pest management plan or national or regional pathway plan made under Part 5 of the Biosecurity Act 1993; or
- any other new or established and exotic animal or plant that could pose a threat to values of interest, and
- (c) their related vectors/ pest agents, and particles such as prions, (including organisms that have been purposefully established but later prove to be a threat to the values).

Indigenous means native to New Zealand.

Introduced means a species brought from its natural range to New Zealand by a human agency.

Iwi refers to a political grouping comprised of several hapū, each recognising descent from a common ancestor(s). The hapū not only recognise genealogical ties but geographical, political and social ties.

Key Native Ecosystems refers to terrestrial sites (sites on land) identified by the Taranaki Regional Council to have regionally significant indigenous biodiversity values.

LGA refers to the Local Government Act 2002.

LTP refers to long term plans prepared under the Local Government Act 2002.

Management agency* means a management agency responsible for implementing a regional pest management plan.

National Policy direction* or **NPD** means the direction approved under section 57 [of the Biosecurity Act 1993].

New Zealand Transport Authority or **NZTA** is the Government agency responsible for managing state highways.

Occupier*

- (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.

Organism* does not include a human being or a genetic structure derived from a human being, includes a micro-organism, includes a genetic structure that is capable of replicating itself (whether that structure comprises all or only part of an entity, and whether it comprises all or only part of the total genetic structure of an entity). Includes an entity (other than a human being) declared by the Governor General by Order in Council to be an organism for the purposes of the Act. Includes a reproductive cell or developmental stage of an organism. Includes any particle that is a prion.

Person* Includes the Crown, a corporation sole, and a body of persons (whether corporate or unincorporated).

Pest* means an organism specified as a pest in a pest management plan.

Pesticide means a substance for destroying harmful pests.

Pathway* means movement that:

- (a) is of goods or craft out of, into, or through:
 - (i) a particular place in New Zealand; or
 - (ii) a particular kind of place in New Zealand; and
- (b) has the potential to spread harmful organisms.

Pathway management plan * means a Plan to which the following applies:

- (a) it is for the prevention or management of the spread of a harmful organism
- (b) it is made under Part V of the Ac
- (c) it is a national pathway management plan or a regional pathway management plan..

Pest management plan and RPMP* means a Plan to which the following applies:

- (a) it is for the eradication or effective management of a particular pest or pests
- (b) it is made under Part 5 of the Ac
- (c) it is a national pest management plan or a regional pest management plan.

Plant refers to any plant, tree, shrub, herb, flower, nursery stock, culture, vegetable, or other vegetation; and also includes any fruit, seed, spore and portion or product of any plant; and also includes all aquatic plants.

Port includes an airport, anchorage, harbour and wharf.

Principal Officer*

- (a) in relation to a regional council, its chief executive;
 and
- (b) in relation to a region, the chief executive of the region's regional council and includes an acting chief executive.

Private land means any land which is for the time being held in fee simple by any person other than Her Majesty; and includes any Maori land.

Region²⁸, in relation to a regional council, means the region of the regional council as determined in accordance with the Local Government Act 2002.

Regional council means a regional council within the meaning of the Local Government Act 2002.

Road means all formed roads (including road verges) from the centre of the road to an abutting property boundary and includes all bridges, culverts and fords forming part of any road, but does not include unformed (paper) roads.

Rule means a rule included in a pest management plan in accordance with section 73(5) of the Act.

RMA refers to the Resource Management Act 1991.

Road includes all bridges, culverts, and fords forming part of any road.

RTC refers to residual trap catch.

Sale includes bartering, offering for sale, exposing, or attempting to sell, or having in possession for sale, or sending or delivering for sale, causing or allowing to be sold, offered or displayed for sale, and includes any disposal whether for valuable consideration or not and '**Sell**' has a corresponding meaning.

Site-led pest programme means a management programme for which the intermediate outcome for the programme is that the subject, or an organism being spread by the subject that is capable of causing damage to a place, is excluded or eradicated from that place; or is contained, reduced, or controlled within the place to an extent that protects the values of that place.

Small-scale management programme means a small-scale management programme to which section 100V [of the Biosecurity Act 1993] applies.

Subject means:

- (a) in relation to a proposal for a pest management plan, means the organism or organisms proposed to be specified as a pest or pests under the plan; and
- (b) in relation to a pest management plan, means the pest to which the plan applies; and
- (c) in relation to a proposal for a pathway management plan, or to a pathway management plan, means the pathway or pathways to which the proposal for a plan, or to which the plan, applies; and
- (d) in relation to a small-scale management programme, means the unwanted organism specified in the programme.

Sustained control pest programme means a management programme for which the intermediate outcome for the programme is to provide for the sustained control of the subject, or an organism being spread by the subject, in an area to a level where the costs imposed on persons are manageable.

Surveillance refers to the active searching for new incursions of invasive pests and other harmful organism.

Tangata whenua²⁹, in relation to a particular area, means the Iwi or hapu that holds mana whenua over that area.

Transport corridor means local roads, state highways and railway lines as owned or occupied by district/city councils,

Vector means a carrier of disease.

²⁸Resource Management Act 1991

²⁹ Resource Management Act 1991

Unwanted organism* means any organism that a chief technical officer believes is capable or potentially capable of causing unwanted harm to any natural and physical resources or human health, and

- (a) includes—
 - (i) Any new organism, if the Authority
 [Environmental Risk Management Authority]
 has declined approval to import that organism; and
 - (ii) Any organism specified in the Second Schedule of the Hazardous Substances and New Organisms Act 1996; but
- (b) does not include any organism approved for importation under the Hazardous Substances and New Organisms Act 1996, unless—
 - (i) the organism is an organism that has escaped from a containment facility; or
 - (ii) a chief technical officer, after consulting the Authority [Environmental Risk Management Authority] and taking into account any comments made by the Authority concerning the organism, believes that the organism is capable or potentially capable of causing unwanted harm to any natural and physical resources or human health.

Wāhi tapu means places or things which are sacred or spiritually endowed. These are defined locally by tangata whenua of the Taranaki region.

Working Day* means any day except -

- (a) a Saturday, a Sunday, Good Friday, Easter Monday, Anzac Day, Labour Day, the Sovereign's birthday, and Waitangi Day; and Wellington Anniversary Day;
- (b) The day observed in the region of a regional council as the anniversary date of the province of which the region forms a part; and
- (c) a day in the period commencing on the 20th day of December in any year and ending with the 15th day of January in the following year.

Zero-density in relation to the staged eradication of pests, a medium-term target to maintain an area free from the adverse effects of the pests. The pests may still arise in the region, but they are managed such that they cease to be a threat to economic, environmental or social/amenity values.

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Appendix 1: Summary of the means for achieving individual pest management objectives

			Enforce rules			Direct control			
Harmful organisms	Advise & educate		Sale & distribution controls	Good neighbour rules	Other property rules	To protect site values (KNEs)	To eradicate from region	Biological control	
Pathway and exclusion programmes (Strategy only)	Pathway and exclusion programmes (Strategy only)								
Invasive ants, rusa deer, pest fish, rooks, didymo	1	4	4				1		
Eradication programmes (RPMP)									
Climbing Spindleberry	1	1	1				1		
Giant Reed	1	1	1				1		
Madeira Vine	1	1	1				1		
Senegal Tea	1	1	1				1		
Sustained control programmes (RPMP)									
Brushtail possums	1	1	1	1	***************************************				
Common and Purple pampas	1	1	1	1					
Giant Gunnera	1	1	***	1	***				
Giant Buttercup	1	1	1	***					
Gorse	1	1	1	***				***	
Nodding & Plumeless Thistle	1	1	1	***				***	

			Enforce rules	Direct	control			
Harmful organisms	Advise & educate	Monitor & surveillance	Sale & distribution controls	Good neighbour rules	Other property rules	To protect site values (KNEs)	To eradicate from region	Biological control
Old Man's Beard	1	1	1	1	1			***************************************
Ragwort	1	1	1	1	1			1
Variegated Thistle	1	1	1	1				
Wild Broom	1	1	1	1				
Wild Ginger [Kahili and Yellow]	1	1	1	1	1			
Site-led programmes (Strategy only)								
Possums, feral cats, fallow deer, feral goats, feral pigs, hare, mustelids, Climbing asparagus, Spanish health, Wandering willy, Woolly nightshade	***	1	1			1		
Other programmes (Strategy only)								
Undaria, Egeria, Argentine ants, magpies, wasps, Egeria, Lagarasiphon, Yellow bristle grass, tutsan,	***	1	1			1		1