

Regional Pest Management Plan for Taranaki

Taranaki Regional Council

Private Bag 713

Stratford 4352

February 2018

Document: 1679033

Taranaki Regional Council

REGIONAL PEST MANAGEMENT PLAN FOR TARANAKI

The Taranaki Regional Council under Part V of the Biosecurity Act 1993 approved this document entitled *Regional Pest Management Plan for Taranaki* at its Ordinary Meeting on 20 February 2018 and it became operative on 20 February 2018.

DATED at Stratford this 20 February 2018

SIGNED by the TARANAKI REGIONAL COUNCIL

by affixing its Common Seal

in the presence of



A handwritten signature in black ink, appearing to be "D N MacLeod", written over a horizontal line.

D N MacLeod (Chairman)

A handwritten signature in blue ink, appearing to be "M J Nield", written over a horizontal line.

M J Nield (Director – Corporate Services)

Foreword

This document is the *Regional Pest Management Plan for Taranaki* (the Plan). Its purpose is to set out the statutory framework by which the Taranaki Regional Council will undertake the management of pest animals and pest plants in the Taranaki region for the next 10 years.

The Plan is the fourth plan prepared by the Taranaki Regional Council for its pest management functions. This Plan identifies and sets out management programmes in relation to 17 'pest' animal and plant species that the Taranaki Regional Council believes warrant regional intervention.

We want to ensure that we are making the best use of resources to effectively manage the pests that are of most concern to the environment and economy of our region.

In brief, the following highlights and significant changes are noted:

- Rules relating to the control of animal and plant pests are combined within a single document;
- Good Neighbour rules are included for Possums; Giant buttercup; Giant gunnera; Gorse; Nodding, Plumeless and Variegated thistles; Old man's beard; Wild broom; Wild ginger; (Yellow and Kahili) and Yellow ragwort. These rules are binding on both private and Crown land occupiers;
- General rules also apply for possums, Giant gunnera; Old man's beard; Wild ginger (Yellow and Kahili); and Yellow ragwort;
- Application of rules to control Old man's beard in the Kaupokonui and Waingongoro catchments; and
- The Plan focuses on eradication or sustained control programmes (for which rules apply). Non-regulatory programmes and activities for other harmful organisms are addressed in the *Taranaki Regional Council Biosecurity Strategy 2018–2038*, which is a companion document to this Plan.

Some prioritising has necessarily been required to identify those pests that are of most concern, and which meet the 'tests' required under section 71 of the Act. The results of those tests are set out in the cost benefit analysis document entitled *Impact Assessments and Cost-Benefit Analyses*.

On behalf of the Taranaki Regional Council I would like to thank all those who participated in the preparation of the *Regional Pest Management Plan for Taranaki*. I look forward to working with you to achieve effective pest management in the Taranaki region.

David MacLeod
Chair, Taranaki Regional Council

Table of contents

1.	Introduction	1
1.1	Purpose	1
1.2	Scope and Coverage	1
1.3	Duration	1
2.	Planning and statutory background	3
2.1	Strategic background	3
2.2	Legislative background	3
2.2.1	Biosecurity Act 1993	3
2.2.2	Resource Management Act	4
2.2.3	Local Government Act	4
2.2.4	Wild Animal Control Act and the Wildlife Act	4
2.2.5	Other legislation	5
2.3	Relationship with other pest management plans	5
2.4	Relationship with Māori	5
3.	Responsibilities and obligations	7
3.1	The management agency	7
3.2	Responsibilities of owners and/or occupiers	7
3.3	Crown agencies	7
3.3.1	Department of Conservation	8
3.3.2	Land Information New Zealand	8
3.3.3	KiwiRail	8
3.3.4	New Zealand Transport Authority	8
3.4	Territorial authorities	8
3.5	Road reserves	8
4.	Organisms declared as pests	13
5.	Pest management framework	15
5.1	Pest management programmes	15
5.2	Objectives	15
5.3	Principal measures to manage pests	15
5.4	Requirement to act	15
5.5	Council inspection	15
5.6	Service delivery	15
5.7	Advocacy and education	16
5.8	Alternative pest management arrangements	16
5.9	Rules	16
6.	Pest descriptions and programmes	17
Eradication		18
6.1	Climbing spindleberry (<i>Celastrus orbiculatus</i>)	19
6.1.1	Adverse effects	19
6.1.2	Objective	19
6.1.3	Principal measures to achieve objective	19
6.2	Giant reed (<i>Arundo donax</i>)	20
6.2.1	Adverse effects	20

6.2.2	Objective	20
6.2.3	Principal measures to achieve objective	20
6.3	Madeira (Mignonette) vine (<i>Anredera cordifolia</i>)	21
6.3.1	Adverse effects	21
6.3.2	Objective	21
6.3.3	Principal measures to achieve objective	21
6.4	Moth plant (<i>Araujia hortorum</i> / <i>A. sericifer</i>)	22
6.4.1	Adverse effects	22
6.4.2	Objective	22
6.4.3	Principal measures to achieve objective	22
6.5	Senegal tea (<i>Gymnocoronis spilanthoides</i>)	23
6.5.1	Adverse effects	23
6.5.2	Objective	23
6.5.3	Principal measures to achieve objective	23
Sustained Control		24
6.6	Brushtail possums (<i>Trichosurus vulpecula</i>)	25
6.6.1	Adverse effects	25
6.6.2	Objective	25
6.6.3	Principal measures to achieve objective	25
6.7	Giant buttercup (<i>Ranunculus acris</i>)	27
6.7.1	Adverse effects	27
6.7.2	Objective	27
6.7.3	Principal measures to achieve objective	27
6.8	Giant gunnera (<i>Gunnera tinctoria</i> ; <i>G. manicata</i>)	28
6.8.1	Adverse effects	28
6.8.2	Objective	28
6.8.3	Principal measures to achieve objective	28
6.9	Gorse (<i>Ulex europaeus</i>)	30
6.9.1	Adverse effects	30
6.9.2	Objective	30
6.9.3	Principal measures to achieve objective	30
6.10	Nodding, Plumeless and Variegated thistles (<i>Carduus nutans</i> , <i>C. acanthoides</i> , <i>Silybum marianum</i>)	32
6.10.1	Adverse effects	32
6.10.2	Objective	32
6.10.3	Principal measures to achieve objective	32
6.11	Old man's beard (<i>Clematis vitalba</i>)	34
6.11.1	Adverse effects	34
6.11.2	Objective	34
6.11.3	Principal measures to achieve objective	34
6.12	Wild broom (<i>Cytisus scoparius</i>)	36
6.12.1	Adverse effects	36
6.12.2	Objective	36
6.12.3	Principal measures to achieve objective	36

6.13	Wild ginger (Yellow and Kahili) (<i>Hedychium gardnerianum</i> ; <i>H. flavescens</i>)	38
6.13.1	Adverse effects	38
6.13.2	Objective	38
6.13.3	Principal measures to achieve objective	38
6.14	Yellow ragwort (<i>Jacobaea vulgaris</i>)	40
6.14.1	Adverse effects	40
6.14.2	Objective	40
6.14.3	Principal measures to achieve objective	40
7.	Actual or potential effects of implementation	43
7.1	Effects on Māori	43
7.2	Effects on the environment	43
7.3	Effects on overseas marketing of New Zealand products	43
8.	Powers conferred	47
8.1	Powers of authorised persons under Part 6 of the Act	47
8.2	Powers under other sections of the Act	47
8.3	Power to issue exemptions to plan rules	47
9.	Monitoring	49
9.1	Measuring what the objectives are achieving	49
9.2	Monitoring the management agency's performance	49
9.3	Monitoring plan effectiveness	49
9.4	Monitoring other effects of this Plan	49
9.5	Plan Review	50
10.	Funding	51
10.1	Introduction	51
10.2	Funding sources and reasons for funding	51
10.3	Anticipated costs to the Council of implementing the Plan	51
10.3.1	General rate and investment revenue	51
10.3.2	Recovery of direct costs	51
10.3.3	Funding limitations	51
	Glossary	53
	Appendices	57
	Appendix A: Pest Management Line	59
	Appendix B: Self-Help Possum Control Programme (as at May 2017)	61
	Appendix C: Plants listed in the National Pest Plant Accord List	63

List of tables

Table 1: Animal organisms classified as pests	13
Table 2: Plant organisms classified as pests	13
Table 3: Powers from Part 6 to be used	47
Table 4: Indicative costs and sources of funds (exclusive of GST)	52

List of figures

Figure 1: The Taranaki Region	1
-------------------------------	---

PART ONE: PLAN ESTABLISHMENT

1. Introduction

1.1 Purpose

The purpose of the *Regional Pest Management Plan for Taranaki* (the Plan) is to outline the framework for efficient and effective management, or eradication, of specified animal and plant organisms 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 actions by way of a regionally coordinated approach.

Many organisms in the Taranaki region, or which could infest the Taranaki region, are considered undesirable or a nuisance. For some of those organisms it is considered that a pest management plan will add significant value to the region by providing for their eradication or effective management, and that value will exceed the value derived from uncoordinated individual actions (or inaction). This Plan identifies which organisms should be classified as pests and managed on a regional basis.

The Plan will empower the Taranaki Regional Council to exercise the relevant advisory, service delivery, regulatory and funding provisions available under the Act to deliver the specific objectives identified in Part Two: Pest Management.

1.2 Scope and Coverage

The Plan will operate within the administrative boundaries of the Taranaki region (Figure 1) as defined by the Local Government (Taranaki Region) Reorganisation Order 1989. It covers a total land area of 723,610 hectares on the North Island's west coast. The boundaries of the Taranaki Regional Council 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 (see map below).

The framework set out in the Plan, which focuses on eradication programmes and sustained control programmes (for which rules apply), is supported by the *Taranaki Regional Council Biosecurity Strategy 2018–2038*, which also addresses other harmful organisms and non-regulatory pest management programmes undertaken by the Council.

1.3 Duration

The Plan will take effect on the date it becomes operative under section 77(5) of the Act. It will remain in force for 10 years from that date. The Plan may cease at an earlier date if the Taranaki Regional Council declares by public notice that it has achieved its purpose. It may also cease at an earlier date if, following a review, it is revoked.

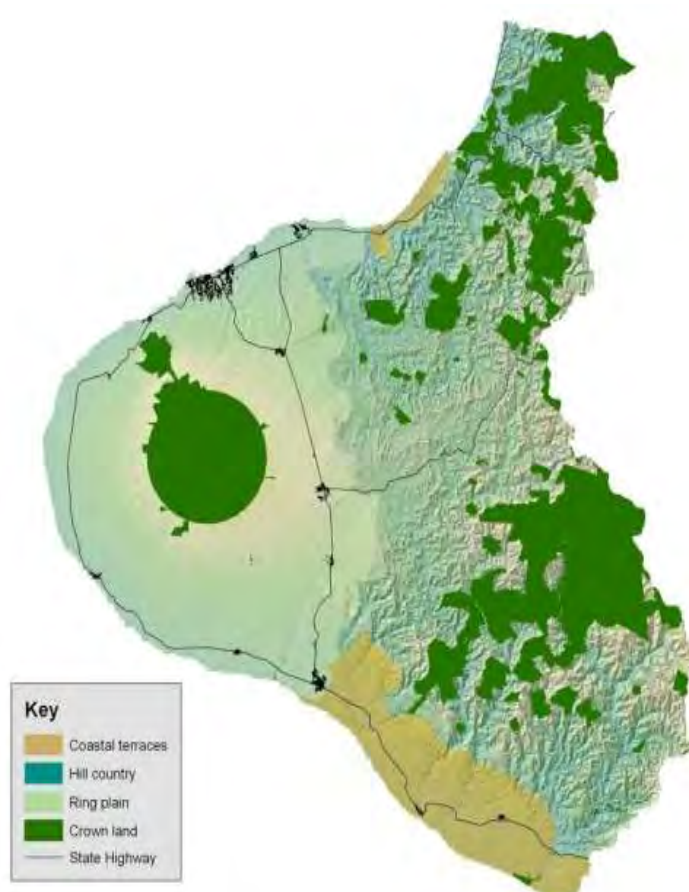


Figure 1: The Taranaki Region

2. Planning and statutory background

2.1 Strategic background

Regional pest management in the Taranaki region sits within a biosecurity framework, which includes this Plan, and a biosecurity strategy entitled *Taranaki Regional Council Biosecurity Strategy 2018–2038*. The framework is underpinned by a number of supporting actions, which either provide inputs into regional pest management, or result from their activity. Land occupiers and the wider community, either as beneficiaries or exacerbators or both, complete the partnership.

An effective biosecurity framework works both within a region and at a national level. Neighbouring regional pest plans and pathway management plans and national legislation, policy and initiatives influence the Plan, and the plans and strategies of territorial authorities may have complementary influence. As a result, a plan is an integral cog in a secure biosecurity system to protect New Zealand's environmental, economic, social, and cultural values from pest threats.

2.2 Legislative background

Regional councils undertake local government activities and actions under several legislative mandates. While managing pests is not dependent on one particular statute, its effectiveness is connected to the purpose of a particular statute. All regional councils in New Zealand prepare and operate regional pest management plans under the Biosecurity Act 1993 (the Act).

2.2.1 Biosecurity Act 1993

A regional council can use the Act to exclude, eradicate or effectively manage pests in its region, including unwanted organisms. A regional council is not legally obliged to manage a pest or other organism to be controlled, unless it chooses to do so¹. As such, the Act's approach is enabling rather than prescriptive. It provides a framework to gather intervention methods into a coherent system of efficient and effective

actions. Indeed, section 71 of the Act sets out prerequisite criteria that must be met to justify such intervention. These criteria include that each subject–

- is capable of causing at some time an adverse effect on certain values;² and

For each subject–

- the benefits of the Plan must outweigh the costs, or the consequences of inaction, or other courses of action;
- persons who are required to pay some or all of the costs of implementation must either be beneficiaries of the Plan or exacerbators of the problems proposed to be resolved by the Plan;
- there is likely to be adequate funding for the Plan's implementation; and
- that each rule helps to achieve the Plan's objectives and does not trespass unduly on individual rights; and
- that the Plan is not frivolous or vexatious, is clear enough to be easily understood, and
- that if the council has rejected a similar proposal within the last 3 years, new material information answers the previous objections.

Part 5: Managing pests and harmful organisms

Part 5 of the Act specifically covers pest management. Its primary purpose is to provide for harmful organisms to be managed effectively or eradicated. A harmful organism is assigned pest status if included in a pest management plan (also see the prerequisites in sections 69–78 of the Act). Part 5 includes a requirement for ongoing monitoring, to determine whether pests and unwanted organisms are present, and keeping them under surveillance. Part of this process is to develop effective and efficient measures (such as policies and plans) that prevent, reduce, or eliminate the adverse effects of pests and unwanted organisms on land and people (including Māori, their kaitiakitanga and taonga). Part 5 also addresses the issue of who should pay for pest management.

¹ Council officers may also enforce sections 52 and 53 of the BSA, which relate to the sale, propagation or spread of "unwanted organisms".

² That is, on one or more of the following: economic wellbeing; the viability of threatened species; the survival and distribution of indigenous plants and animals; the sustainability of natural and developed ecological systems and processes and biological diversity; soil resources; water quality; human health; social and cultural wellbeing; recreational enjoyment of the natural environment; the relationship between Māori, their culture and traditions and their ancestral lands, waters and other taonga; and animal welfare.

Part 2: Functions, powers and duties in a leadership role

Regional councils are mandated under Part 2 (functions, powers and duties) of the Act to provide regional leadership for biosecurity activities, primarily within their immediate jurisdictional areas.

Section 12B(1) sets out how regional councils provide leadership. It includes ways that leadership in pest management issues can help to prevent, reduce or eliminate adverse effects from harmful organisms. Some of these activities include helping to develop and align plans and regional pathway management plans in the region, promoting public support for managing pests, and helping those involved in managing pests to communicate and cooperate so as to make programmes more effective, efficient and equitable.

Section 13(1) sets out the powers that support regional councils in this leadership role. These are powers to –

- establish (eg, appoint a management agency for a plan; implement a small-scale management programme);
- research and prepare (eg, gather information; keep records; prepare a proposal to activate a plan);
- enable (eg, giving councils the power to monitor pests to be assessed, managed or eradicated); and
- review (eg, not allow an operational plan; review, amend, revoke or replace a plan).

Part 6: Administering a Plan

Once operative, a plan is supported by parts of Part 6 (as nominated in the plan) that focus on the voluntary and mandatory actions of a regional council. For example, a regional council must assess any other proposal for a plan, must prepare an operational plan for any plan (if they are the management agency for it), and must prepare an annual report on the Operational Plan.

2.2.2 Resource Management Act

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. These responsibilities include sustaining the potential of natural and physical resources, safeguarding the life-supporting capacity, and protecting environmentally significant areas and habitats (s5(2) and s6(c)).

The RMA sets out the functions of regional councils in relation to the maintenance and enhancement of ecosystems in the coastal marine area of the region (s30(1)(c)(iii)(a)), the control of actual or potential

effects of use, development or protection of land (s30(1)(d)(v)), and the establishment, implementation and review of objectives, policies and methods for maintaining indigenous biological diversity (s30(1)(ga)).

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 a biosecurity risk or those risks are minimised. While the Biosecurity Act is the main regulatory tool for managing pests, there are complementary powers within the RMA that can be used to ensure the problem is not exacerbated by activities regulated under the RMA.

The Biosecurity Act cannot over-ride any controls imposed under the RMA, for example, bypassing resource consent requirements.

2.2.3 Local Government Act

The purpose of the Local Government Act 2002 (the LGA) is to provide "... a framework and powers for local authorities to decide which activities they undertake and the manner in which they will undertake them". The LGA currently underpins biosecurity activities through the collection of both general and targeted rates. While planning and delivering pest management objectives could fall under the powers and duties of the LGA, accessing legislation focused on managing pests at the regional level is the most transparent and efficient approach. The Council is mandated under s11(b) of the LGA to perform the funding function, and s11(b) provides for Council to perform duties under Acts other than the LGA.

2.2.4 Wild Animal Control Act and the Wildlife Act

Activities undertaken in implementing this Plan must comply with the provisions of other legislation. Two such Acts are the Wild Animal Control Act 1977 (and Wild Animal Control Amendment Act 1997) and the Wildlife Act 1953. Particular relevant requirements are noted below.

- (a) The Wild Animal Control Act controls the hunting and release of wild animals such as deer, goats and pigs as well as regulates deer farming and the operation of safari parks. It also gives local authorities the power to destroy wild animals under operational plans that have the consent of the Minister of Conservation.
- (b) The Wildlife Act controls and protects wildlife not subject to the Wild Animal Control Act. It defines wildlife which are not protected (eg, cattle, cats,

dogs), are to be game (eg, mallard ducks, black swan), partially protected or are injurious. It authorises that certain unprotected wildlife may be kept and bred in captivity even if they are declared pests under a pest management plan (eg, stoat and weasel).

making processes. This includes considering ways to help Māori to contribute. These responsibilities and requirements were met while preparing this Plan and will continue after it takes effect.

2.2.5 Other legislation

Other legislation (such as the Reserves Act 1977 and the Conservation Act 1987) contains provisions that support pest management within a specific context. The role of regional councils under such legislation is limited to advocacy. As regional councils have a specific role under the Biosecurity Act, only taking on an advocacy role would be of little use.

2.3 Relationship with other pest management plans

A regional pest management plan must not be inconsistent with–

- (a) any national pest management plan or Plan that is focused on the same organism; or
- (b) any regulation or regulations.

Coordination with other pest management plans, and pest control operations undertaken by the Department of Conservation, OSPRI, Waikato Regional Council and Horizons, will be achieved through a process based on consultation, collaboration, and communication between the Taranaki Regional Council and the relevant agency. Alternative pest management arrangements or memoranda of understanding will be developed as required. Liaison on national pest control matters will take place with the Ministry of Primary Industries.

2.4 Relationship with Māori

The Act, and the Taranaki Regional Council, seek to provide for the protection of the relationship between Māori as tangata whenua and their ancestral lands, their waters, sites, wāhi tapu, and taonga, and for the protection of those aspects from the adverse effects of pests, through the Plan. Māori involvement in biosecurity is an important part of exercising kaitiakitanga over their mana whenua. Māori also carry out significant pest management through their primary sector economic interests and as land owners and/or occupiers.

The LGA requires the Taranaki Regional Council to recognise and respect the Crown's responsibilities under the Tiriti o Waitangi – Treaty of Waitangi. It also requires councils to maintain and improve opportunities for Māori to contribute to decision-

3. Responsibilities and obligations

3.1 The management agency

The Taranaki Regional Council is the management agency responsible for implementing this Plan. The Taranaki Regional Council is satisfied that it meets the requirements of s100 of the Act in that it–

- (a) is accountable to the Plan funders, including Crown agencies, through the requirements of the LGA;
- (b) is acceptable to the funders and those persons subject to the Plan’s management provisions because it implemented previous regional pest management strategies; and
- (c) has the capacity, competency and expertise to implement the Plan.

How the Taranaki Regional Council will undertake its management responsibilities is set out in Section 5 (Pest Management framework) and in Part Three Section 8 (Procedures) of the Plan, and in the Council’s Operational Plan.

3.2 Responsibilities of owners and/or occupiers

Pest management is an individual’s responsibility in the first instance because generally occupiers contribute to the pest problem and in turn benefit from the control of pests. The term ‘occupier’ has a wide definition under the Act and includes–

- the person who physically occupies the place; and
- the owner of the place; and
- any agent, employee, or other person acting or apparently acting in the general management or control of the place.

Under the Act, place includes: any building, conveyance, craft, land or structure and the bed and waters of the sea and any canal, lake, pond, river or stream.

Owners and/or occupiers must manage pest populations at or below levels specified in the rules. If they fail to meet the rules’ requirements, they may face legal action. In some instances, owners and/or occupiers must report pests to the Taranaki Regional Council. It is illegal to sell, propagate, distribute or keep pests.

An owner and/or occupier is not able to stop an authorised person from entering a place, at any reasonable time, to–

- find out whether pests are on the property;
- manage pests; or
- ensure the owner and/or occupier is complying with biosecurity law.

While the owner and/or occupier may choose the methods they will use to control any pests, they must also comply with the requirements under other legislation (e.g. the RMA and/or the Hazardous Substances and New Organisms Act 1996.)

3.3 Crown agencies

Under section 69(5) of the Act, all land occupiers, including the Crown, must meet ‘good neighbour rules’ within regional pest management plans, as well as general rules. A good neighbour rule responds to the issues caused when a land occupier imposes unreasonable costs on an adjacent land occupier who is actively managing a certain pest, by not undertaking management, or sufficient management, of that pest.

This is an opportunity for the Council to promote more integrated and effective pest management, regardless of land tenure, and develop equity across occupiers. In common with other land occupiers, however, the Council may exempt the Crown from any requirement in a plan rule upon written request (refer section 8.3 of this Plan).

3.3.1 Department of Conservation

The Department of Conservation manages 146,973 hectares of Crown land in the Taranaki region (21% of the total land area) under the Reserves Act, the National Parks Act, and the Conservation Act.

The Department also has particular responsibilities and expertise in the management and prevention of spread of pest plants and pest animals that pose a threat to indigenous biodiversity, including pest fish such as Brown bull-headed catfish, under the Wild Animal Control Act, the Wildlife Act (see section 2.2.4), and the Freshwater Fisheries Regulations 1983.³

3.3.2 Land Information New Zealand

Land Information New Zealand (LINZ) administers vacant and non-rateable land, as well as 4412 hectares of Crown Forestry Land in Taranaki⁴. LINZ also has responsibility for un-alienated Crown land and surplus railway land in the region.

3.3.3 KiwiRail

KiwiRail is, on behalf of the Crown, the owner and manager of New Zealand's railway infrastructure. There are approximately 215 kilometres of railway line in the Taranaki region accounting for 763 hectares of railway land.

KiwiRail is required to control pests on land that it administers, as set out in plan rules prescribed in Part Two of this Plan. In individual circumstances, the Taranaki Regional Council may, in accordance with section 8.3 of the Plan, exempt any person from any requirement included in a Plan rule.

3.3.4 New Zealand Transport Authority

The New Zealand Transport Authority (NZTA) is the road controlling authority for 391 kilometres of state highways⁵ 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 it occupies, including all formed roads, roadways or road margins for which it is responsible, in accordance with the plan rules prescribed in Part Two of this Plan. In individual circumstances, the Taranaki Regional Council may, in accordance with section 8.3 of the Plan, exempt any person from any requirement included in a plan rule.

3.4 Territorial authorities

Three territorial authorities are wholly or partly contained within the Taranaki region. They are the South Taranaki District Council, Stratford District Council (excluding parts of the district that lie in the Whanganui catchment), and the New Plymouth District Council.

Each territorial authority will be bound by the rules in this Plan (with the exception of situations where adjoining land occupiers of road reserves are deemed responsible in accordance with section 3.5 below) Each territorial authority will be responsible for meeting its own costs of complying with this Plan.

Territorial authorities are occupiers of land (such as parks and reserves) and are road controlling authorities in their districts. Territorial authorities are jointly responsible for 3,504 kilometres of local roads in the Taranaki region.⁶

3.5 Road reserves

Road reserves include the land on which the formed road lies and the verge area that extends to adjacent property boundaries. The Act allows the option of making either roading authorities (NZ Transport Agency and district councils) or adjoining land occupiers responsible for pest management in road reserves (see s6(1) of the Act).

As such, the Taranaki Regional Council has decided that, for the purposes of this Plan, roadside

³ Particular pest fish are classified as "unwanted organisms" under the Act or as "noxious fish" under the Freshwater Fisheries Regulations 1983. The regulations make it an offence to obtain or keep in captivity any mosquito fish (*Gambusia affinis*), or to control or spread certain pest fish as specified in Schedule 3 including European carp, Japanese koi and Rudd. Part 8A also contains additional provisions for European carp and Japanese koi. Under sections 52 and 53 of the Act it is an offence to sell, distribute, or release "unwanted organisms" such as Brown bull-headed catfish, European carp, *Gambusia*, Japanese koi, and Rudd.

⁴ Comprising the Te Wera block (TNPR23/51).

⁵ Taranaki Regional Council 2015, *Regional Land Transport Plan for Taranaki 2015/16-2020/21*, p 10.

⁶ Taranaki Regional Council 2015, *Regional Land Transport Plan for Taranaki 2015/16-2020/21*, p 10.

responsibilities for pest animal and pest plant management lie with the roading authorities where they apply to 'formed' roads. Pest animal and pest plant control on unformed (paper) roads occupied by other persons are the responsibility of the person physically occupying that land.

PART TWO: PEST MANAGEMENT

4. Organisms declared as pests

The organisms listed in Tables 1 and 2 below are classified as pests. The table also indicates what management programme or programmes will apply to the pest and if a Good Neighbour Rule (GNR), applies.

Attention is also drawn to:

- The general administrative **powers** of inspection and entry, contained in **Part 6 of the Act**, which are available to the Taranaki Regional Council;
- The **statutory obligations** of any person under **sections 52 and 53 of the Act**. Those sections ban anyone from selling, propagating or distributing any pest, or part of a pest, covered by the Plan. Not complying with sections 52 and 53 is an **offence** under the Act, and may result in the penalties noted in section 157(1); and
- **Exemptions** to any plan rule may apply under Section 78 of the Act.

Table 1: Animal organisms classified as pests

Common name	Scientific name	Programme	GNR	Page
Possum	<i>Trichosurus vulpecula</i>	Sustained control	√	25

Table 2: Plant organisms classified as pests

Common name	Scientific name	Programme	GNR	Page
Climbing spindleberry	<i>Celastrus orbiculatus</i>	Eradication		19
Giant reed	<i>Arundo donax</i>	Eradication		20
Madeira (Mignonette) vine	<i>Anredera cordifolia</i>	Eradication		21
Moth plant	<i>Araujia hortorum</i> / <i>A. sericifera</i>	Eradication		22
Senegal tea	<i>Gymnocoronis spilanthoides</i>	Eradication		23
Giant buttercup	<i>Ranunculus acris</i>	Sustained Control	√	27
Giant gunnera	<i>Gunnera manicata</i> & <i>G. tinctoria</i>	Sustained Control	√	28
Gorse	<i>Ulex europeaus</i>	Sustained Control	√	30
Nodding, Plumeless and Variegated thistles	<i>Carduus nutans</i> , <i>C. acanthoides</i> , <i>Silybum marianum</i>	Sustained Control	√	32
Old man's beard	<i>Clematis vitalba</i>	Sustained Control	√	34
Wild broom	<i>Cytisus scoparius</i>	Sustained Control	√	36
Wild ginger (Kahili and Yellow)	<i>Hedychium gardnerianum</i> <i>Hedychium flavescens</i>	Sustained Control	√	38
Yellow ragwort	<i>Jacobaea vulgaris</i>	Sustained Control	√	40

5. Pest management framework

5.1 Pest management programmes

One or more pest management programmes will be used to control pests covered by this Plan. The types of programme are defined by the NPD and reflect outcomes in keeping with–

- the extent of the invasion; and
- whether it is possible to achieve the desired control levels for the pests.

The intermediate outcomes for the programme types relevant to this Plan are described below.

1. **Eradication Programme:** to reduce the infestation level of the subject, or an organism being spread by the subject, to zero levels in an area in the short to medium term.
2. **Sustained Control Programme:** to provide for ongoing control of the subject, or an organism being spread by the subject, to reduce its impacts on values and spread to other properties.

5.2 Objectives

Objectives have been set for each pest or class of pests. As required by the *National Policy Direction for Pest Management 2015* (NPD), the objectives include–

- the particular adverse effect/s (s54(a) of the Act) to be addressed;
- the immediate outcomes of managing the pest;
- the geographic area to which the objective applies;
- the level of outcome, if applicable;
- the period for achieving the outcome; and
- the intended outcome in the first 10 years of the Plan (if the period is greater than 10 years).

5.3 Principal measures to manage pests

The principal measures used in the Plan to achieve the objectives are in four main categories. Each category contains a suite of tools to be applied in appropriate circumstances.

5.4 Requirement to act

Land occupiers or other persons may be required to act–

- (a) Where plan rules dictate pests are to be controlled; and
- (b) pursuant to restrictions under sections 52 and 53 of the Act, requiring persons not to release, spread, propagate, sell or distribute a pest.

The Council's powers to act through service delivery are set out in section 5.6 of this Plan.

5.5 Council inspection

Inspection by Council may include staff–

- (a) visiting properties, undertaking monitoring, or doing surveys to determine whether pests are present, or rules and management programmes are complied with, or to identify areas that control programmes will apply to (places of value, exclusion zones, movement control areas);
- (b) managing compliance to regulations (rule enforcement, action on default, prosecution, exemptions);
- (c) taking limited control actions, where doing so is effective and cost efficient; or
- (d) monitoring effectiveness of control.

5.6 Service delivery

Council may deliver the service–

- (a) by undertaking direct control to facilitate the eradication of Climbing spindleberry, Giant reed, Madeira (Mignonette) vine, and Senegal tea
- (b) in relation to the Self-Help Possum Control Programme;
- (c) in relation to Key Native Ecosystems where the presence of the subject threatens regionally significant biodiversity values;
- (d) by undertaking the direct control of any other pest or harmful organism as time and circumstances permit;
- (e) by providing control tools (e.g. traps, chemicals), including sourcing and distributing biological agents, or provisions; and
- (f) on a user pays basis.

For further information on surveillance, monitoring, and direct control actions to be taken and eradication targets, refer to sections 4 and 5 of the *Taranaki Regional Council Biosecurity Strategy 2018–2038*.

5.7 Advocacy and education

Council may–

- (a) provide general purpose education, advice, awareness and publicity activities to land owners and/or occupiers and the public about pests and pathways (and control of them);
- (a) encourage land owners and/or occupiers to control pests;
- (b) facilitate or fund community and land owners and/or occupier self-help groups and committees;
- (c) help other agencies with control, advocacy, and the sharing or sourcing of funding;
- (d) promote industry requirements and best practice to contractors and land owners and/or occupiers;
- (e) encourage land owners and/or occupiers and other persons to report any pests they find or to control them; or
- (f) facilitate or commission research.

5.8 Alternative pest management arrangements

Council may develop alternative management arrangements (i.e. management plans or memoranda of understanding (MOUs)) with agencies to establish agreed levels of service with those agencies, to act to control pests on their land, or to defer enforcement actions on rules in this Plan, in preference for pragmatic levels of service that achieve the objectives of the Plan.

5.9 Rules

Rules play an integral role in securing many of the pest management outcomes sought by the objectives of the Plan. They create a safety net to protect land owners and/or occupiers from the effects of the actions or inactions of others where non-regulatory means are inappropriate or do not succeed. Importantly, amendments to the Act arising from the *Biosecurity Law Reform Act 2012* now make the Crown bound by those rules identified as **Good Neighbour Rules** in plans.

Section 73(5) of the Act prescribes the matters that may be addressed by rules, and the need to–

- (a) specify if the rule is to be designated as a ‘Good Neighbour Rule’;
- (b) specify if breaching the rule is an offence under the Act;

- (c) specify if an exemption to the rule, or any part of it, is allowable or not; and
- (d) explain the purpose of the rule.

Rules can apply to owners and/or occupiers or to a person’s actions in general.

The NPD and accompanying guidance notes include extra requirements for a new Good Neighbour Rule. Of particular note, the Good Neighbour Rule will–

- (a) identify who the Good Neighbour Rule applies to– either all owners and/or occupiers, or a specified class of owner and/or occupier;
- (b) identify the pest to be managed;
- (c) state that the pest must already be present on the owner’s and/or occupier’s land;
- (d) state that the owner and/or occupier of the adjacent or nearby land must, in the view of the management agency, be taking reasonable measures to manage the pest on their land; and
- (e) (if relevant) state the particular values or uses of the neighbouring land that the pest’s spread affects, and that the Good Neighbour Rule is intended to address.

6. Pest descriptions and programmes

The following section describes the pests, or groups of pests, to be managed under the Plan's management programmes, and their adverse effects. This section also describes any rules that will be used to achieve the management objectives.

For each pest listed the Act requires the Plan to describe the objective of pest management (see Section 5.2 above), and the principal measures used to achieve the objectives (see section 5.3 above).

The Plan also proposes various general and Good Neighbour Rules (see section 5.9 above), whose contravention will be an offence under the Act.

Eradication



The eradication programme covers organisms which are present in the region but infestations are limited in size or density, or eradication is a feasible and cost-effective solution to prevent a species becoming entrenched, and to protect future production or environmental values. The programme involves regular ongoing control to reduce infestations levels of the pests, in the short to medium term, to zero density levels across the region and across all habitats and properties. Taranaki Regional Council has decided it is appropriate to be the lead agency or partner for eradicating these pests from the region.

6.1 Climbing spindleberry (*Celastrus orbiculatus*)

6.1.1 Adverse effects

Climbing spindleberry (also known as Oriental bittersweet) is a deciduous, perennial, twining climber. It can spread vegetatively and by birds eating the fruit and depositing the seeds.

The plant seeds prolifically and is shade tolerant, allowing it to establish and spread quickly, forming dense colonies that compete with other plant species for soil moisture, nutrients and light. Once established, Climbing spindleberry is difficult to control and becomes very invasive.

Climbing spindleberry represents a particular threat to indigenous biodiversity and, to a lesser extent, plantation forests and farm shelterbelts. It can compete with and replace indigenous plants in disturbed or low forest, and on forest and riparian margins. Its density can affect the regeneration of indigenous flora, topple and kill small trees, and suppress desirable groundcovers. Preventing Climbing spindleberry from becoming established will reduce the possibility of more significant costs in the future.



Climbing spindleberry

6.1.2 Objective

Over the duration of the Plan eradicate Climbing spindleberry, by destroying all infestations known at the date the Plan becomes operative and, where practicable, destroy any new infestations that are identified, to prevent adverse effects on indigenous biodiversity and production forestry values in the Taranaki region.

6.1.3 Principal measures to achieve objective

To achieve the objective for Climbing spindleberry, the following principal measures will be applied:

Inspection and monitoring

Taranaki Regional Council will inspect and monitor properties with suspected or confirmed infestations of Climbing spindleberry to establish the extent of any infestations and to identify any remedial action that needs to be undertaken.

Advocacy and education

Taranaki Regional Council will–

1. Provide advice and information to land occupiers and the general public to promote awareness and encourage the public reporting of any infestations;
2. Provide a broad suite of general purpose education, advice, awareness and publicity activities to other interested parties to prevent the introduction or spread of Climbing spindleberry; and
3. Undertake liaison and advocacy to promote effective integrated pest management

Service delivery

Taranaki Regional Council will undertake direct control of Climbing spindleberry.

6.2 Giant reed (*Arundo donax*)

6.2.1 Adverse effects

Originally introduced into New Zealand as an ornamental garden plant, Giant reed is a tall, perennial, clump-forming bamboo-like grass with a dense root mass and short rhizomes.

Giant reed can grow up to eight metres tall. Usually grey-green in colour, it also has a variegated form, with white stripes. A plume-like flower-head is produced at the top of the stem in late summer. It is primarily spread by vegetative reproduction, either from underground rhizome extensions or from plant fragments transported by water, and both stems and rhizomes have the ability to propagate.

The plant can inhabit riparian and forest margins, scrub-land, production and regenerating indigenous forests and degraded pasture.

Once established it forms dense clumps, which exclude and/or compete with other plant species for soil moisture, nutrients and light. Giant reed represents a particular threat to indigenous biodiversity values along riparian, wetland and forest margins and can also cause problems in recreational areas and by obstructing drainage channels.



6.2.2 Objective

Over the duration of the Plan eradicate Giant reed (including the variegated form), by destroying all infestations known at the date the Plan becomes operative and, where practicable, destroy any new infestations that are identified, to prevent adverse effects on indigenous biodiversity values in the Taranaki region.

6.2.3 Principal measures to achieve objective

To achieve the objective for Giant reed, the following principal measures will be applied:

Inspection and monitoring

Taranaki Regional Council will inspect and monitor properties with suspected or confirmed infestations of Giant reed (including the variegated form) to establish the extent of any infestations and to identify any remedial action that needs to be undertaken.

Advocacy and education

Taranaki Regional Council will–

1. Provide advice and information to land occupiers and the general public to promote awareness and encourage the public reporting of any infestations;
2. Provide a broad suite of general purpose education, advice, awareness and publicity activities to other interested parties to prevent the introduction or spread of Giant reed; and
3. Undertake liaison and advocacy to promote effective integrated pest management.

Service delivery

Taranaki Regional Council will undertake direct control of Giant reed (including the variegated form).

6.3 Madeira (Mignonette) vine (*Anredera cordifolia*)

6.3.1 Adverse effects

Madeira vine (also known as Mignonette vine) is a perennial climber arising from a fleshy rhizome. The plant has bright green fleshy leaves, long racemes of cream flowers from January to April, and warty stem tubers. It can grow up to seven metres high.

Originally widely distributed as an ornamental plant, Madeira vine has become a significant potential threat to indigenous biodiversity values. It reproduces through the shedding and spread of stem tubers and each tuber is capable of generating a new plant. Dumping garden waste or moving topsoil containing tubers have been the main cause of the plant's spread.

The preferred habitat of Madeira vine includes gardens, forest and riparian margins, disturbed and low indigenous forests, particularly in coastal areas. The plant is very invasive and can form dense colonies, which exclude and/or compete with other plant species for soil moisture, nutrients and light. Once established, it is very difficult to control.



6.3.2 Objective

Over the duration of the Plan eradicate Madeira (Mignonette) vine, by destroying all infestations known at the date the Plan becomes operative and, where practicable, destroy any new infestations that are identified, to prevent adverse effects on indigenous biodiversity and production forestry values in the Taranaki region.

6.3.3 Principal measures to achieve objective

To achieve the objective for Madeira (Mignonette) vine, the following principal measures will be applied:

Inspection and monitoring

Taranaki Regional Council will inspect and monitor properties with suspected or confirmed infestations of Madeira vine to establish the extent of any infestations and to identify any remedial action that needs to be undertaken.

Advocacy and education

Taranaki Regional Council will–

1. Provide advice and information to land occupiers and the general public to promote awareness and encourage the public reporting of any infestations;
2. Provide a broad suite of general purpose education, advice, awareness and publicity activities to other interested parties to prevent the introduction or spread of Madeira vine; and
3. Undertake liaison and advocacy to promote effective integrated pest management.

Service delivery

Taranaki Regional Council will undertake direct control of Madeira vine.

6.4 Moth plant (*Araujia hortorum* / *A. sericifer*)

6.4.1 Adverse effects

Moth plant is a rampant, evergreen vine with sticky, white sap and twining flexible stems. It can grow up to 10 metres tall. The leaves are thick, somewhat wavy, triangular, smooth on the upper surface and downy underneath.

Clusters of pink-white flowers appear from December to May, followed by distinctive thick, leathery, pear-shaped, choko-like pods up to 10cm long and 7 cm through. The pods contain pulp, & the pods dry & split open to disperse numerous black, seeds with downy parachutes that drift long distances on air currents, establishing new infestations.

Moth plant grows rapidly and forms large, heavy, long-lived masses. It is tolerant of shade, very tolerant of drought or damp, wind, salt, many soil types, and damage, but is frost tender. The seeds are poisonous and irritant-inducing to some humans, and are not grazed by animals.

Moth plant invades almost any frost-free habitat, including intact and disturbed forest and margins, tracks, coastline, cliffs, shrub lands, mangroves, and inshore and offshore islands. It can germinate in light wells or semi-shade inside established forest, often long distances from seed sources, and smothers and kills plants up into the canopy, preventing the establishment of native plant species.



6.4.2 Objective

Over the duration of the Plan eradicate Moth plant, by destroying all infestations known at the date the Plan becomes operative and, where practicable, destroy any new infestations that are identified, to prevent adverse effects on indigenous biodiversity values in the Taranaki region.

6.4.3 Principal measures to achieve objective

To achieve the objective for Moth plant, the following principal measures will be applied:

Inspection and monitoring

Taranaki Regional Council will inspect and monitor properties with suspected or confirmed infestations of Moth plant to establish the extent of any infestations and to identify any remedial action that needs to be undertaken.

Advocacy and education

Taranaki Regional Council will–

1. Provide advice and information to land occupiers and the general public to promote awareness and encourage the public reporting of any infestations;
2. Provide a broad suite of general purpose education, advice, awareness and publicity activities to other interested parties to prevent the introduction or spread of Moth plant; and
3. Undertake liaison and advocacy to promote effective integrated pest management.

Service delivery

Taranaki Regional Council will undertake direct control of Moth plant.

6.5 Senegal tea (*Gymnocoronis spilanthoides*)

6.5.1 Adverse effects

Senegal tea is a perennial, semi-aquatic herb with dark green leaves and white flowers. The plant flowers in summer and autumn and may grow up to 1.5 metres in height. The plant has been widely distributed as an ornamental pond plant through the aquarium trade and has become an extremely aggressive freshwater weed.

It inhabits wetlands and still or flowing water and is spread both by vegetative fragmentation and seed dispersal. Stem fragments may be spread by water movement, deliberate plantings or by drainage machinery. Dispersal of seed is by water movement, or mud sticking to animals or machinery.

Senegal tea forms dense floating mats, which can quickly cover waterways or wetland areas causing a number of serious and unintended adverse effects. These include the displacement of traditional food sources of value to Maori, particularly watercress, and the smothering of submerged native flora species, which affects the habitat and food source of some fish species. Heavy infestations and the rotting of dead plants can diminish oxygen available to fish by reducing water circulation. They can also impede the flow of water, causing flooding (problems with flooding attributable to this plant have occurred elsewhere in New Zealand), and interfering with navigation and recreational activities.



6.5.2 Objective

Over the duration of the Plan eradicate Senegal tea by destroying all infestations known at the date the Plan becomes operative and, where practicable, destroy any new infestations that are identified, to prevent adverse effects on indigenous biodiversity values in the Taranaki region.

6.5.3 Principal measures to achieve objective

To achieve the objective for Senegal tea, the following principal measures will be applied:

Inspection and monitoring

Taranaki Regional Council will inspect and monitor properties with suspected or confirmed infestations of Senegal tea to establish the extent of any infestations and to identify any remedial action that needs to be undertaken.

Advocacy and education

Taranaki Regional Council will–

1. Provide advice and information to land occupiers and the general public to promote awareness and encourage the public reporting of any infestations;
2. Provide a broad suite of general purpose education, advice, awareness and publicity activities to other interested parties to prevent the introduction or spread of Senegal tea; and
3. Undertake liaison and advocacy to promote effective integrated pest management.

Service delivery

Taranaki Regional Council will undertake direct control of Senegal tea.

Sustained Control



The sustained control programme covers pests that, because of their biological and pest characteristics, need to be controlled to levels where their impacts on the economic, environmental or social values are reduced cost-effectively and on an ongoing basis. The programme involves the imposition of rules and associated costs on organisations and individuals to maintain pest numbers below, or at, a level that addresses the negative impacts of the species on their neighbours. The effect of the rules may apply to the whole property, parts of the property (i.e. on its boundaries), the whole region, or parts of the region. Exemptions to any plan rule may apply under Section 78 of the Biosecurity Act. Public costs are incurred through the implementation of an inspectorial, monitoring and enforcement regime to ensure compliance.

6.6 Brushtail possums (*Trichosurus vulpecula*)

6.6.1 Adverse effects

The brushtail possum is an introduced marsupial animal widespread throughout New Zealand. A small to medium sized omnivore, the animal is nocturnal, with large ears, pointed face, close woolly fur, and bushy tail. Possums represent a major threat to the Taranaki region in terms of their actual or potential harmful effects on economic production and on indigenous biodiversity values.

Their main economic impact is reduced economic returns associated with agricultural production. Possums compete directly with livestock for pasture, reducing the carrying capacity of farmland and reducing farm income. Additionally, they can be a vector for Bovine tuberculosis, however a concerted and considerable investment into regional control has been successful in preventing the disease becoming endemic in the region (one of only three regions where this has been the case). Possums also cause substantial damage to plantation forests, indigenous vegetation and birds. The net overall result of possum infestations is a reduction in the vigour, density and diversity of native flora and fauna species.

Possum population densities within the region vary according to the topography, vegetation and history of control in any specific area. The highest possum population densities lie between forest and pasture where there is a plentiful supply of food and suitable habitat. In those areas where the Taranaki Regional Council has implemented the 'Self-help Possum Control Programme' (SHP) (refer below and in the *Taranaki Regional Council Biosecurity Strategy 2018–2038*), possum numbers are very low and have been maintained at these low levels for a number of years. Possum numbers outside the Programme are significantly higher.



The Self-help Possum Control Programme has been running successfully since the early 1990s through the Council working with land owners to facilitate possum control.

As at 30 June 2016, effective and sustained control of possums has been achieved over approximately 241,344 hectares of farmland on the ring plain and coastal terraces. The level of control achieved is an average 6.13% residual trap catch - a figure well below the 10% target considered necessary to protect pastoral production and the vegetative canopy of remnant forests and wetlands. It has also contributed to increased bird life. More recently, the Council has extended its possum control activities into urban areas, in collaboration with New Plymouth District Council.

The Council will continue to support the Self-help programme and look at opportunities to expand the programme (where appropriate) working in collaboration with Predator Free 2050 Limited, as outlined in Section 7 of the *Taranaki Regional Council Biosecurity Strategy 2018–2038*.

6.6.2 Objective

Over the duration of the Plan, sustainably control possum numbers on land within the Self-help Possum Control Programme, and elsewhere as appropriate, to avoid or minimise adverse effects on pastoral production, animal health, and indigenous biodiversity values in the Taranaki region.

6.6.3 Principal measures to achieve objective

To achieve the objective for possums, the following principal measures will be applied:

Requirement to act

Land occupiers will comply with the rules specified in this section of the Plan.

Extension programme

Taranaki Regional Council will continue to implement the Self-help Possum Control Programme (SHP) and provide sustained possum control on the ring plain and coastal terraces by:

1. Undertaking initial possum control on rateable properties that lie in an area where at least 75% of land occupiers, covering at least 75% of the land area targeted, indicate, or have indicated, that they wish to be included in the SHP and will accept land occupier obligations; and

-
2. Providing ongoing technical advice, information, and support to land occupiers in the SHP, including monitoring and enforcement of rules.

Inspection and monitoring

Taranaki Regional Council will inspect and monitor properties in the SHP with suspected or confirmed infestations of possums to establish the extent of any infestations and to identify any remedial action that needs to be undertaken.

Advocacy and education

Taranaki Regional Council will–

1. Provide advice and information to land occupiers in the SHP to coordinate possum control;
2. Provide a broad suite of general purpose education, advice, awareness and publicity activities to other interested parties to promote effective possum management; and
3. Undertake liaison and advocacy to promote effective integrated possum management.

Service delivery

Taranaki Regional Council will –

1. Undertake additional initial direct control, as necessary, of possums on properties in the SHP;
 2. Undertake additional initial direct control, as necessary, on properties in urban pest control programmes;
 3. Undertake control operations of possums in areas surrounding Egmont National Park in conjunction with the Department of Conservation; and
 4. Undertake site-led possum control on Key Native Ecosystems as part of an agreed site-led response.
-

Plan rules requiring land occupier and other persons to act

General Rule for the Self-Help Possum Control Programme

- 6.6.3.1 A land occupier in the Self-Help Possum Control Programme must maintain possum numbers present on their land to below a 10% residual trap catch.

Good Neighbour Rule

- 6.6.3.2 A land occupier must maintain possum numbers present on their land to below a 10% residual trap catch within 500 metres of their boundary:-
- to protect adjacent production and indigenous biodiversity values; **AND**
 - where an adjacent land occupier is in the Self-Help Possum Control Programme and is maintaining possums present on their land to below a 10% residual trap catch, **AND**
 - excepting any property or part of a property east of the Self-Help Possum Control Programme boundary or in an urban area.

Contravention of these rules creates an offence under section 154(N)(19) of the Act.

6.7 Giant buttercup (*Ranunculus acris*)

6.7.1 Adverse effects

Giant buttercup is a rhizomatous perennial plant with deeply segmented leaves. From early summer the plant has yellow flowers on branched stems up to a metre tall.

Giant buttercup is very free seeding, with the hooked seeds being spread by water, animals and in silage and hay. The plant's preferred habitat is in pasture and along roadsides, particularly in areas with high rainfall.

Sheep will eat giant buttercup, however the plant is seasonably unpalatable to cattle so infestations of giant buttercup can quickly overwhelm other pasture species in dairying areas thereby reducing pasture and dairy production. Once established in pasture, the plant can be costly and difficult to control.



6.7.2 Objective

Over the duration of the Plan, sustainably control Giant buttercup to avoid or minimise adverse effects on dairy and beef pastoral production in the Taranaki region.

6.7.3 Principal measures to achieve objective

To achieve the objective for Giant buttercup, the following principal measures will be applied:

Requirement to act

Land occupiers will comply with the rules specified in this section of the Plan.

Inspection and monitoring

Taranaki Regional Council will inspect and monitor properties with suspected or confirmed infestations of Giant buttercup to establish the extent of any boundary infestations and to identify any remedial action that needs to be undertaken.

Advocacy and education

Taranaki Regional Council will–

1. Provide advice and information to land occupiers to promote effective control;
2. Provide a broad suite of general purpose education, advice, awareness and publicity activities to other interested parties to prevent spread of Giant buttercup; and
3. Undertake liaison and advocacy to promote effective integrated pest management

Plan rules requiring land occupiers and other persons to act

Good Neighbour Rule

- 6.7.3.1 A land occupier within the Taranaki region must destroy all Giant buttercup present on their land within five (5) metres of their property boundary
- to protect adjacent dairy and beef production values; **AND**
 - where an adjacent land occupier is managing Giant buttercup within five (5) metres of their property boundary.

Contravention of this rule creates an offence under section 154(N)(19) of the Act.

6.8 Giant gunnera (*Gunnera tinctoria*; *G. manicata*)

6.8.1 Adverse effects

All giant gunnera species and hybrids, including *Gunnera manicata* and *Gunnera tinctoria*,⁷ are covered by this Plan. Giant gunnera species share many of the same features and are commonly mistaken for one another.

Giant gunnera is a giant, clump-forming, herbaceous perennial with massive umbrella-sized leaves and stems up to two metres tall. It was a popular ornamental garden plant used extensively in bog gardens, however it has become invasive in several areas of New Zealand, including Taranaki.

Giant gunnera is a very free-seeding plant with the seeds being spread by water and birds. It represents a particular threat to indigenous biodiversity values, particularly in coastal, wetland and riparian areas. Once established the plants form dense colonies that can suppress the regeneration of indigenous flora. The presence of Giant gunnera in Key Native Ecosystems and other areas of high conservation value, could have a disproportionately high impact on such areas, possibly impacting upon rare and endangered indigenous flora and fauna species.

Occasionally Giant gunnera causes the obstruction or infestation of production forestry and recreational areas.



6.8.2 Objective

Over the duration of the Plan, sustainably control Giant gunnera to avoid or minimise adverse effects on indigenous biodiversity values in the Taranaki region.

6.8.3 Principal measures to achieve objective

To achieve the objective for Giant gunnera, the following principal measures will be applied:

Requirement to act

Land occupiers will comply with the rules specified in this section of the Plan.

Inspection and monitoring

Taranaki Regional Council will inspect and monitor properties with suspected or confirmed infestations of Giant gunnera to establish the extent of any infestations and to identify any remedial action that needs to be undertaken.

Advocacy and education

Taranaki Regional Council will–

1. Provide advice and information to land occupiers to promote effective control;
2. Provide a broad suite of general purpose education, advice, awareness and publicity activities to other interested parties to prevent the spread of Giant gunnera and encourage its control; and
3. Undertake liaison and advocacy to promote effective integrated pest management.

Service delivery

Taranaki Regional Council will undertake direct control of Giant gunnera in Key Native Ecosystems as part of an agreed site-led response.

⁷ *Giant gunnera* is also known as *Chilean Rhubarb*.

Plan rules requiring land occupier and other persons to act

General rule

- 6.8.3.1 A private land occupier within the Taranaki region must destroy all Giant gunnera present on their land to protect indigenous biodiversity values.

Good Neighbour Rule

- 6.8.3.2 A Crown land occupier within the Taranaki region must destroy all Giant gunnera present on their land within 500 metres of their property boundary-
- to protect adjacent indigenous biodiversity values; **AND**
 - where the adjacent land occupier is managing Giant gunnera within 500 metres of their property boundary.

Contravention of these rules create an offence under section 154(N)(19) of the Act.

6.9 Gorse (*Ulex europaeus*)

6.9.1 Adverse effects

Gorse is a deep-rooted, woody perennial shrub with sharp spikes.

The plant may grow up to four metres in height and has yellow flowers, which may appear all year, followed by black seed pods. Gorse seeds are primarily ballistic and can be ejected up to five metres from their pods. However, the seeds can also be spread by water or animals, or via human activities such as road works and gravel extraction and distribution.

Gorse seeds can remain viable in the soil for many decades. The plant's biological characteristics and its ability to grow almost anywhere mean that the plant can be a serious problem over large areas, including pasture, riparian zones, roadside margins, scrub-land, forest margins and coastal habitats.

The impact of Gorse is principally on agricultural production. Gorse forms dense spiny thickets, capable of totally suppressing pasture or restricting stock grazing in affected areas. Although Gorse does have benefits as a nursery plant for native species, the impacts on farm productivity, and the cost to land occupiers to control gorse may be significant. This is particularly the case on properties that are only marginally financially sustainable.



6.9.2 Objective

Over the duration of the Plan, sustainably control Gorse to avoid or minimise adverse effects on pastoral or forestry production values in the Taranaki region.

6.9.3 Principal measures to achieve objective

To achieve the objective for Gorse, the following principal measures will be applied:

Requirement to act

Land occupiers will comply with the rules specified in this section of the Plan.

Inspection and monitoring

Taranaki Regional Council will inspect and monitor properties with suspected or confirmed infestations of Gorse to establish the extent of any infestations and to identify any remedial action that needs to be undertaken.

Advocacy and education

Taranaki Regional Council will–

1. Provide advice and information to land occupiers and the general public to promote awareness and encourage the public reporting of any infestations;
2. Provide a broad suite of general purpose education, advice, awareness and publicity activities to other interested parties to prevent the spread of Gorse; and
3. Undertake liaison and advocacy to promote effective integrated pest management.

Service delivery

Taranaki Regional Council will–

1. Undertake biological control; and
2. Undertake direct control of Gorse in Key Native Ecosystems as part of an agreed site-led response.

Plan rules requiring land occupier and other persons to act

Good Neighbour Rule

- 6.9.3.1** A land occupier within the Taranaki region must destroy all Gorse present on their land within 10 metres of their property boundary-
- to protect adjacent pastoral or forestry production values; **AND**
 - where the adjacent land occupier is managing Gorse within 10 metres of their property boundary **AND**
 - excepting any property or part of a property in an urban area.

Contravention of this rule creates an offence under section 154(N)(19) of the Act.

6.10 Nodding, Plumeless and Variegated thistles (*Carduus nutans*, *C. acanthoides*, *Silybum marianum*)

6.10.1 Adverse effects

Nodding, Plumeless and Variegated thistles are largely biennial plants.

Nodding thistle forms a large flat rosette then has flowering stems up to 1.5 metres tall with a long fleshy taproot. The large purple flower heads droop or 'nod' when mature.

Plumeless thistle is similar to Nodding thistle but grows taller (up to two metres tall) and has smaller flower heads that stay erect. The plants require the same control measures. Variegated thistle is spiny and easily recognised by cream marks on its leaves, which give it a variegated appearance.

All three thistles are extremely invasive pasture plants and are avoided by cattle and sheep. They will grow in most soil types and, owing to the mixed age and size of the plants, are difficult and costly to control. If not controlled, the thistles form dense stands that suppress pasture and obstruct livestock movement. Thistle fragments and spines may also injure livestock, damage the fleeces or hides of livestock, and may cause 'scabby mouth' in lambs.

Variegated thistle matures very rapidly, seeds prolifically, and is spread by wind and animals. It grows best on high fertility soils in pasture, along roadside margins, and in other unused areas. The broad leaves smother pasture and create bare ground for its seeds to germinate.



Variegated thistle



Nodding & Plumeless thistles

6.10.2 Objective

Over the duration of the Plan, sustainably control Nodding, Plumeless and Variegated thistles to avoid or minimise adverse effects on dairying and sheep and beef production in the Taranaki region.

6.10.3 Principal measures to achieve objective

To achieve the objective for Nodding, Plumeless and Variegated thistles, the following principal measures will be applied:

Requirement to act

Land occupiers will comply with the rules specified in this section of the Plan.

Inspection and monitoring

Taranaki Regional Council will inspect and monitor properties with suspected or confirmed infestations of Nodding, Plumeless or Variegated thistles to establish the extent of any infestations and to identify any remedial action that needs to be undertaken.

Advocacy and education

Taranaki Regional Council will-

1. Provide advice and information to land occupiers to promote effective control;
2. Provide a broad suite of general purpose education, advice, awareness and publicity activities to other interested parties to prevent the spread of Nodding, Plumeless and Variegated thistles; and
3. Undertake liaison and advocacy to promote effective integrated pest management.

Service delivery

Taranaki Regional Council will-

1. Undertake biological control; and
2. Undertake direct control of thistles in Key Native Ecosystems as part of an agreed site-led response.

Plan rules requiring land occupier and other persons to act

Good Neighbour Rules

6.10.3.1 A land occupier within the Taranaki region must destroy all Nodding and Plumeless thistles present on their land within 100 metres of their property boundary-

- to protect adjacent dairying and sheep and beef production values;

AND

- where the adjacent land occupier is managing Nodding and Plumeless thistles within 100 metres of their property boundary.

6.10.3.2 A land occupier within the Taranaki region must destroy all Variegated thistles present on their land within five (5) metres of their property boundary-

- to protect adjacent dairying and sheep and beef production values;

AND

- where the adjacent land occupier is managing Variegated thistles within five (5) metres of their property boundary.

Contravention of these rules creates an offence under section 154(N)(19) of the Act.

6.11 Old man's beard (*Clematis vitalba*)

6.11.1 Adverse effects

Old man's beard is a deciduous, woody, perennial climber that may reach 25 metres in height. In summer it has creamy white flowers followed by 'fluffy' seed heads in autumn and winter. The plant grows in well-drained alluvial soils and can occupy a wide range of habitats including riparian margins, forest remnants, gardens, and hedgerows. Wind, water and birds disperse the seeds.

Old man's beard is recognised as the most damaging pest climber in New Zealand and it is a significant threat to indigenous biodiversity values in the region. It has the potential to infest most lowland forested areas (750 metres or less above sea level) of Taranaki and is particularly troublesome in second growth or damaged indigenous forests (typical of many of the small but important remnant areas on the ring plain).

One plant is capable of blanketing an area up to 180 square metres. The plant climbs high into the canopy, forming a thick blanket of growth, which prevents light reaching the support trees, eventually smothering and killing them. Old man's beard also prevents the establishment of native seedlings.



6.11.2 Objective

Over the duration of the Plan, sustainably control Old man's beard to avoid or minimise adverse effects on indigenous biodiversity and production forestry values in the Taranaki region.

6.11.3 Principal measures to achieve objective

To achieve the objective for Old man's beard, the following principal measures will be applied:

Requirement to act

Land occupiers will comply with the rules specified in this section of the Plan.

Extension programme (Waingongoro Old man's beard programme)

Taranaki Regional Council will incrementally implement the Waingongoro Old man's beard Programme to:

1. Undertake initial Old man's beard control along the mid and lower reaches; and
2. Provide ongoing technical advice, information, and support to land occupiers in the programmes, including monitoring and enforcement of rules.

Inspection and monitoring

Taranaki Regional Council will inspect and monitor properties with suspected or confirmed infestations of Old man's beard to establish the extent of any infestations and to identify any remedial action that needs to be undertaken.

Advocacy and education

Taranaki Regional Council will–

1. Provide advice and information to land occupiers and the general public to promote effective control;
2. Provide a broad suite of general purpose education, advice, awareness and publicity activities to other interested parties to prevent the spread of Old man's beard and encourage its control; and
3. Undertake liaison and advocacy to promote effective integrated pest management

Service delivery

Taranaki Regional Council will -

1. Undertake biological control;
2. Incrementally undertake initial direct control of Old man's beard along the Waingongoro River south of Opunake Road;
3. Undertake direct control of Old man's beard in Key Native Ecosystems as part of an agreed site-led response;
4. Investigate the undertaking of direct control along the mid to lower parts of the Patea River.

Plan rules requiring land occupier and other persons to act

General Rule

- 6.11.3.1 A private land occupier within the Taranaki region must destroy all Old man's beard on their property, **EXCEPT**:
- any parts of a property that lie within 50 metres from the middle of the Waingongoro River south of Opunake Road and for which the Council has not completed its initial control programme; **AND**
 - any parts of a property that lie within 50 metres from the middle of the Patea River east of State Highway 3.

Good Neighbour Rule

- 6.11.3.2 A Crown land occupier within the Taranaki region must destroy all Old man's beard present on their land within 10 metres of their property boundary-
- to protect adjacent indigenous biodiversity values; **AND**
 - where the adjacent land occupier is managing Old man's beard within 10 metres of their property boundary.

Contravention of these rules creates an offence under section 154(N)(19) of the Biosecurity Act.

6.12 Wild broom (*Cytisus scoparius*)

6.12.1 Adverse effects

Wild broom is a multi-branched shrub that grows up to 2.5 metres tall. The plant has bright yellow flowers throughout October and November and these are followed by flat, dark seed pods. The seeds are ballistic and animals and flowing water also have a role in their dispersal.

Wild broom seeds prolifically and can grow under a wide variety of soil and climatic conditions. The plant is principally a problem in pastoral situations where it forms thickets and shades out pasture grasses, affecting agricultural production and imposing costs of control on the occupier.

Wild broom can also invade and modify semi-open indigenous ecosystems such as riparian areas. In some areas, Wild broom may affect aesthetic or recreational values, by inhibiting access to riparian margins or reducing indigenous biodiversity values generally.



6.12.2 Objective

Over the duration of the Plan, sustainably control Wild broom to avoid or minimise adverse effects on dairying, sheep and beef, and forestry production in the Taranaki region.

6.12.3 Principal measures to achieve objective

To achieve the objective for Wild broom, the following principal measures will be applied:

Requirement to act

Land occupiers will comply with the rules specified in this section of the Plan.

Inspection and monitoring

Taranaki Regional Council will inspect and monitor properties with suspected or confirmed infestations of Wild broom to establish the extent of any infestations and to identify any remedial action that needs to be undertaken.

Advocacy and education

Taranaki Regional Council will–

1. Provide advice and information to land occupiers and the general public to promote effective control of Wild broom;
2. Provide a broad suite of general purpose education, advice, awareness and publicity activities to other interested parties to prevent the spread of Wild broom; and
3. Undertake liaison and advocacy to promote effective integrated pest management.

Service delivery

Taranaki Regional Council will

1. Undertake biological control; and
2. Undertake direct control of Wild broom in Key Native Ecosystems as part of an agreed site-led response.

Plan rules requiring land occupier and other persons to act

Good Neighbour Rule

6.12.3.1 A land occupier within the Taranaki region must destroy all Wild broom present on their land within 10 metres of their property boundary-

- to protect adjacent dairying, sheep and beef or forestry production values; **AND**
- where the adjacent land occupier is managing Wild broom within 10 metres of their property boundary.

Contravention of this rule creates an offence under section 154(N)(19) of the Biosecurity Act.

6.13 Wild ginger (Yellow and Kahili) (*Hedychium gardnerianum*; *H. flavescens*)

6.13.1 Adverse effects

Kahili ginger and Yellow ginger share many of the same features and, when not in flower, are often mistaken for one another. Yellow ginger flowers are cream coloured and are seen late autumn and early winter. Kahili ginger flowers are lemon yellow with red centre stamens and are seen during the late summer and early autumn followed by red seeds. The leaves are wider than that of Yellow ginger.

Both varieties can grow up to two metres or more and produce many branching rhizomes, which spread outwards and over themselves to create a rhizome bed a metre or more deep. In addition to branching rhizomes, Kahili ginger also produces up to 100 seeds per flower head, making it a more prolific spreader than Yellow ginger.

Kahili and yellow ginger are ecologically versatile plants that are extremely difficult to control or eradicate once established. Once popular garden plants, both gingers are now generally considered to be insidious, and have a significant impact on indigenous biodiversity values. Once established in indigenous forested areas and other habitats, the tough rhizomes form a solid web over large areas smothering and replacing understorey species and seedlings. Kahili ginger and Yellow ginger can suppress indigenous regeneration by up to 90%, however, Kahili ginger is the more invasive plant given its seeding ability.

Kahili ginger and yellow ginger can also block streams and drains and obstruct walking tracks, reducing access to some recreational and conservation areas and the aesthetic appeal of such areas.



6.13.2 Objective

Over the duration of the Plan, sustainably control Wild ginger (Yellow and Kahili) to avoid or minimise adverse effects on indigenous biodiversity in the Taranaki region.

6.13.3 Principal measures to achieve objective

To achieve the objective for Wild ginger, the following principal measures will be applied:

Requirement to act

Land occupiers will comply with the rules specified in this section of the Plan.

Inspection and monitoring

Taranaki Regional Council will inspect and monitor properties with suspected or confirmed infestations of Wild ginger (Yellow and Kahili) to establish the extent of any infestations and to identify any remedial action that needs to be undertaken.

Advocacy and education

Taranaki Regional Council will–

1. Provide advice and information to land occupiers and the general public to promote effective control;
2. Provide a broad suite of general purpose education, advice, awareness and publicity activities to other interested parties to prevent the spread of Wild ginger (Yellow and Kahili) and encourage its control; and
3. Undertake liaison and advocacy to promote effective integrated pest management.

Service delivery

Taranaki Regional Council will undertake direct control of Wild ginger (Yellow and Kahili) on Key Native Ecosystems as part of an agreed site-led response.

Plan rules requiring land occupier and other persons to act

General Rule

- 6.13.3.1 A private land occupier within the Taranaki region must destroy all Yellow ginger and Kahili ginger present on their land.

Good Neighbour Rule for Yellow Ginger

- 6.13.3.2 A Crown land occupier within the Taranaki region must destroy all Wild ginger (Yellow) present on their land within five (5) metres of their property boundary-
- to protect indigenous biodiversity values; **AND**
 - where the adjacent land occupier is managing Wild ginger (Yellow) within five (5) metres of their property boundary.

Good Neighbour Rule for Kahili Ginger

- 6.13.3.3 A Crown land occupier within the Taranaki region must destroy all Wild ginger (Kahili) present on their land within 1,000 metres of their property boundary-
- to protect indigenous biodiversity values **AND**
 - where the adjacent land occupier is managing Wild ginger (Kahili) within 1,000 metres of their property boundary.

Contravention of these rules creates an offence under section 154(N)(19) of the Biosecurity Act.

6.14 Yellow ragwort (*Jacobaea vulgaris*)

6.14.1 Adverse effects

Yellow ragwort is a herbaceous biennial or perennial with conspicuous yellow flowers during summer.

The majority of plants flower in their second season, from December to March, followed by mature seeds a few weeks after the first appearance of flowers. A large plant can produce 150,000 seeds in one season. It commonly grows 45 to 60 centimetres high.

Yellow ragwort can be a serious pasture weed, found in pasture, riparian margins, open forests, swamps and other habitats. Once established, the plant has the ability to spread rapidly and invade 'clean' pasture areas. It seeds freely and is dispersed principally by wind and, to a lesser extent, by water and animals, and in hay.

Yellow ragwort is a particular problem in dairying and beef parts of Taranaki. Heavy infestations will reduce pasture production, thereby reducing the carrying capacity of dairy land, and imposing added farm production costs on the occupier. Ragwort is readily eaten by sheep.

Ragwort is toxic to cattle, horses and deer so they avoid the plant and pasture nearby. This enhances the smothering effects of the plant and further reduces pasture utilisation.



6.14.2 Objective

Over the duration of the Plan, sustainably control Yellow ragwort to avoid or minimise adverse effects on dairy or beef production values in the region.

6.14.3 Principal measures to achieve objective

To achieve the objective for Yellow ragwort, the following principal measures will be applied:

Requirement to act

Land occupiers will comply with the rules specified in this section of the Plan.

Inspection and monitoring

Taranaki Regional Council will inspect and monitor properties with suspected or confirmed infestations of Yellow ragwort to establish the extent of any infestations and to identify any remedial action that needs to be undertaken.

Advocacy and education

Taranaki Regional Council will–

1. Provide advice and information to land occupiers and the general public to promote effective control of Yellow ragwort;
2. Provide a broad suite of general purpose education, advice, awareness and publicity activities to other interested parties to prevent the spread of Yellow ragwort; and
3. Undertake liaison and advocacy to promote effective integrated pest management

Service delivery

Taranaki Regional Council will undertake biological control of Yellow ragwort.

Plan rules requiring land occupier and other persons to act

General Rule

6.14.3.1 A private land occupier west of the Pest Management Line as identified in Appendix A of the Plan must destroy all Yellow ragwort on their land, **EXCEPT**:

- Any Crown land in which case 6.14.3.2 applies.

Good Neighbour Rule

6.14.3.2 A Crown land occupier within the Taranaki region, or land occupier east of the Pest Management Line as identified in Appendix A of the Plan, must destroy all Yellow ragwort present on their land within 20 metres of their property boundary-

- to protect adjacent dairying or beef production values; **AND**
- where the adjacent land occupier is managing Yellow ragwort within 20 metres of their property boundary.

Contravention of these rules creates an offence under section 154(N)(19) of the Biosecurity Act.

7. Actual or potential effects of implementation

Given its longstanding experience in pest management, Taranaki Regional Council is satisfied that the overall effects of the Plan will be beneficial to the regional community. While Taranaki Regional Council is confident that a Plan is an effective way of managing pests, there are some aspects of the implementation of the Plan that may have real or perceived adverse effects.

7.1 Effects on Māori

It is hoped that pest animal and plant management under the Plan will have a positive effect on the relationship of Māori with their culture and traditions, and their ancestral lands, waters, sites, wāhi tapu, and taonga, by contributing to the protection of taonga and mauri associated with indigenous biodiversity, landscapes, and waterways.

Positive results stemming from the Plan can include improved quality of traditional food gathering sites (eg wetlands and estuaries), and improved availability of native plant resources for food, fibre, and the purposes of rongoā.

It is acknowledged that wild animals such as deer, pigs, and goats are valued as replacements for traditional hunting resources. However, none of these species are priorities for pest control under the Plan, and therefore the effect of the Plan on the regional availability of these hunting resources will be minimal.

7.2 Effects on the environment

This Plan will enhance and protect the ecological environment including natural ecosystems and processes, soil health and water quality, by removing, reducing, or managing the pest species that threaten it. The use of control tools such as toxins or traps can negatively affect indigenous wildlife. Taranaki Regional Council actively participates in current research and training that aims to minimise the non-target effects of pest control, and readily adopts best practice methods for poisoning and trapping operations.

Enjoyment of the cultural environment will also be enhanced where pest management overlaps with amenity and recreational values. The economic environment will experience some benefit as a result of

suppressing or eradicating pests that impact on primary productivity. In addition, the tourism industry (domestic and international) is expected to gain from this Plan through enhancement of the natural areas utilised by visitors.

7.3 Effects on overseas marketing of New Zealand products

The control of pests in areas of high natural value (including Key Native Ecosystems), in conjunction with the *Taranaki Regional Council Biosecurity Strategy 2018–2038*, should increase the recreational and aesthetic values associated with these areas, which may have a positive impact on international tourism.

The provisions of this Plan do not replace other legislation or regulations relating to the use of toxins and impacts on Māori culture and traditions, and public health and safety. The Taranaki Regional Council shall monitor and report on any impacts arising through the use of toxins through systems and processes established under the relevant legislation. The Taranaki Regional Council will also routinely record and report any adverse effects arising from its direct control operations, including non-target kills.

The use of best practice methods when applying toxins and employment of the mixed method of control should mitigate any threat to the marketing of New Zealand products. Moreover the volume of exports may be improved through increased productivity by managing pests that affect agriculture, horticulture, and forestry.

PART THREE: PROCEDURES

8. Powers conferred

8.1 Powers of authorised persons under Part 6 of the Act

The Principal Officer (Chief Executive) of the Taranaki Regional Council may appoint authorised persons to exercise the functions, powers, and duties under the Act in relation to a Plan.

The Taranaki Regional Council will use those statutory powers of Part 6 of the Act as shown in Table 3 below, where necessary, to help implement this Plan.

Table 3: Powers from Part 6 to be used

Administrative provisions	Biosecurity Act Reference
The appointment of authorised and accredited persons	Sections 103(3) and (7)
Delegation to authorised persons	Section 105
Power to require assistance	Section 106
Power of inspections and duties	Sections 109, 110 & 112
Power to record information	Section 113
General powers	Sections 114 & 114A
Use of dogs and devices	Section 115
Power to seize abandoned goods	Section 119
Power to intercept risk goods	Section 120
Power to examine organisms	Section 121
Power to give directions	Section 122
Power to act on default	Section 128
Liens	Section 129
Declaration of restricted areas	Section 130
Declaration of controlled areas	Section 131
Options for cost recovery	Section 135
Failure to pay	Section 136

Note: The Taranaki Regional Council's standard operating procedures document sets out the procedures the Council will follow when land owners and/or occupiers or other persons do not comply with the rules or other general duties.

8.2 Powers under other sections of the Act

A land occupier or any person in breach of a plan rule creates an offence under section 154N(19) of the Act, where the rule provides for this. The Taranaki Regional Council can seek prosecution under section 157(5) of the Act for those offences.

A Chief Technical Officer (employed under the State Sector Act 1988) may appoint authorised people to implement other biosecurity law considered necessary. One example is where restrictions on selling, propagating and distributing pests (under sections 52 and 53 of the Act) must be enforced. Another example is where owners and/or occupiers of land are asked for information (under section 43 of the Act).

8.3 Power to issue exemptions to plan rules

Any land occupier or other person may write to the Taranaki Regional Council to seek an exemption from any provision of a plan rule set out in Part Two of the Plan. However, a rule may state that no exemptions will be considered, or it may limit the circumstances to which exemptions apply (eg, scientific purposes).

The requirements in section 78 of the Act must be met for a person to be granted an exemption. Taranaki Regional Council's operating procedures must also note those requirements in full. The requirements are:

- (a) The council is satisfied that granting the exemption will not significantly prejudice the attainment of the plan's objectives; and
- (b) The council is satisfied that 1 or more of the following applies:
 - (c) The requirement has been substantially complied with and further compliance is unnecessary;
 - (d) The action taken on, or provision made for, the matter to which the requirement relates is as effective as, or more effective than, compliance with the requirement;
- (e) The requirement is clearly unreasonable or inappropriate in the particular case;
- (f) Events have occurred that make the requirement unnecessary or inappropriate in the particular case.

The Taranaki Regional Council will keep and maintain a register that records the number and nature of exemptions granted (including any agreed Management Plans or alternative pest management arrangements). The public will be able to inspect this register during business hours.

9. Monitoring

9.1 Measuring what the objectives are achieving

The Taranaki Regional Council shall monitor the extent to which the objectives set out in Part Two of this Plan are being achieved by:

- (a) annually mapping the implementation of the Self-help Possum Control Programme;
- (b) monitoring possum population densities and trends, over time, in areas included in the Self-help Possum Control Programme;
- (c) developing agreed collaborative monitoring, reporting and management programmes addressing possum control within and around Egmont National Park;
- (d) monitor, for each pest, the effectiveness of direct control undertaken by the Taranaki Regional Council;
- (e) recording the number of public complaints pertaining to individual pests and instances of non-compliance with the plan rules; and
- (f) recording the number of public enquiries in relation to individual pests, including requests for information.
- (g) annually surveying at release sites and mapping the distribution of biological control agents.

9.2 Monitoring the management agency's performance

The Taranaki Regional Council is the management agency. As the management agency responsible for implementing the Plan, the Taranaki Regional Council will–

- (a) prepare an operational plan within three months of the Plan being approved;
- (b) review the operational plan, and amend it if needed;
- (c) report on the operational plan each year, within five months after the end of each financial year; and
- (d) maintain up-to-date databases of complaints, pest levels and densities, and correspondence

from Regional Council and land owners and/or occupiers.

9.3 Monitoring plan effectiveness

Monitoring the effects of the Plan will ensure that it continues to achieve its purpose. It will also check that relevant circumstances have not changed to such an extent that the Plan requires review. A review may be needed if:

- (a) the Act is changed, and a review is needed to ensure that the Plan is not inconsistent with the Act;
- (b) other harmful organisms create, or have the potential to create, problems that can be resolved by including those organisms in the Plan;
- (c) monitoring shows the problems from pests or other organisms to be controlled (as covered by the Plan) have changed significantly; or
- (d) circumstances change so significantly that the Taranaki Regional Council believes a review is appropriate.

If the Plan does not need to be reviewed under such circumstances, it will be reviewed in line with s100D of the Act. Such a review may extend, amend, or revoke the Plan, or leave it unchanged.

The procedures to review the Plan will include officers of the Taranaki Regional Council–

- (e) assessing the efficiency and effectiveness of the principal measures specified for each pest and other organism (or pest group or organisms) to be controlled to achieve the objectives of the Plan;
- (f) assessing the impact the pest or organism (covered by the Plan) has on the region, and any other harmful organisms that should be considered for inclusion in the Plan; and
- (g) liaising with Crown agencies, territorial authorities, iwi authorities and key interest groups, on the effectiveness of the Plan.

9.4 Monitoring other effects of this Plan

The provisions of this Plan do not replace other legislation or regulations relating to the use of toxins, impacts on Maori culture and traditions, and public health and safety. Where appropriate, the Taranaki Regional Council shall monitor and report on any impacts arising through the use of toxins through

systems and processes established under the Resource Management Act⁸. The Taranaki Regional Council will also routinely record and report any adverse effects arising from its direct control operations, including non-target kills.

Agencies other than the Taranaki Regional Council are more likely to undertake monitoring and respond to any problems under the Health and Safety in Employment Act 1992, the Hazardous Substances and New Organisms Act, and the Agricultural Compounds and Veterinary Medicines Act 1997.

9.5 Plan Review

The Taranaki Regional Council may review the Plan or any part of it, if it believes circumstances or management objectives have changed sufficiently. However, where the Plan has been in force for ten years or more and the Plan has not been reviewed within the last ten years, then the Taranaki Regional Council must review the Plan. A review may also become necessary if the Taranaki Regional Council or the Environment Court considers the Plan is inconsistent with any requirements of an operative NPD.

A Council can make minor amendments to the Plan without needing a review. Any minor amendment:

- (i) Must not significantly affect any person's rights and obligations; and
- (ii) Must not be inconsistent with the NPD.

A review may result in no change to the Plan, or may extend its duration.

⁸ Including the Resource Management (Exemption) Regulations 2017.

10. Funding

10.1 Introduction

The Act requires that funding is thoroughly examined. This includes the reason for, and source of, all funding.

10.2 Funding sources and reasons for funding

The Biosecurity Act 1993 and the Local Government (Rating) Act 2002 require that funding is sought from–

- people who have an interest in the Plan;
- those who benefit from the Plan; and
- those who contribute to the pest problem.

Funding must be sought in a way that reflects economic efficiency and equity. Those seeking funds should also target those funding the Plan and the costs of collecting funding.

10.3 Anticipated costs to the Council of implementing the Plan

The anticipated costs to the Taranaki Regional Council of implementing the Plan reflect a similar level of pest management funding to previous years. The Council expects that the relative cost of pest management will be similar for the duration of the Plan.

The funding of the implementation of the Plan is from a region-wide general rate set and assessed under the Local Government (Rating) Act 2002, and in determining this, the Taranaki Regional Council has had regard to those matters outlined in Section 100T of the Biosecurity Act.

10.3.1 General rate and investment revenue

Private land occupiers will contribute to the programmes identified in this Plan through a proportion of the general rate that is levied on every separately rateable property in the region under Section 33 of the Rating Powers Act 1988, and a proportion of the Taranaki Regional Council's investment revenue.

10.3.2 Recovery of direct costs

The Taranaki Regional Council will recover costs for a particular function or service under section 135 of the

Act. In the event that the Council incurs costs arising from a land occupier's failure to comply with a notice of direction, the Council may:

- recover actual and reasonable costs associated with additional inspections for pest infestations; and
- recover actual and reasonable costs associated with undertaking the control of pest infestations.

The amount of money recovered from direct charges will vary from year-to-year depending on the number of cost recovery pest plant control operations undertaken, if any. Table 4 below sets out the indicative income and costs for the Plan, up until 2020/2021. The figures include the effect of inflation. Funding sources include direct charges (usually arising from enforcement action), and a proportion of the general rate.

The New Plymouth, Stratford and South Taranaki district councils collect general rates on behalf of the Taranaki Regional Council. The policies adopted by the Taranaki Regional Council in relation to rate remissions, postponements, and additional charges are those adopted by the respective district councils.

10.3.3 Funding limitations

No unusual administrative problems or costs are expected in recovering the costs from any of the persons who are required to pay.

Table 4: Indicative costs and sources of funds (exclusive of GST)

Expenditure	2016/17 \$	2017/18 \$	2018/19 \$	2019/20 \$	2020/21 \$
Biosecurity pest animal and plant management planning, plans and strategy initiatives, and actions	2,049,707	1,806,794	1,829,842	2,050,486	1,922,269
Total expenditure	2,049,707	1,806,794	1,829,842	2,050,486	1,922,269
Income:					
Direct charges	108,250	110,116	112,104	114,297	116,631
Total income	108,250	110,116	112,104	114,297	116,631
Net cost of service	1,941,457	1,696,678	1,717,738	1,936,189	1,805,638
Funded by:					
General rates and investment revenue	1,941,457	1,696,678	1,717,738	1,936,189	1,805,638
Total Funding	1,941,457	1,696,678	1,717,738	1,936,189	1,805,638

Glossary

This section provides the meaning of words used in this Plan and in the amended Biosecurity Act 1993. When a word is followed by an asterisk (*), the meaning which follows is the meaning provided in section 4 [interpretation section] of the Act.

Users of this Plan are advised that they should refer to the Act (or other relevant legislation) to ensure that the definition included in this Plan is the current statutory definition. In the case of any inconsistency or amendment of the definition, the statutory definition prevails.

Act* means the Biosecurity Act 1993.

Adjacent means, for the purpose of this Plan, a property that is next to, or adjoining, another property.

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

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

Authorised person* means a person for the time being appointed an authorised person under section 103 (Inspectors, authorised persons, and accredited persons) of the Act.

Beneficiary means the receiver of benefits accruing from the implementation of a pest management measure or this Plan.

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.

Bovine tuberculosis means the state of being infected with *Mycobacterium bovis*. *Mycobacterium bovis* is an infectious, zoonotic, bacterial disease, characterised by the formation of tubercle lesions on affected animals.

Crown⁹

- (a) means her Majesty the Queen in right of New Zealand; and

- (b) includes all Ministers of the Crown and all departments; but

does not include:

- (c) an Office of Parliament;
- (d) a Crown entity; or
- (e) a State enterprise named in the First Schedule to the State-Owned Enterprises Act 1986.

Crown land means any land occupied or owned by the Crown, a Crown entity under the Crown Entities Act 2004, and a crown-owned enterprise under the State-Owned Enterprises Act 1986.

Destroy, in relation to rules that apply to sustained control pests, means an annual minimum 99% level of control on land requiring treatment.

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

Distribute, in relation to pest animals or plants, means to transport, or in any way spread a pest animal or plant.

District council means a district council as defined in accordance with the Local Government Act 2002.

Effect¹⁰ includes:

- (a) any positive or adverse effect; and
- (b) any temporary or permanent effect; and
- (c) any past; present or future effect; and
- (d) any cumulative effect which arises over time or in combination with other effects—regardless of the scale, intensity, duration or frequency of the effect—and also includes:
- (e) any potential effect of high probability; and
- (f) any potential effect of low probability which has a high potential impact.

Endemic means a plant or animal native or restricted to a certain place, or, in the case of wild animal populations, means the presence of Bovine tuberculosis.

Environment includes:

- (a) ecosystems and their constituent parts, including people and their communities; and
- (b) all natural and physical resources; and

⁹ *Public Finances Act 1989*

¹⁰ *Resource Management Act 1991*

- (c) amenity values; and
- (d) the social, economic, aesthetic and cultural conditions which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters.

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 contributes to the creation, continuance, or exacerbation of the problems proposed to be resolved by a pest or pathway management plan.

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.

Good Neighbour Rule means a rule that seeks to manage the externality impacts arising from pests spilling over from one property to a neighbouring property that is free of, or being cleared, of that pest.

Habitat means the place or type of site where an organism or population naturally occurs.

Harmful organism means organisms that have not been declared 'pests' for the purposes of this Plan because, although they may have significant adverse effects, regulatory responses are not considered appropriate or necessary.

Indigenous means native to New Zealand.

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

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

Mana whenua means customary authority and title exercised by Iwi or hapu over the general environment within their tribal rohe.

Means of achievement means the general management options, tactics, or technical methods by which the Taranaki Regional Council or land occupiers will achieve an objective or objectives.

Mitigate means to reduce or moderate the severity of something.

Monitor, in respect of this Plan, means to measure and record parameters that indicate the levels of

effectiveness of a certain pest management programme.

National Policy Direction (NPD), in respect of this Plan, means the currently operative National Policy Direction for Pest Management.

Notice of direction refers to a notice served by officers of the Taranaki Regional Council to note non-compliance with a plan rule and to identify and direct remedial action.

Objective means a statement of a desired, specific environmental outcome.

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.

Occupied has a corresponding meaning.

Operational plan means a plan prepared by the management agency under section 100B of the Act.

Organism –

- (a) does not include a human being or a genetic structure derived from a human being;
- (b) includes a micro-organism;
- (c) subject to paragraph (a), 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);
- (d) 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;
- (e) includes a reproductive cell or developmental stage of an organism;
- (f) 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.

Pest management plan and Plan* means a Plan made under Part V of the Act, for the exclusion,

eradication or management of a particular pest or pests.

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

Principal officer* means -

- (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.

Region¹¹, 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 includes all bridges, culverts, and fords forming part of any road.

Rohe means the territory or boundary that defines the area within which a tangata whenua group claims traditional association and mana whenua.

Rongoā means traditional Māori medicine. Rongoā is a system of healing that was passed on orally. It comprised diverse practices and an emphasis on the spiritual dimension of health. Rongoā includes herbal remedies, physical therapies such as massage and manipulation, and spiritual healing.

Rule* means a rule in a regional pest management plan under Part 5 of the Act.

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.

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 ongoing control of the subject, or an organism being spread by the subject, to reduce its impacts on values and spread to other properties.

Tangata whenua¹², in relation to a particular area, means the Īwi or hapu that holds mana whenua over that area.

Taonga means treasure, property: taonga are prized and protected as sacred possessions of the tribe. The term carries a deep spiritual meaning and taonga may be things that cannot be seen or touched. Included for example are te reo Māori (the Māori language), wāhi tapu, the air, waterways, fishing grounds and mountains.

Tapu means under spiritual protection or restriction.

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

Includes—

- (a) Any new organism, if the Authority [Environmental Risk Management Authority] has declined approval to import that organism; and
- (b) Any organism specified in the Second Schedule of the Hazardous Substances and New Organisms Act 1996; but

¹¹Resource Management Act 1991.

¹² Resource Management Act 1991.

- (c) Does not include any organism approved for importation under the Hazardous Substances and New Organisms Act 1996, unless—
- (d) The organism is an organism that has escaped from a containment facility; or
- (e) 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.

Urban area means a city, town or urban settlement that comprises a built-up area of commercial, industrial, or residential buildings, including associated infrastructure and amenities. An urban area also includes low density 'lifestyle' residential areas, urban parkland and open spaces, usually within or associated with, built-up areas.

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

Wild, in respect of deer, pigs and goats, means free-ranging, living in a wild state.

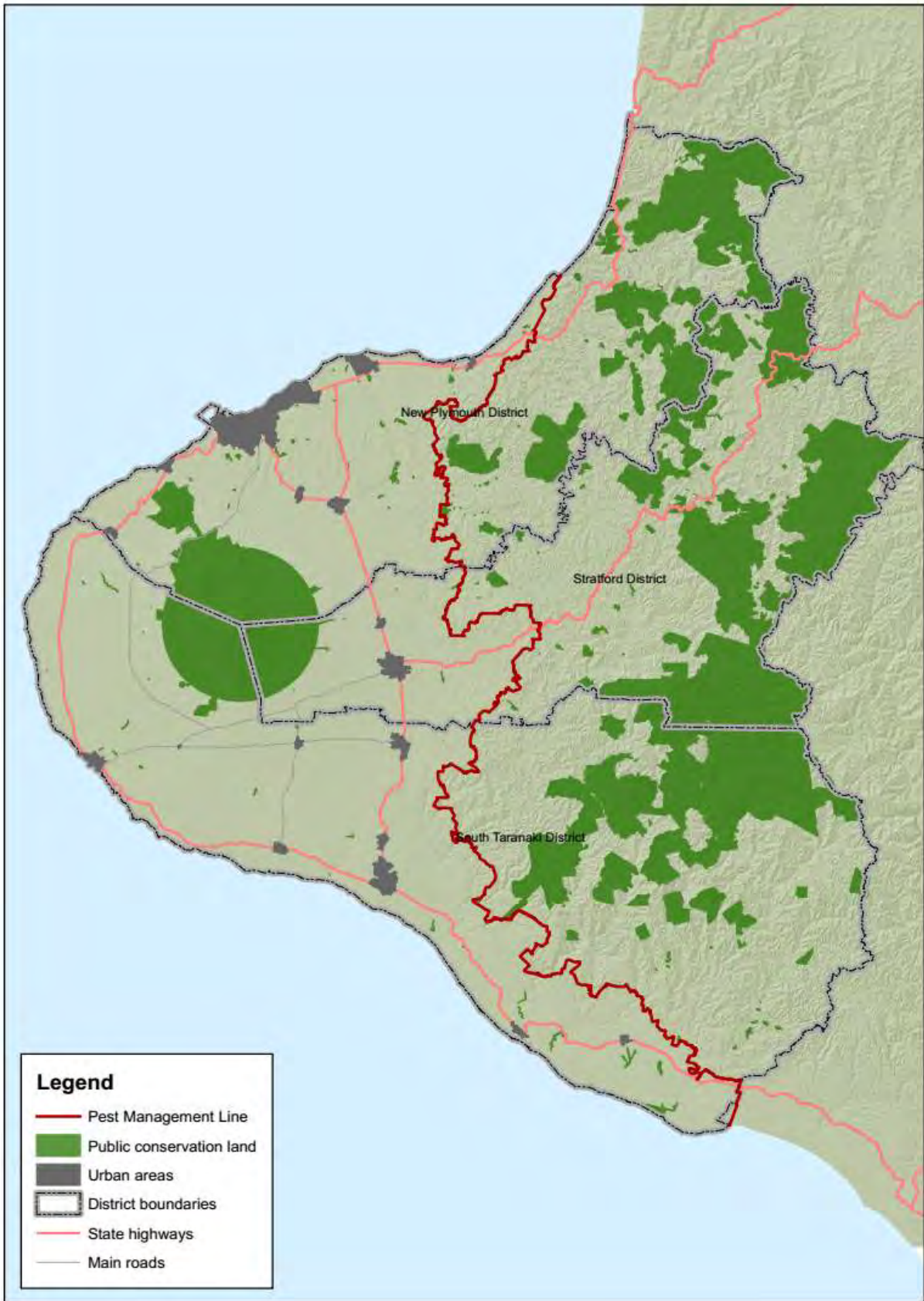
Working day* means any day except:

- (a) a Saturday, a Sunday, Good Friday, Easter Monday, Anzac Day, Labour Day, the Sovereign's birthday and Waitangi Day; and
- (b) the day observed in the region of a regional council as the anniversary day of the province of which the region forms 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.

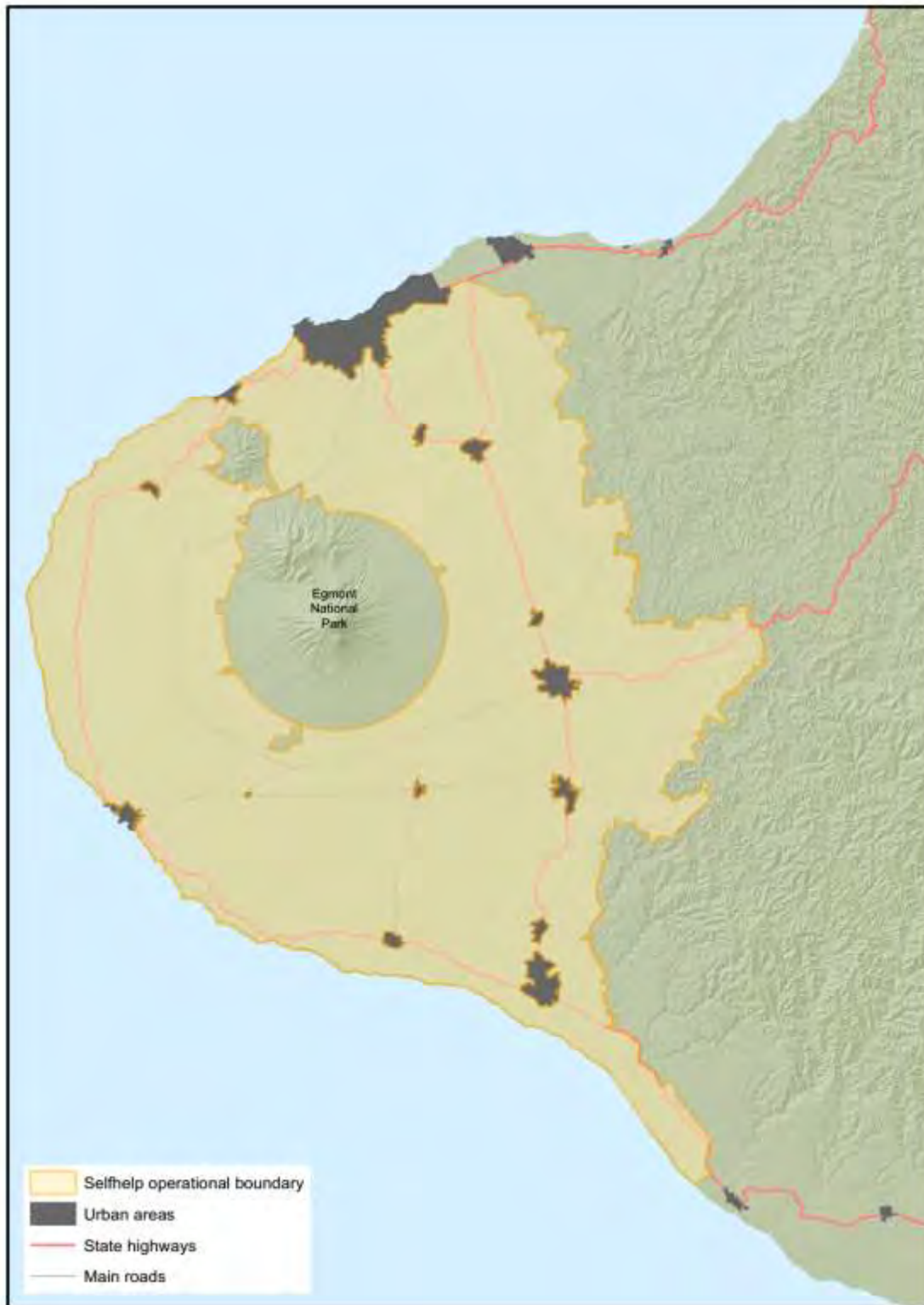
Appendices

Appendix A: Pest Management Line

The Pest Management Line is used to demarcate that part of Taranaki that is predominantly intensive dairy farming land from that part of the region where other land uses predominate. It is based on the Land Use Capability database, which provides detail of land types across the whole country. The Pest Management Line is referred to in rules relating to Yellow ragwort.



Appendix B: Self-Help Possum Control Programme (as at May 2017)



NB: this map is indicative only. More properties may be added during the lifetime of this Plan with the agreement of land owners who join the Programme.

Appendix C: Plants listed in the National Pest Plant Accord List

The National Pest Plant Accord (NPPA) is designed to prevent the sale, distribution and propagation of a set list of pest plants (the Accord list) within New Zealand. If allowed to spread further, these pest plants could seriously damage the New Zealand economy and environment. The NPPA is a cooperative agreement between:

- MPI
- New Zealand Plant Producers Incorporated (NZPPI)
- unitary and regional councils
- Department of Conservation.

All plants on the Accord list are among the plants on the list of 'unwanted organisms' specified under the Biosecurity Act 1993. This means they cannot be distributed or sold in New Zealand. The NPPA is used alongside other pest management plans and strategies.

MPI consults with a group of key stakeholders and parties interested in the NPPA or the Accord list and the group is updated when the Accord list changes. Anyone interested in the NPPA and the Accord list can sign up.

It should be noted that the Accord List is current at the time of printing this Plan and will be altered in the future.

The full list, further information, and updates on the list can be obtained directly from Ministry of Primary Industries or by visiting their website on:

<http://www.mpi.govt.nz/protection-and-response/long-term-pest-management/national-pest-plant-accord>

