ITEM: 3.5
Attachment 1

Proposed Northland Regional Pest and Marine Pathway

Management Plan 2017-2027

NORTHLAND REGIONAL COUNCIL

Karakia (Prayer)

Tēnei au Tēnei au
Tēnei au te hōkai nei o taku tapuwae
Ko te hōkai nuku ko te hōkai rangi
Ko te hōkai a tō tupuna a Tānenui-a-rangi
Ka pikitia ai ki te rangi tūhāhā ki te Tihi-o-Manono
Ka rokohina atu rā ko Te Matua-kore anake
Ka tīkina mai ngā kete o te wānanga
Ko te kete-tuauri
Ko te kete-tuatea
Ko te kete-aronui
Ka tiritiria ka poupoua
Ka puta mai iho ko te ira tangata
Ki te whei ao ki te ao māramaTihei-mauri ora!

Here am I, here am I
here am I swiftly moving by
the power of my karakia for swift movement
Swiftly moving over the earth
Swiftly moving through the heavens
the swift movement of your ancestor
Tane-nui-a-rangi
who climbed up
to the isolated realms
to the summit of Manono
and there found
Io-the-Parentless alone
He brought back down
the Baskets of Knowledge
the Basket called Tuauri
the Basket called Tuatea
the Basket called Aronui.
Portioned out, planted
in Mother Earth
the life principle of humankind
comes forth into the dawn
into the world of light

I sneeze, there is life!

Mihi whakataki (Introductory welcome)

Ka hoki ki te tīmatanga, ko te pū, ko te weu, ko te more, ko te aka.

We return to the beginning, where life itself began, and, like the development cycle of a plant, earth transformed itself into various stages of evolution.

E takoto mai ngā atua nei ko Ranginui ko Papatūānuku, kei waenganui tonu ā rāua tamariki e noho ana, e whakaora tonu ana. Tēnei te hono hei tūhono i a tātou, kia tūhono, kia tūtaki, kia whiti te noho tahi e, Tihei mauri ora!

Papatuanuku and Ranginui lay together with their children, and today continue to dwell and sustain all people. This relationship joins people and the land, it binds us and it joins us so that our co-existence will flourish. Long live this life force!

Ō tātou mate tuatini, i takoto mai ai i roto i te kōpū o te whenua, e tika ana hei poroporoaki i a rātou. āpiti hono, tātai hono, te hunga mate ki te whenua; āpiti hono, tātai hono ko te whenua ki te hunga ora.

Our many deceased who lie in the belly of the land, it is right that they be appropriately eulogised. Let the deceased then be united with the earth below. So, too, let us, the living, be united with the land above.

E ngā iwi, e ngā mana, ka huri ngā mihi ki a koutou. Ahakoa te kaupapa taiao, te kaha ki te kōrero tahi me te mahi tahi, kāore he hua i tua atu i raro i te kaupapa whakakore rawāho kino.

All peoples, all authorities, our acknowledgement goes out to you.
There are many environmental issues to be balanced, there is therefore no greater asset and benefit to the environment than being able to talk and work together on pest management.

Te tiaki i ngā āhuatanga katoa o te tangata me te taiao kia āhei ai te tokorua te puāwai tahi mo ake tonu atu.

Through looking after the needs of the environment and people, the two will continue to flourish and sustain each other.

Kei roto i tenei whakatauaki "Ka tipu ake ka puawai i te taiao ma nga tangata katoa ki nga ra kei te heke mai".

To end with "If people are immersed and nourished in the environment, they will ensure its survival".

Tena koutou, tena koutou, tena tatou katoa.

Greetings to you, greetings to us all.

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Overview

Northland Regional Council's Regional Pest Management Strategies (the strategies) for Northland are due for review. The aim is to incorporate recent changes in legislation regarding regional pest management while also reassessing the pests that are included in the strategies. While the review is underway, all existing strategies remain in force.

Since the last review in 2009, there has been a significant shift in national direction on the management of pests at a regional level, including legislative change which has had an impact on the review and the new proposed plan. The Biosecurity Law Reform Act (2012) and the National Policy Direction for Pest Management (2015) are the two key pieces of legislation that have influenced this review.

The two key changes that have resulted from these pieces of legislation are the inclusion of pathway management plans and the introduction of pest management plans as a regional pest management tool. Rather than strategies, there will be a suite of programmes for pest management incorporating new divisions for plant, animal, freshwater and marine pests, and diseases and pathogens. This means that as part of this review, the existing pests in the strategies will be re-categorised into new pest management programmes, or in some cases removed, as appropriate, and incorporated into a Pest Management Plan.

Council also welcomes the introduction of marine pathway management plans as a preventative tool for the spread of pests, and has identified that these will be particularly effective in the marine environment. A key aim of the Marine Pathway Management Plan is to reduce the spread of marine pests on vessel hulls in Northland by ensuring they meet a minimum clean standard.

In the following proposed pest management and marine pathway management plans, a rationale for addressing each pest is provided and the management approach the regional council considers most appropriate within the prescribed programmes is defined.

How to provide feedback

Anyone can give feedback on the proposed plans, which are presented in one document called the proposed Northland Regional Pest and Marine Pathways Management Plan 2017-2027.

To provide feedback you can:

- Do it online at www.nrc.govt.nz/haveyoursay (we encourage online feedback as it reduces our costs for processing the feedback we get)
- Email us at submissions@nrc.govt.nz
- Or mail your submission to: Proposed Northland Regional Pest and Marine Pathway Management Plan 2017-2027, c/- Mailroom, Private Bag 9021, Whangārei 0148.

Feedback should reach the council by 4pm Friday 21 April 2017.

Other documents we are seeking feedback on

Along with the Proposed Northland Regional Pest and Marine Pathway Management Plan, we are also seeking feedback on the following documents at the same time, as they also have proposals that may be of interest to maritime users.

- Annual Plan 2017/18 and Charging Policy (proposed marine biosecurity charge for moorings, boatsheds, marinas and some ports)
- Navigation Safety Bylaw (which sets the rules for keeping people safe on Northland's waters).

Our online submission form invites you to have your say on all documents that are up for consultation, but there is no requirement for you to comment on anything outside of the Proposed Northland Regional Pest and Marine Pathway Management Plan. Find out more at www.nrc.govt.nz/haveyoursay

Submissions are to be submitted online or made in writing to the Northland Regional Council no later than 4pm on Friday 21 April 2017.

1 Introduction | Tīmatatanga kōrero

The primary mechanisms available to regional councils for controlling pests are regional pest management plans, which place rules on pest species or sites, and regional pathway management plans, which manage the vectors of pests. These plans are developed under the Biosecurity Act 1993 and regional councils are the agencies responsible for processing and approving the plans. While regional councils have no statutory obligation to undertake pest management, most have significant roles in this field. The Biosecurity Act 1993 prescribes the process to be followed in the preparation, subsequent implementation and review of pest and pathway management plans. The following proposal aims to reduce the damaging impacts of priority pests on Northland's environment, economy and culture.

1.1 Proposer

Northland Regional Council has a leadership role in pest management in Northland and intends to establish a Regional Pest Management Plan (the 'Pest Plan') and a Regional Marine Pathway Management Plan (the 'Marine Pathway Plan') under the Biosecurity Act 1993 (the Act). These two plans will be presented in one document that builds on the previously-adopted Northland Regional Pest Management Strategies 2010-2015. The first formal step is notification of this proposed Northland Regional Pest and Marine Pathway Management Plan for 10 years.

1.2 Purpose

Many organisms in Northland are considered undesirable or a nuisance. The Act has set criteria that must be met to justify regional intervention in managing such organisms. This proposal identifies those organisms classified as pests and the marine pathways to be managed.

A pest management plan is a plan for the eradication or effective management of specified pest species or groups of pests, and a pest pathway plan is a plan for the prevention or management of the spread of harmful organisms. The marine pathway plan will focus on preventing or managing the spread of harmful marine organisms, including named pest species, within coastal waters via boat hull fouling in Northland.

The purpose of this combined plan is therefore to outline the framework to efficiently and effectively manage or eradicate specified organisms and/or marine pest pathways in Northland. Doing so will:

- Minimise the actual or potential adverse or unintended effects associated with these organisms and/or pathways; and
- Maximise the effectiveness of individual actions in managing pests or pathways through a regionally co-ordinated approach.

The proposed pest and marine pathway plans are designed to work together to achieve mutual impact. By presenting these as one physical document and consulting on them simultaneously, it is anticipated that they will be well integrated and their implementation co-ordinated.

Once operative, the plans will empower the 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 and Pathway Management.

The public can make written submissions about these proposed plans. Council will then hold hearings so submitters can speak to their submissions. It will then issue decisions after considering those submissions and any supporting information provided. Council decisions can be appealed through the Environment Court.

1.3 Coverage

The proposed Pest Plan will operate within Northland, which covers a total area (land and sea) of 3,008,425 hectares Figure 1.1 'Map of Northland.' This includes the land area, surface water bodies (rivers, lakes and streams) and coastal waters. The proposed Marine Pathway Plan will operate within the Northland coastal marine area only, which is defined as the area around

Northland's coast from Mean High Water Springs (MHWS) to the 12 nautical mile (22.3 kilometre) limit of New Zealand's territorial sea.

1.4 Duration

The proposed plans will take effect on the date they become operative as a regional Pest Management Plan under Section 77 of the Act and as a regional Marine Pathway Plan under Section 97 of the Act. If the proposed combined plan is adopted, it will become operative on a date to be specified by the council in a public notice after having considered the matters under Section 77 and 97 of the Act. The Pest Plan and Marine Pathway Plan are then proposed to remain in force for a period of 10 years as the Northland Regional Pest and Marine Pathway Management Plan 2017-2027.

They may cease at an earlier date if the council declares, by public notice, that the plans have achieved their purpose. They may also cease at an earlier date if, following a review under section 100D of the Act, it is decided the plan or plans need to be revoked.

Figure 1.1 Map of Northland.

2 Planning and statutory background | Whakataka mahere me te ture

2.1 Regional leadership

Northland Regional Council is involved in pest management to promote the social, economic, environmental and cultural wellbeing of communities in the present and for the future; and to reflect regional variations in pests, pathways and environments. Regional councils also carry out devolved functions where they are best placed to achieve national outcomes, and are the management agency responsible for implementing regional pest Management and pathway management plans.

The Northland Regional Pest and Marine Pathway Management Plan 2017-2027 is one component of the council's biosecurity activities. Outside these plans, the council works closely with communities, landowners/occupiers, tangata whenua and other agencies to achieve biosecurity and biodiversity outcomes.

More details about this work can be found in 'Appendix 1 | Āpitihanga tuatahi: Non-regulatory regional pest methods '.

2.2 Legislative background

The Biosecurity Act 1993 (the 'Act)', the Resource Management Act 1991 (RMA) and the Local Government Act 2002 provide a national framework for council's biosecurity activities. The Pest Plan and Marine Pathway Plan are the primary tools for managing pests in Northland. However, they sit within a biosecurity framework for the region which is supported by a number of other complementary policies and plans. Within the council, these policies and plans include the Regional Policy Statement and regional plans prepared under the Resource Management Act 1991.

2.2.1 Biosecurity Act 1993

The council can use the Biosecurity Act 1993 (the Act) to exclude, eradicate or effectively manage pests in its region, including unwanted organisms. While regional councils have no statutory obligation to undertake pest management, most have significant leadership roles in this field. The Act prescribes the process to be followed in the preparation, implementation and review of pest and pathway management plans.

This includes:

- Developing and aligning regional pest management plans and pathway management plans in the region;
- Promoting public support for managing pests;
- Supporting those involved in managing pests to make programmes more effective and efficient;
- Helping to prevent, reduce or eliminate adverse effects from harmful organisms on land and people (including Māori, their kaitiakitanga and taonga);
- Undertaking surveillance and monitoring for pests, pest agents, and unwanted organisms;
- Declaring and implementing small-scale management programmes for the control or eradication of unwanted organisms that are not included in the Pest Plan;
- Gathering information, keeping records and undertaking research; and
- Addressing issues about who should pay for the cost of pest management.

2.2.2 Resource Management Act 1991

Regional councils 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 life-supporting capacity and protecting environmentally-significant areas and habitats.

The RMA sets out the functions of regional councils in relation to the maintenance and enhancement of ecosystems, including :

- The coastal marine area;

- The control of actual or potential effects of use, development or protection of land;
- The establishment, implementation and review of objectives, policies and methods for maintaining indigenous biological diversity.

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.

Regional Policy Statement for Northland

The Regional Policy Statement for Northland promotes the sustainable management of Northland's resources by providing an overview of resource management issues and setting out policies and methods to achieve integrated management of these. The stated issues, objectives, policies and methods include consideration of the effects of pests and pest management. The policy statement identifies key pressures on Northland's indigenous terrestrial, freshwater, and coastal marine ecosystems and species, including terrestrial, aquatic and marine pest species.

These issues are addressed by objectives, policies and methods that aim to safeguard Northland's ecological integrity by protecting significant indigenous biodiversity, and to maintain and enhance the region's indigenous ecosystems and habitats. The threat of pest species is acknowledged, as is the requirement for key regulatory methods to be included within regional and/or district plans in addition to support for voluntary pest management efforts. The regulatory methods include:

- Required provision within regional plans to control land or water use and development that could cause aquatic pest species to be released or otherwise spread;
- Required provision within district plans to control the introduction or keeping of species with recognised pest potential i.e. those listed within this regional Pest Plan; and
- Required allowance within both regional and district plans for pest control activity in order to allow quicker responses to pest incursions and to reduce procedural costs for those responsible for undertaking pest management.

There is also a commitment to work with district councils, the Department of Conservation, iwi and affected landowners to establish priorities on indigenous biodiversity and pest control that enable co-ordinated and effective pest management in areas of significant indigenous vegetation and significant habitats of indigenous fauna.

Regional plans

The regional plans prepared by the council contain objectives, policies and rules for managing resource management issues including plant and animal pest control. Currently these plans are the Regional Water and Soil Plan, the Regional Coastal Plan, and the Regional Air Quality Plan.

These plans include rules on the use of pesticides and herbicides to ensure any associated adverse environmental effects are appropriately managed. The plans also include specific rules to help prevent the introduction of pest species and allow for their removal where they are found to occur.

These plans cover:

- The effects of land use activities on water and soil in Northland;
- The introduction or planting of aquatic pest species in the bed of lakes or rivers;
- The aerial application of pesticides and herbicides; and
- The introduction and spread of exotic species which represent a threat to significant marine indigenous vegetation (where practicable).

These plans are currently under review and will be combined into a single regional plan. The draft plan proposes to include a number of new provisions relating to pest management.

2.2.3 Local Government Act 2002

The purpose of the Local Government Act 2002 is to provide a framework and powers for local authorities to decide how they will undertake their activities. The

Local Government Act currently underpins the funding of biosecurity activities through the collection of both general and targeted rates.

Northland Regional Council is mandated under the Local Government Act to:

- Perform funding functions, such as rating; and
- Perform duties under Acts other than the Local Government Act.

While planning and delivering pest management objectives could fall within powers and duties under the Local Government Act, using legislation focused on managing pests at the regional level, i.e. the Biosecurity Act, is considered the most transparent and efficient approach.

Long Term Plan 2015-2025

Council's Long Term Plan (2015-2025) maintains a focus on pest management activities in Northland. The plan proposes that the council will provide the services of:

- Reducing the impact of introduced pests on the environment, economic and social values;
- Protecting the health of forests and lakes through effective regional pest control; and
- Promoting community involvement in pest management, including tangata whenua, communities, district councils and other stakeholders.

The plan provides the necessary funding, via rates and user charges, for the operational and planning activities associated with pest management.

2.3 Relationship with the National Policy Direction

The National Policy Direction became active on 17 August 2015. The stated purpose of the National Policy Direction is to ensure that activities under Part 5 of the Act (Pest Management) provide the best use of available resources for New Zealand's best interests, and align with each other (when necessary), to help achieve the purpose of Part 5. The National Policy Direction includes direction on:

- Setting pest and pathway management plan objectives;
- The types of programmes to be used in pest and pathway management plans;
- The matters to be considered in analysing the benefits and costs of dealing with specific pests under a pest or pathway management plan;
- The matters to be considered in determining cost allocation for implementing a pest or pathway management plan; and
- The matters to be considered before including a good neighbour rule in a pest or pathway management plan.

This Regional Pest Management and Marine Pathway Management Plan must not be inconsistent with the National Policy Direction.

National Policy Direction requirements	Steps taken to comply
Programme is described	The types of programmes described comply with the directions of Section 5 of the National Policy Direction. The terms Exclusion, Eradication, Progressive Containment and Sustained Control have been used in preparing this plan.
Objectives are set	The contents of Section 5.1 of the Proposed Plan comply with clause 4 of the National Policy Direction.
Benefits and costs are analysed	The analysis of benefits and costs has been completed in accordance with the National Policy Direction requirements. Consultation has included Crown agencies, Māori and industry and communities.
Funding rationale is noted	The funding rationale described in Section 13 of the proposed plan has been developed in accordance with the directions on the allocation of costs for pest management and pathway plans.

National Policy Direction requirements	Steps taken to comply
Good Neighbour Rules are described	Good Neighbour Rules have been developed in line with clause 8 of the National Policy Direction. Consultation with affected parties is ongoing.

Table 2.1 National Policy Direction requirements and the steps taken to comply with them.

2.4 Other statutory requirements

Activities in implementing these plans must comply with other legislation. Other acts with relevant requirements include the Wild Animal Control Act 1977, Wild Animal Control Amendment Act 1997,Wildlife Act 1953, Reserves Act 1977 and the Conservation Act 1987.

a. The Wild Animal Control Act 1977 controls the hunting and release of wild animals and 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 Minister of Conservation's consent. Control of wild animals under this Pest Plan has this consent.
b. The Wildlife Act 1953 controls and protects wildlife not subject to the Wild Animal Control Act 1977. It defines wildlife which is not protected (e.g. feral cattle, feral cats, feral dogs), and others which are considered game e.g. mallard ducks, black swan, and which are partially protected or 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 (e.g. stoat, weasel, polecat). The Director-General of Conservation must approve any plans to control injurious birds (e.g. rooks) and as yet there has been no such requirement to approve such plans within Northland.
c. The role of regional councils under the Reserves Act 1977 and the Conservation Act 1987 is generally limited to advocacy.

2.5 Relationship with other pest and pathway management plans

This plan must not be inconsistent with:

a. any national pest management or regional pest management plan that is focused on the same organism;
b. any regulation; or
c. any pathway management plan.

Northland Regional Council shares a boundary with Auckland Council. This is unique, particularly for marine management, in that the statutory management of the Kaipara Harbour is shared. It is in the interests of efficient and effective pest management that the pest management objectives between neighbouring councils are not inconsistent with each other. In developing the Pest and Marine Pathway Plan, Northland Regional Council has given regard to the aims and objectives of the Auckland Council pest management plan. The two councils have worked closely to identify approaches to managing pests common to both Regional Pest Management Plans.

Council is also aware of, and has given regard to, the control of unwanted organisms that are under the auspices of central government agencies, and will work with DOC and the Ministry for Primary Industries to ensure the Pest and Marine Pathway plans are not inconsistent with their objectives for unwanted organisms.

Note:

The Act also requires (in Sections 70(2)(f) and 90(2)(e)) that if a plan would affect another pest management plan or pathway management plan, the plan must state how it is proposed to co-ordinate the implementation of the plans.

2.6 Relationship with Māori

One specific purpose of a regional pest management or pathway management plan under the Act is to provide for the protection of the relationship between Māori and their ancestral lands, waters, sites, wāhi tapu and taonga, and to protect those aspects from the adverse effects of pests. Māori involvement in biosecurity is an important part of exercising kaitiakitanga. Māori also carry out significant pest management through their primary sector economic interests and as landowners and/or occupiers.

Council believes it is important to take into account management plans recognised by iwi authorities as repositories of Mātauranga Māori or traditional

ecological knowledge . Mātauranga Māori is a central part of maintaining the mauri of indigenous habitats and biodiversity. The use of this traditional knowledge supports and contributes to Māori aspirations in managing the natural environment from a Māori world view. The council will work in partnership with tangata whenua to better manage the impacts of pests and, on request, will assist in the development of localised pest management plans with Māori. A case study highlighting such partnerships is included in Appendices.

The Local Government Act requires council to recognise and respect the Crown's responsibilities under the Tiriti o Waitangi - Treaty of Waitangi Act 1975. It also requires councils to maintain and improve opportunities for Māori to contribute to decision-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.

2.7 Consultation overview

A stakeholder workshop was held to consult on the management of freshwater pests, site-led programmes, good neighbour rules, and marine pest management. Attendees included representatives from the three district councils in Northland, Department of Conservation, Auckland Council, Māori, Forest and Bird, Landcare groups, Ministry for Primary Industries, Northland Conservation Board and other interested parties. This identified gaps in information and management of pests and resulted in some specific conclusions, including the need for a freshwater plan for managing pests and to do more to prevent new marine organisms establishing in Northland.

Key stakeholders include but are not limited to the following:

- Ministry for Primary Industries
- Department of Conservation
- Industry Federated Farmers
- Hort NZ
- Land owners/occupiers (includes Coastal Marine Area)
- Māori
- Other regional councils
- National agencies/ trusts e.g. Landcare Trust, QEII, Reconnecting Northland , Predator Free NZ, Crown research agencies,
- Community groups/local businesses.

3 Responsibilities and obligations | Takohanga me ngā herenga

3.1 Management agency

Under Sections 73 and 93 of the Biosecurity Act 1993 (the 'Act'), Regional Pest Management Plans and Pathway Management Plans (in this instance, the Marine Pathway Plan) are required to specify the management agency that will be responsible for implementing the plan.

Northland Regional Council is the management agency responsible for implementing this proposed Pest Plan and Marine Pathway Plan. The council is satisfied that it meets the requirements of Section 100 of the Act for management agencies in that it:

- is accountable to the plan funders, including Crown agencies, through the requirements of the Local Government Act 2002;
- is acceptable to the funders and those persons subject to the plans' management provisions because it implemented previous Regional Pest Management Strategies; and
- has the capacity, competency and expertise to implement the proposed Pest Plan and Marine Pathway Plan.

How the council will undertake its management responsibilities is set out in Part Three (Procedures) of the proposed plans and in council's operational plans.

3.2 Compensation and disposal of receipts

The Proposed Pest Plan and Marine Pathway Plan do not provide for compensation to be paid to any persons meeting their obligations under their implementation. However, should the disposal of a pest or associated organism provide any net proceeds, a person will be paid disbursement in the manner noted under Section 100I of the Act.

3.3 Affected parties

3.3.1 Responsibilities of owners and/or occupiers

A number of agencies and individuals have roles and responsibilities for pest management. These are generally set out in the Biosecurity Act. In addition to the council, the following parties also play a part in the management of pests in Northland:

- The public
- Individuals (including landowners, occupiers and those who occupy the Coastal Marine Area)
- The Crown
- Territorial local authorities
- Roading authorities
- Rail corridor occupiers.

Their roles are briefly explained below.

Public

The general public has an interest in reducing the impacts of pests on Northland's social, economic, environmental and cultural well-being. Public awareness, behaviour, participation and support are fundamental to effective pest management. Ultimately, central and local government are accountable to local communities.

Individuals (landowners/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 council. They must never sell, propagate, distribute or keep pests.

An owner and/or occupier cannot 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. RMA and/or the Hazardous Substances and New Organisms Act 1996).

The proposed Pest Plan treats all private land equitably and emphasises the responsibilities and obligations of all landowners and/or occupiers, including Māori. Council acknowledges the complex and variable relationships of Māori land ownership and occupation. This includes multiple owners (including lessees) or a range of corporate management systems under the Companies Act 1993 or Te Ture Māori Whenua Act 1993. Where owners and/or occupiers are unknown, the Māori Land Court or the Registrar of Companies may help to identify and communicate with them. Within Northland, the approximate area of land under multiple ownership is unknown. This is significant to the regional interest if the proposed plan is implemented; or, conversely, is a risk if communicating with owners and/or occupiers about their obligations and responsibilities in the Pest Plan and Marine Pathway Plan is an issue.

3.3.2 Crown agencies

The Crown has an interest in protecting the national interest and ensuring the pest management system is equitable, efficient and achieves the best overall outcomes for New Zealand and under the Treaty of Waitangi and international treaties. The Crown is also a landowner and protects the public's interest in the land of the Crown, including land managed by the Department of Conservation.

3.3.3 Territorial local authorities

Three territorial authorities are contained within Northland:

- Far North District Council;
- Kaipara District Council; and
- Whangarei District Council.

Each territorial authority will be bound by the rules in these plans. Territorial local authorities are required to control pests on land that they occupy in accordance with the rules of the Proposed Pest Plan and Marine Pathway Plan. Each territorial local authority must meet the costs of complying with the proposed Pest Plan and Marine Pathway Plan. Where relevant, the regional council believes there is benefit in developing operational plans with territorial local authorities to limit the spread of pests and facilitate effective pest management.

3.3.4 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 (New Zealand Transport Agency and district/city councils) or adjoining land occupiers responsible for pest management in road reserves (see Section 6(1) of the Act).

The territorial local authorities are the roading authorities for local roads, and the New Zealand Transport Agency is the roading authority for State Highways. Council considers that the New Zealand Transport Agency is not part of the Crown for the purposes of the Act, in light of the decision of the Environment Court in Mehrtens v NZ Transport Agency (EnvC C165/2000), and therefore falls within the definition of 'occupier' for the purposes of obligations for pest control on road reserves or verges in terms of the Act (as described in Part Two of this plan). Accordingly, the New Zealand Transport Agency has the same obligations as any other land occupier.

3.3.5 Rail

KiwiRail is also deemed not to be the Crown for the purposes of the Act and comes within the definition of an occupier of that land under the Act. Accordingly, it has obligations and responsibilities for pest management on the land that it occupies, equal to those of other land occupiers. KiwiRail and the regional council have signed a Memorandum of Understanding to describe their mutual obligations and expectations.

4 Organisms declared as pests | Raupori e tauākī ngārara

The organisms listed in Table 4.1 ' Organisms classified as pests' are classified as pests. The table also indicates what management programme or programmes will apply to the pest and if a Good Neighbour Rule applies.

Attention is also drawn to the statutory obligations of any person under s52 and s53 of the Biosecurity Act 1993 (the 'Act'). Those sections ban anyone from selling, propagating, breeding or distributing any pest, or part of a pest, covered by the Pest Plan. These sections also relate to unwanted organisms, whether or not they are in a plan. Non-compliance with s52 and s53 is an offence under the Act, and may result in the penalties noted in s157(1).

Common name	Scientific name	Programme	Page
African feather grass	*Cenchrus macrourus*	Progressive Containment Plants	Page 44
Agapanthus	*Agapanthus praecox*	Banned from Sale & Distribution	Page 67
Akebia	*Akebia quinata*	Eradication Plants	Page 34
Asian paddle crab	*Charybdis japonica*	Sustained Control Marine	Page 132
Asiatic knotweed	*Fallopia japonica*	Exclusion Plants	Page 29
Australian droplet tunicate	*Eudistoma elongatum*	Sustained Control Marine	Page 133
Balloon vine	*Cardiospermum grandiflorum*	Eradication Plants	Page 34
Bathurst bur	*Xanthium spinosum*	Sustained Control Plants	Page 59
Bat-wing passion flower	*Passiflora apetala*	Eradication Plants	Page 34
Big headed ant	*Pheidole megacephala*	Exclusion Animals	Page 76
Brazilian pepper tree*	*Schinus terebinthifolius*	Sustained Control Plants	Page 59
Broom	*Cytisus scorparius*	Banned from Sale & Distribution	Page 67
Brown bullhead catfish	*Ameiurus nebulosus*	Sustained Control Freshwater	Page 116
Brush wattle	*Paraserianthes lophantha*	Banned from Sale & Distribution	Page 67

Common name	Scientific name	Programme	Page
Buddleia	*Buddleja davidii*	Banned from Sale & Distribution	Page 67
Camphor laurel	*Cinnamomum camphora*	Banned from Sale & Distribution	Page 67
Cape honey flower	*Melianthus major*	Banned from Sale & Distribution	Page 67
Cape ivy	*Senecio angulatus*	Banned from Sale & Distribution	Page 67
Cape tulip	*Moraea flaccida*	Eradication Plants	Page 35
Cathedral bells	*Cobaea scandens*	Eradication Plants	Page 36
Cats - feral and stray	*Felis catus*	Sustained Control Animals	Page 79
Century plant	*Agave americana*	Banned from Sale & Distribution	Page 68
Chinese knotweed	*Persicaria chinensis*	Exclusion Plants	Page 29
Chilean rhubarb	*Gunnera tinctoria*	Eradication Plants	Page 36
Climbing spindle berry	*Celastrus orbiculatus*	Exclusion Plants	Page 29
Coastal banksia	*Banksia integrifolia*	Banned from Sale & Distribution	Page 68
Contorta pine	*Pinus contorta*	Sustained Control Plants	Page 64
Cotoneaster	*Cotoneaster glaucophyllus, C. franchetii*	Banned from Sale & Distribution	Page 68
Deer - feral	*Dama, Odocoileus & Cervus spp. & hybrids*	Sustained Control Animals	Page 86
Eastern water dragon	*Intellagama lesueurii lesueurii*	Eradication Freshwater	Page 99
Eel grass	*Vallisneria australis*	Eradication Freshwater	Page 95
Eleagnus	*Eleagnus x reflexa*	Banned from Sale & Distribution	Page 68
Elephant's ear	*Alocasia brisbanensis*	Banned from Sale & Distribution	Page 68
English Ivy	*Hedera helix*	Banned from Sale & Distribution	Page 68

Common name	Scientific name	Programme	Page
Evergreen buckthorn	*Rhamnus alaternus*	Eradication Plants	Page 39
Field horsetail	*Equisetum arvense*	Eradication Plants	Page 39
Firethorn	*Pyracantha angustifolia*	Eradication Plants	Page 39
Furcraea	*Furcraea spp.*	Banned from Sale & Distribution	Page 68
German ivy	*Delairea odorata*	Banned from Sale & Distribution	Page 68
Giant hogweed	*Heracleum mantegazzianum*	Exclusion Plants	Page 30
Goat - feral	*Capra hircus*	Sustained Control Animals	Page 80
Gorse*	*Ulex spp.*	Sustained Control Plants	Page 60
Gravel groundsel*	*Senecio skirrhodon*	Sustained Control Plants	Page 60
Greater bindweed	*Calystegia silvatica*	Banned from Sale & Distribution	Page 69
Gypsywort	*Lycopus europaeus*	Eradication Plants	Page 40
Hakea	*Hakea spp.*	Banned from Sale & Distribution	Page 69
Himalayan fairy grass	*Miscanthus nepalensis*	Banned from Sale & Distribution	Page 69
Himalayan honeysuckle	*Leycesteria formosa*	Banned from Sale & Distribution	Page 69
Holly-leaved senecio	*Senecio glastifolius*	Exclusion Plants	Could not findID-926261-2904
Houttuynia	*Houttuynia cordata*	Exclusion Plants	Page 30
Indian ring-necked parakeet	*Psittacula krameri*	Exclusion Animals	Page 76
Japanese mantis shrimp	*Oratosquilla oratoria*	Sustained Control Marine	Page 133
Jasmine	*Jasminum polyanthum*	Banned from Sale & Distribution	Page 69
Kangaroo acacia	*Acacia paradoxa*	Banned from Sale & Distribution	Page 69
Kauri dieback	*Phytophthora agathidicida*	Sustained Control Diseases	Page 89

Common name	Scientific name	Programme	Page
Koi carp	*Cyprinus carpio*	Progressive Containment Freshwater	Page 102
Lantana	*Lantana camara*	Progressive Containment Plants	Page 46
Lesser knotweed	*Aconogonon campanulatum*	Eradication Plants	Page 40
Lily of the valley vine	*Salpichroa origanifolia*	Banned from Sale & Distribution	Page 69
Manchurian wild rice	*Zizania latifolia*	Progressive Containment Freshwater	Page 49
Marshwort	*Nymphoides montana*	Exclusion Freshwater	Page 93
Mediterranean fanworm	*Sabella spallanzanii*	Sustained Control Marine	Page 134
Mexican feather grass	*Nassella tenuissima*	Eradication Plants	Page 40
Mickey Mouse plant	*Ochna serrulata*	Eradication Plants	Page 40
Mile-a-minute	*Dipogon lignosus*	Progressive Containment Plants	Page 51
Monkey musk	*Erythranthe guttata*	Eradication Freshwater	Page 41
Mustelids	*Mustela furo, M.erminea & M.nivalis vulgari*	Sustained Control Animals	Page 83
Nardoo	*Marsilea mutica*	Eradication Freshwater	Page 95
Nassella tussock	*Nassella trichotoma*	Eradication Plants	Page 41
Noogoora bur	*Xanthium strumarium*	Exclusion Plants	Page 31
Nutgrass	*Cyperus rotundus*	Eradication Plants	Page 41
Old man's beard	*Clematis vitalba*	Exclusion Plants	Page 31
Oxylobium	*Callistachys lanceolata*	Banned from Sale & Distribution	Page 70
Pampas	*Cortaderia jubata & C. selloana*	Banned from Sale & Distribution	Page 70
Paperbark poplar	*Melaleuca quinquinervia*	Banned from Sale & Distribution	Page 70
Perch	*Perca fluviatilis*	Progressive Containment Freshwater	Page 109

Common name	Scientific name	Programme	Page
Periwinkle	*Vinca major*	Banned from Sale & Distribution	Page 70 Page 61
Phoenix palm*	*Phoenix canariensis*	Sustained Control Plants	Page 61
Phragmites	*Phragmites australis*	Exclusion Plants	Page 31
Pig - feral	*Sus scrofa*	Sustained Control Animals	Page 82
Possum	*Trichosurus vulpecula*	Sustained Control Animals	Page 83
Prickly moses	*Acacia verticillata* (*A. v. subsp. cephalantha & A. v. subsp. ruscifolia*)	Banned from Sale & Distribution	Page 70
Privet*	*Ligustrum spp.*	Sustained Control Plants	Page 62
Pultenaea	*Pultenaea daphnoides*	Progressive Containment Plants	Page 54
Purple loosestrife	*Lythrum salicaria*	Exclusion Plants	Page 32
Pyura sea-squirt	*Pyura praepetualis & P.doppelgangera*	Sustained Control Marine	Page 135
Queen of the night*	*Cestrum nocturnum*	Sustained Control Plants	Page 62
Rabbit	*Oryctolaques cuniculus cuniculus*	Sustained Control Animals	Page 84
Rainbow lorikeet	*Trichoglossus haematodus*	Exclusion Animals	Page 76
Rat	*Rattus spp.*	Sustained Control Animals	Page 84
Red-eared slider turtle	*Trachemys scripta elegans*	Eradication Freshwater	Page 97
Rhus tree*	*Toxicodendron succedaneum*	Sustained Control Plants	Page 63
Rook	*Corvus frugilegus*	Exclusion Animals	Page 77
Royal fern	*Osmunda regalis*	Eradication Plants	Page 42
Rudd	*Scardinius erythrophthalmus*	Sustained Control Freshwater	Page 116
Salvinia	*Salvinia molesta*	Eradication Freshwater	Page 96
Sea Spurge	*Euphorbial paralias*	Exclusion Plants	Page 32
Senegal tea	*Gymnocoronis spilanthoides*	Eradication Freshwater	Page 96
Sexton's bride	*Rhaphiolepis umbellata*	Banned from Sale & Distribution	Page 70

Common name	Scientific name	Programme	Page
Snake-neck turtle	*Chelodina longicollis*	Eradication Freshwater	Page 97
Spartina	*Spartina alterniflora, S. anglica & S. townsendii*	Eradication Plants	Page 42
Styela sea squirt	*Styela clava*	Sustained Control Marine	Page 135
Sycamore	*Acer pseudoplatanus*	Banned from Sale & Distribution	Page 70
Sydney golden wattle	*Acacia longifolia*	Banned from Sale & Distribution	Page 71
Taiwan cherry	*Prunus campanulata*	Banned from Sale & Distribution	Page 71
Tench	*Tinca tinca*	Progressive Containment Freshwater	Page 113
Wallaby	*Macropus, Petrogale & Wallabia spp.*	Exclusion Animals	Page 77
Water hyacinth	*Eichhornia crassipes*	Eradication Freshwater	Page 97
Water poppy	*Hydrocleys nymphoides*	Exclusion Freshwater	Page 93
Wild ginger*	*Hedychium flavescens & H.gardnerianum*	Sustained Control Plants	Page 64
Wilding conifers*	*Pseudostuga & Pinus spp.*	Sustained Control Plants	Page 64
Wilding kiwifruit	*Actinidiaceae spp.*	Banned from Sale & Distribution	Page 71
Woolly Nightshade*	*Solanum mauritianum*	Sustained Control Plants	Page 65
Undaria seaweed	*Undaria pinnatifida*	Sustained Control Marine	Page 136
Velvet groundsel	*Roldana petasitis*	Banned from Sale & Distribution	Page 71
Velvetleaf	*Abutilon theophrasti*	Exclusion Plants	Page 32
Yellow flag iris	*Iris pseudacorus*	Eradication Plants	Page 42

Table 4.1 Organisms classified as pests

* Good Neighbour Rules

5 Programmes and attributes | Ngā kaupapa me ngā ahua

5.1 Objectives

Objectives have been set for each pest or class of pests. As required by the National Policy Direction, the objectives include:

- the particular adverse effect(s) (s54(a) of the Act) to be addressed;
- the intermediate 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).

Table 5.1 'Example of objective' gives an example of an objective in each category.

Category	Objective
Exclusion pests	For the duration of the Pest Plan, avoid impacts to biodiversity, cultural and economic values by preventing the establishment of exclusion pests in Northland. Council will search for and control new incursions of pests that are present in New Zealand but not yet established in Northland which have been identified as having the potential to be a serious pest in the future. Section 100V of the Act may be used to investigate emergency control of new incursions of pests that are not otherwise listed in the Pest Plan.
Eradication pests	For the duration of the Pest Plan, reduce impacts to biodiversity, cultural and economic values by eradicating identified pests in Northland. The intermediate outcome is to eradicate the pest in an area. In the short to medium term, infestation levels will be reduced to the point where it becomes difficult to detect the pest.
Progressive containment pests	For the duration of the Pest Plan, reduce impacts to biodiversity, cultural and economic values by containing and, where practicable, reducing the geographic distribution of pests in Northland. The intermediate outcome is to contain and reduce the geographic distribution of the pest to an area over time. Progressive containment pests are those where a pest is at high densities in parts of Northland, but of low extent or limited range. Eradication is not feasible, but it is feasible to prevent the pest from spreading to other parts of Northland or to eradicate the pest from other parts of Northland.
Sustained control pests	For the duration of the Pest Plan, reduce impacts to biodiversity, cultural and economic values by controlling identified pests in Northland and preventing unreasonable impacts from these plants spreading across property boundaries and causing unwanted effects on adjacent or nearby neighbours' assets and values. The intermediate outcome is to provide for the sustained control of the pest to a level where externality impacts are manageable. The focus is on ensuring densities do not reach a level where they are causing significant externality impacts.

Table 5.1 Example of objective

Classifying pests into categories makes it easier to understand the potential risks and impacts of those pests. The council has used an 'invasion curve model' to help classify pests and guide decision making on pest management options.

Invasion curve

The invasion curve is a simple descriptive model (Figure 5.1 'Invasion curve graph'; derived from Williams, 1997) that demonstrates basic pest population dynamics and can be used to help guide strategy objectives and management programmes for individual pests. There is a strong relationship between where a pest sits on the invasion curve and the likelihood of controlling it. The invasion curve has four stages which can be explained as follows:

1. Absent: These pests have not yet established in Northland, or all known sites have been eradicated. The most effective form of management is to continue to exclude them.
2. Lag stage: This is the initial slow establishment stage. Pest numbers are low, the rate of population increase is slow and distribution is limited. The most cost effective option during this stage may be eradication, to prevent further establishment.
3. Explosion stage: The explosion stage occurs once a pest has adapted to its environment and has reached a population base that allows rapid growth in population size and range. At this stage it is not realistic or cost effective to eradicate the pest, but it may be possible to prevent further spread through containment.
4. Established stage: This stage occurs when the rapid growth in population size and range slows as the pest fills most of its available habitat. At this stage, pests can only be suppressed to mitigate their impacts.

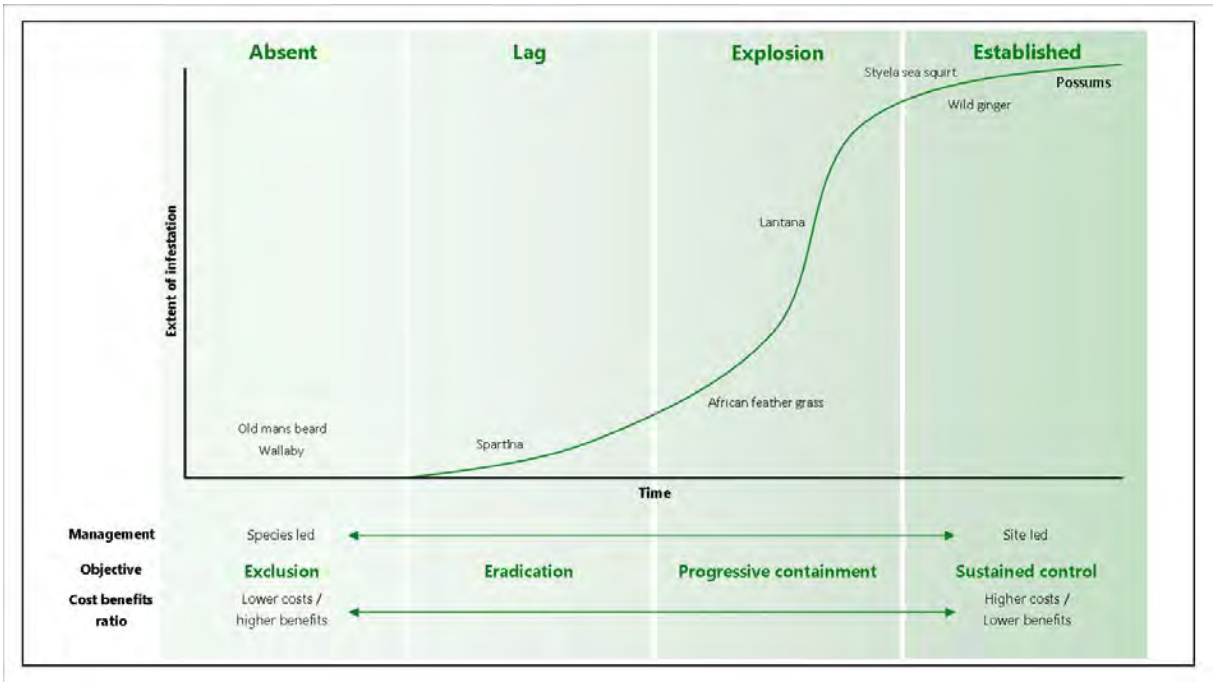


Figure 5.1 Invasion curve graph

5.2 Pest management programmes

One or more pest management programmes will be used to control pests and any other organisms covered by the Pest Plan. The types of programme are defined by the National Policy Direction 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 five programmes are described below.

1. Exclusion Programme: to prevent the establishment of the subject, or an organism being spread by the subject, that is present in New Zealand but not yet established in an area.
2. 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.
3. Progressive Containment Programme: to contain or reduce the geographic distribution of the subject, or an organism being spread by the subject, to an area over time.
4. 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.

Vector Management: Pathway Management Plan

The intermediate outcome for the programme is to:

- Reduce the spread of harmful organisms to and within Northland for the duration of the plan.

5.3 Principle measures to manage pests

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

Requirement to act

Land owners and/or occupiers or other persons may be required to act where pest or pathway management rules dictate:

- pests are to be controlled;
- management plans are to be prepared and submitted;
- the presence of pests is to be reported;
- actions are to be reported (type, quantity, frequency, location, programme completion); or
- pests are not to be spread (propagated, sold, distributed), and
- pathways are to be managed (for example, vessel hulls).

Council inspection

- Inspection by council may include staff:visiting places 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);
- managing compliance to regulations (rule enforcement, action on default, prosecution, exemptions);
- taking limited control actions, where doing so is effective and cost efficient; or
- monitoring effectiveness of control.

Service delivery

Council may deliver the service:

- where it is funded to do so within a rating district;
- on a user pays basis;
- by providing control tools, including sourcing and distributing biological agents, or provisions (for example, traps, chemicals).

Council will support the development of tools and best practice guidelines to manage pests.

Advocacy and education

Council may:

- provide education, advice, awareness and publicity activities to owners and/or occupiers and the public about pests and pathways (and control of them);
- encourage owners and/or occupiers to control pests;
- facilitate or fund community and land owners and/or occupier self-help groups and committees;
- work co-operatively with other agencies and stakeholders with control, advocacy, and the sharing or sourcing of funding;

- promote industry requirements and best practice to contractors and owners and/or occupiers;
- encourage owners and/or occupiers and other persons to report pests they find or to control them; or
- facilitate or commission research.

5.4 Rules

Rules play an integral role in securing many of the pest management outcomes sought by the Proposed Pest Plan and Marine Pathway Plan. They create a safety net to protect 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 pest management plans.

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

i. specify if the rule is to be designated as a 'Good Neighbour Rule';
ii. specify if breaching the rule is an offence under the Act;
iii. specify if an exemption to the rule, or any part of it, is allowable or not; and
iv. explain the purpose of the rule.

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

The National Policy Direction and accompanying guidance notes provide extra requirements to include in the rules of 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.

An example of a Good Neighbour Rule concerning owners and/or occupiers of land follows:

Rule 6.4.14; "Land occupiers within Northland shall destroy all wild ginger within 10m of an adjacent property, where the adjacent or nearby land occupier is taking reasonable measures to manage wild ginger or its impacts on pastoral production or environmental values. This rule will be enforced on receipt of a complaint from a directly affected land occupier."

An example of a Pest Plan rule that refers to owners and/or occupiers of land follows:

Rule 6.4.15; "Land occupiers within Northland must destroy all wild ginger in the operational areas of a quarry and a 50 strip of land around the operational areas of a quarry."

"A breach of this rule will create an offence under section 154N(19) of the Act."

Exemption to rule 6.4.15

Where existing vegetation around a quarry reduces the risk of wild ginger spreading, the 50m buffer zone may be reduced by written agreement with the council.

6 Plants | Ngā tarutaru

Pest plants threaten native forest, wetlands, lakes and production land across Northland, preventing seedling regeneration and invading pasture, wetlands and native forests. Many species have seeds that last years in the soil, requiring extensive monitoring and surveillance programmes. Northland's warm and wet climate favours the establishment of pest plants and their spread is aided by wind, water, rhizome creep, fragments, birds, animal and humans. Many of these plants are also extraordinarily hardy and difficult to control or eradicate.

K. Hansen

6.1 Exclusion plants

The exclusion plants are potential pest plants which are not known to have established in Northland, or have previously established and have been eradicated. These pest plants all have the potential to establish here and are capable of causing adverse effects to the environmental, economic, social or cultural values of the region. The following information applies to all of the exclusion plants.

Objective

For the duration of the Pest Plan, avoid impacts to biodiversity, cultural and economic values by preventing the establishment of exclusion plants in Northland.

Aims

- The exclusion plants will be detected before they become widely established in Northland.
- A prompt response with appropriate funding will be initiated to control or manage infestations in Northland.

Banned from sale and distribution

Under sections 52 and 53 of the Biosecurity Act 1993 no person can sell, propagate, breed, distribute or otherwise spread any pest in this plan, or any unwanted organism. Not complying with section 52 or 53 is an offence under the Act, and may result in the penalties noted in s157(1).

Rules

Rule 6.1.1

Every person who sees, or suspects the presence of any exclusion plant, shall immediately report the sighting to the Northland Regional Council.

Rule 6.1.2

No person shall possess any exclusion plant (including any seeds or live vegetation) within the Northland region.

A breach of these rules will create an offence under Section 154 N(19) of the Act.

Principal measures

Requirement to act

- People are required to report the presence or suspected presence of the exclusion plants and may not possess those pests.
- The purpose of the rules is to assist in preventing the exclusion plants from becoming established in Northland.

Council inspection

- Council staff and/or their contractors will conduct searches in areas that are vulnerable to infestation by the exclusion plants.
- Council staff may undertake compliance activities when required, such as rule enforcement, action on default, prosecution and processing exemptions.

Service delivery

- Eradication of infestations of the exclusion plants will be attempted by the council in conjunction with relevant Crown agencies and stakeholders where practicable.

Advocacy and education

- Council will provide training to relevant council staff and stakeholders to help them identify exclusion plants and assist in early detection.
- Council will provide advice, attend events and undertake publicity campaigns to increase public awareness of the exclusion plants.

Asiatic knotweed (*Fallopia japonica*) and Giant knotweed (*Fallopia sachalinensis*)

Also known as: Japanese knotweed, *Reynoutria japonica, Reynoutria sachalinensis, Polygonum sachalinense.*

These two species grow in shrubland and riparian areas. They can spread rapidly, forming dense stands and out-competing native species. Their tough shoots and roots can break through gravel, tarmac and even concrete. Asiatic knotweed has zig zag, red-purple shoots which appear early in spring and become green in summer. In late summer it produces masses of creamy white flowers. Giant knotweed looks similar but is taller.

Photo; Weedbusters

Chinese knotweed (*Persicaria chinensis*)

Chinese knotweed is a hardy, fast-growing weed that tolerates a wide range of conditions. It forms dense mats which suppress native plants, particularly along forest fringes. It can grow as a shrub up to 1m high or as a scrambling vine. The leaves are wavy-edged with a white v-shaped blotch, and the flowers are pink/cream.

Photo; Vinayaraj

Climbing spindle berry (*Celastrus orbiculatus*)

Climbing spindleberry is a deciduous climber mainly found in scrub, shrub-land and young forest. It grows up to 15m high, strangling and smothering vegetation as it climbs and causing tree canopies to collapse. It has serrated leaves and produces clusters of small green flowers. Yellow-orange capsules split open to reveal a scarlet fruit.

Photo; D. Smith

Giant hogweed (*Heracleum mantegazzianum*)

Photo; T. English

Also known as: wild rhubarb, cartwheel flower, wild parsnip, cow parsnip.

Giant hogweed is a perennial herb that grows along the banks of rivers or streams. It grows up to 6m tall, and forms dense colonies that suppress the growth of native plants and grasses. When it dies down in winter it leaves bare banks liable to erosion or to invasion by other weeds. It is also poisonous to humans. It has large serrated leaves and produces large, umbrella-like clusters of greenish-white flowers.

Holly-leaved senecio (*Senecio glastifolius*)

Photo; T. Willis

Also known as: pink ragwort

Holly-leaved senecio is an erect perennial herb that mainly grows near the coast. It is an aggressive invader that is a threat to dune and coastal sites. This plant grows up to 1.5m high and has holly-like toothed leaves. Clusters of flowers occur in October, and are purple, mauve or pink. Holly-leaved senecio can be mistaken for purple groundsel, an introduced plant that grows in sand dunes.

Houttuynia (*Houttuynia cordata*)

Photo; A. van den Bos

Also known as: chameleon plant, ground ivy

Houttuynia is a dense groundcover that likes damp, shady sites in wetlands, gardens, riparian margins, forest, and shrubland. Its rampant growth can rapidly displace native plants in forest and wetland ecosystems. Its heart-shaped leaves are usually multi-coloured and, when crushed, they smell of pepper, coriander, or orange. Flowers are small and white and densely clustered on short spikes.

Noogoora bur (*Xanthium strumarium*)

Also known as: Noogoora bur, rough cockle bur

Noogoora bur is a fast-growing summer annual that can reach heights of 2.5m. It favours fertile soils and is often found close to water. It contains chemicals that can impede the growth and germination of neighbouring plants. This fast-growing and highly competitive weed can cause significant losses in many crops. It has clusters of distinctive, egg-shaped burs that contain seeds.

Photo; Karduelis

Rule 6.1.3

Land owners or occupiers must destroy all Noogoora bur on land that they occupy, prior to bur formation.

Old man's beard (*Clematis vitalba*)

Also known as: traveller's joy.

Old man's beard is a deciduous climbing vine that grows up to 20m tall and likes plenty of light. It smothers and collapses even tall trees and can reduce a forest to an impenetrable, low-growing infestation of the vine. Fragrant, creamy-white flowers are produced from December to May, followed by dense, fluffy clusters of seeds. Currently, there are no known sites of Old man's beard in Northland.

Photo; J. Hazley

Phragmites(*Phragmites australis*)

Phragmites is a perennial grass that grows up to 3m tall on water margins. It has bamboo-like stems, long, tapering leaves leaves and large, fluffy, purplish flower heads. In its native range, phragmites forms dense patches on the edges of waterways and displaces native vegetation. It can block drainage channels, trap and accumulate sediment and exacerbate flooding.

Phragmites is a Notifiable Organism (Biosecurity (Notifiable Organisms) Order 2010) and is part of the National Interest Pests Response (NIPR). Management of this pest plant is led by the Ministry for Primary Industries..

Photo; NIWA

Purple loosestrife (*Lythrum salicaria*)

Purple loosestrife is an erect, summer-green perennial herb that grows 1-2m tall. The woody stems are square in cross-section. It has narrow leaves, which are usually paired and are heart-shaped at the base. From December to February it produces 20-25cm long spikes of purple-magenta flowers. The flowers are followed by blackish seed capsules that are 3-5mm long. Purple loosestrife is a highly aggressive invader of damp ground, wetlands and shallow water. It over-tops native species with its dense, bushy growth and is long-lived. It tolerates hot or cold conditions and low to high nutrient levels, but is intolerant of salt water.

Photo, NIWA

Sea spurge (*Euphorbial paralias*)

Sea spurge is a fleshy, bluish-grey/green coastal plant. It forms dense infestations in open sand areas which can alter the natural movement of sand and displace native species. It grows up to 70cm tall and produces a cluster of cup-shaped flower heads on a stalk. Stems contain a milky sap that is toxic to people and animals. Capsule-like fruit produces large buoyant seeds that can be carried vast distances by ocean currents.

Photo; F. Vincentz

Velvetleaf (*Abutilon theophrasti*)

Velvetleaf is a summer-growing annual plant that can grow up to 1.5m tall or more. In countries where it has been introduced it affects many arable crops by competing for nutrients, space and water. It also produces chemicals that inhibit the germination and growth of other species. It has large, velvety heart-shaped leaves, small yellow-orange flowers and distinctive black seed pods.

Photo; Salicyna

Rule 6.1.4

Land owners must destroy all velvetleaf on land that they occupy, prior to seed formation.

6.2 Eradication plants

Eradication plants are present in low numbers or have a limited distribution within Northland, and eradicating them appears to be feasible and cost-effective. These pests all have the potential to establish widely in the region, and are capable of causing adverse effects to the environmental, economic, social or cultural values of the region. Council is either the lead agency or a partner for eradicating these pests from the region.

Objective

For the duration of the Pest Plan, reduce impacts to biodiversity, cultural and economic values by eradicating identified pests in Northland.

- Eradication plants will be controlled to zero-density in Northland by 2027.
- A prompt response with appropriate funding will be initiated to control or manage infestations in Northland.

Banned from sale and distribution

Under sections 52 and 53 of the Biosecurity Act 1993 no person can sell, propagate, breed, distribute, release or otherwise spread any pest in this plan, or any unwanted organism. Not complying with section 52 or 53 is an offence under the Act, and may result in the penalties noted in s157(1).

Rules

Rule 6.2.1

Every person who sees, or suspects the presence of, any eradication plant shall immediately report the sighting to Northland Regional Council.

Rule 6.2.2

No person shall possess any eradication plant (including any seeds or live vegetation) within Northland.

A breach of these rules will result in an offence under Section 154 N(19) of the Act.

Principal measures

Requirement to act

- People are required to report the presence or suspected presence of the eradication plants and may not possess the pests.
- The purpose of the rules is to assist in preventing the eradication plants from spreading in Northland.

Council inspection

- Council staff and/or their contractors will conduct searches in areas that are vulnerable to infestation by the eradication plants.
- Council staff may undertake compliance activities when required, such as rule enforcement, action on default, prosecution and processing exemptions.

Service delivery

- Eradication of infestations of the eradication plants will be attempted by the council in conjunction with relevant Crown agencies and stakeholders where practicable.

Advocacy and education

- Council will provide training to relevant council staff and stakeholders to help them identify eradication plants and assist in early detection.
- Council will provide advice, attend events and undertake publicity campaigns to increase public awareness of the eradication plants.

Akebia (*Akebia quinata*)

Also known as: chocolate vine, five-leaved akebia.

Akebia is a twining vine or ground cover found in open to semi-shaded sites along forest edges or road sides. It grows rapidly ,forming dense patches that out-compete and kill ground cover, shrubs and young trees. From August to October it has chocolate/purple-coloured flowers, which smell like chocolate or vanilla. Fruit are purple-violet, sausage-shaped pods.

Photo; L. Sherwood

Balloon vine (*Cardiospermum grandiflorum*)

Balloon vine is a vigorous climbing vine which prefers moist areas along river edges, forest margins and road edges. It can climb up into trees or spread at ground level, blanketing other vegetation. The vine may change the ecology of an area and inhibit re-colonisation by native species. It has fragrant white flowers and its balloon-like seed pods are light green or straw coloured and papery in the autumn.

Photo; Forest & Kim

Bat-wing passion flower (*Passiflora apetala*)

Bat-wing passionflower is an invasive, shade-tolerant vine that can grow in a variety of locations. It is very invasive, and can smother, shade and strangle the vegetation it grows on. It has distinctive bat-wing shaped leaves, small yellow or light-green coloured flowers and produces small black berries. Infestations are known to exist in and around Kerikeri, Kaitāia, Mangonui, Waikare Inlet, Kamo, and Whau Valley.

Cape tulip (*Moraea flaccida*)

Also known as: *Moraea collina, Homeria collina.*

Cape tulip is a perennial herb that grows best in open environments, such as grasslands and pasture. It has the potential to establish dense colonies over wide areas of pasture, and could have a serious economic impact on agriculture if widely established. It produces shoots in winter, and dies back in early summer. Flowers are six-petalled and usually salmon-pink.

Photo; A. Massyn

Cathedral bells (*Cobaea scandens*)

Cathedral bells is a fast-growing evergreen vine that can grow to 6m tall. It climbs over trees and shrubs, forming a dense canopy that smothers them. It usually has three pairs of oval leaflets with twining tendrils growing from the midrib, and green bell-shaped flowers turn purple as they mature. The 'fruit' comprises hard, oval capsules that split to release numerous winged seeds.

Photo; J. Boow

Chilean rhubarb (*Gunnera tinctoria*)

Chilean rhubarb is a giant, rhubarb-like herb with huge prickly leaves that can reach up to 2.5m tall. It likes damp sites on wetland and riparian margins, coastal cliffs, moist banks and disturbed sites. It produces abundant fruit, which are dispersed by birds, and forms dense patches that exclude virtually all other plants. In winter it dies back to large creeping stems and large, sausage-like flower spikes that are up to 1m tall. The spikes are covered in little flowers that are followed by tiny orange fruits.

Chilean rhubarb is an eradication plant within the mapped areas (Figure 6.1 and 6.2). The eradication plant rules apply in these mapped areas, but section 52 and 53 of the Biosecurity Act 1993 apply throughout Northland.

Exemption to rule 6.2.2

Plants may be kept outside the identified areas in Figures 6.1-6.2. Section 52 and 53 of the Act still apply.

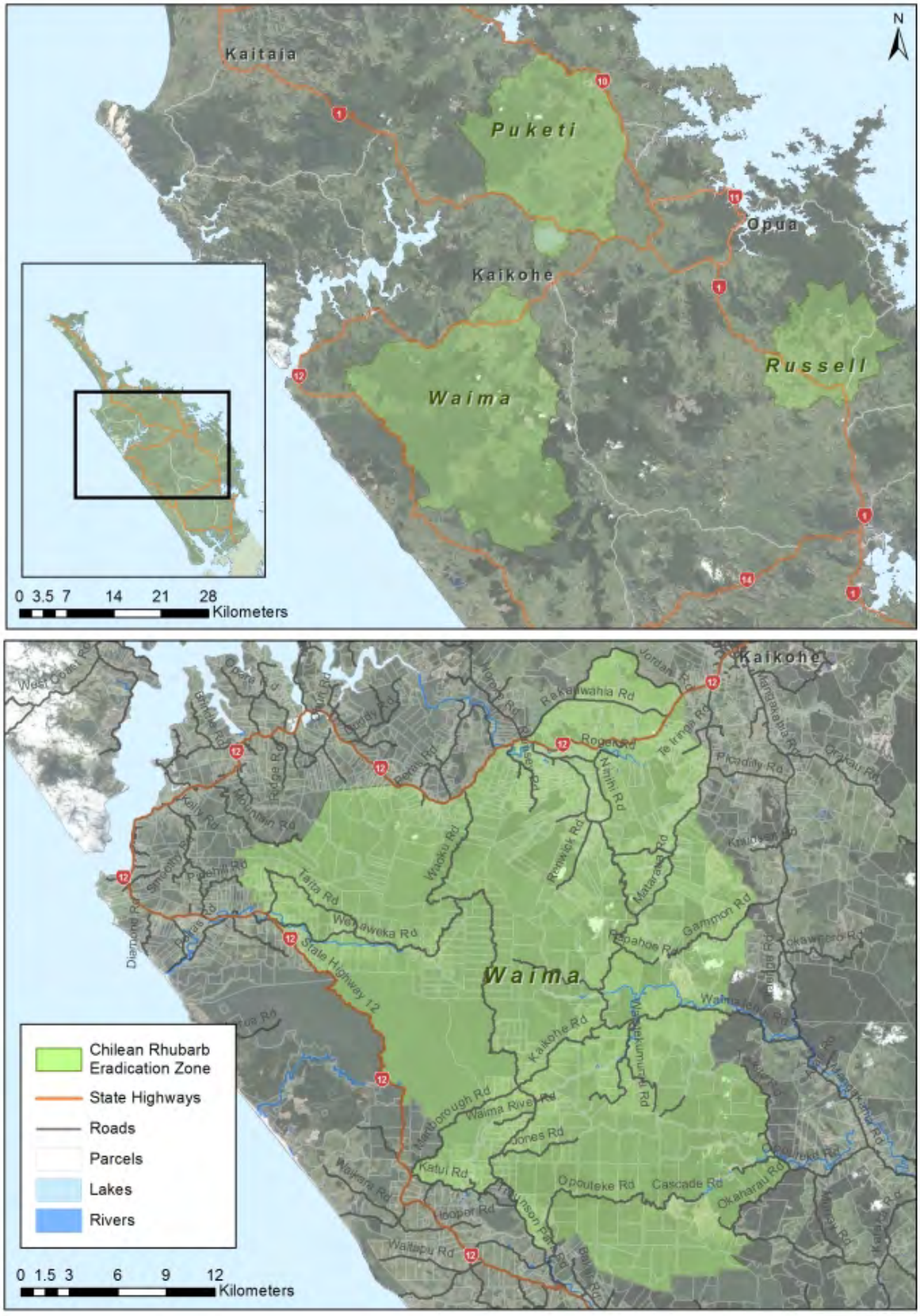


Figure 6.1 Chilean rhubarb eradication zones (1).

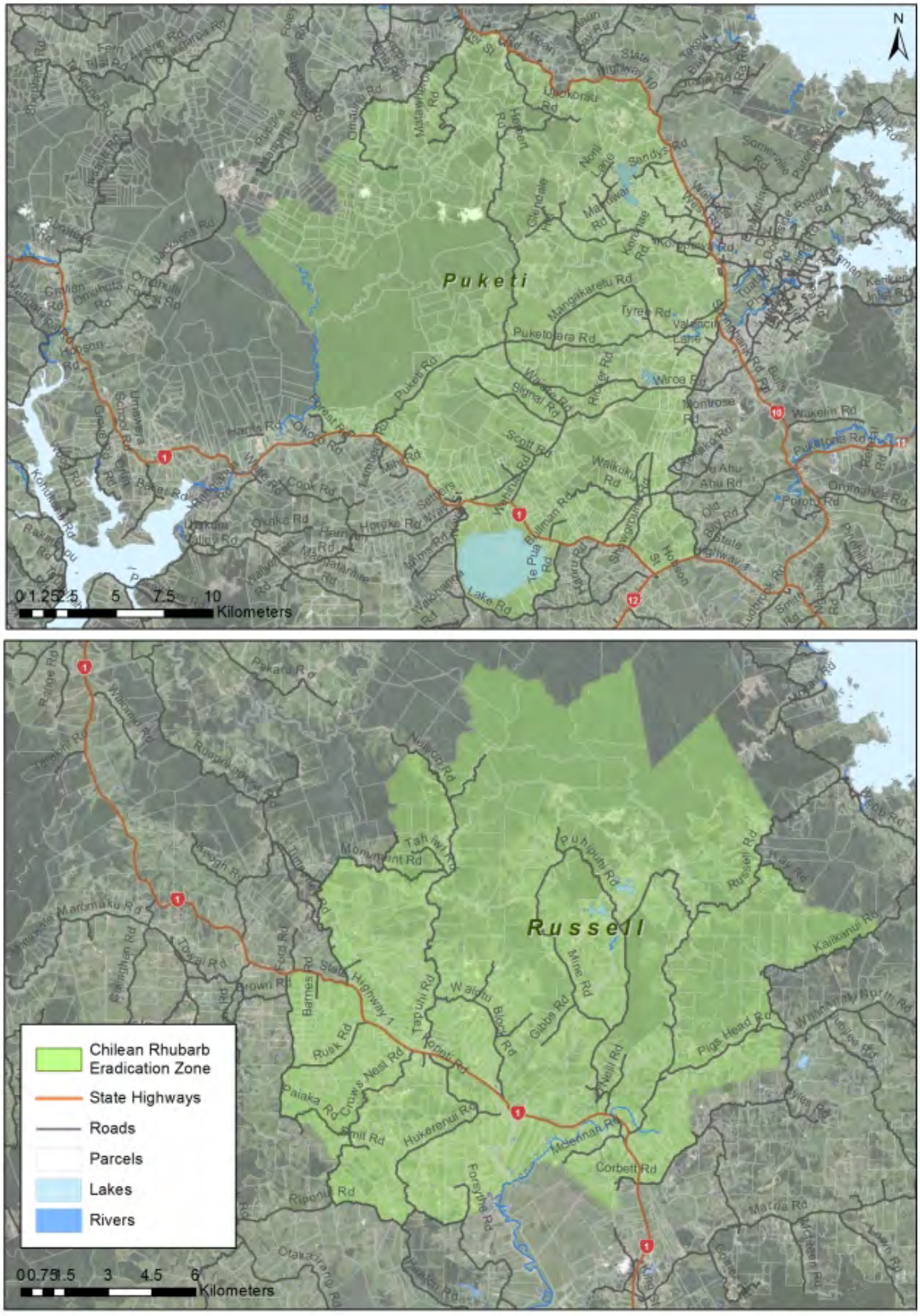


Figure 6.2 Chilean rhubarb eradication zones (2)

Evergreen buckthorn (*Rhamnus alaternus*)

Also known as: Italian evergreen buckthorn, Italian buckthorn.

Evergreen buckthorn is an evergreen shrub or tree that tolerates a wide range of conditions. It forms dense stands and develops a dense leafy canopy under which no other plants can grow. It can grow to 5m tall, but may become a stunted shrub in exposed sites. It has distinctive purplish shoots and glossy berries which ripen from dark-red to black from December to January.

Photo; H. Cox

Field horsetail (*Equisetum arvense*)

Also known as: horsetail.

Field horsetail is an erect, primitive fern-ally that grows up to 80cm high in a range of habitats. This aggressive weed forms extensive colonies which are difficult to kill. It produces fertile stems that apear in spring and die back in summer, and infertile stems that resemble miniature pine trees. It dies back in winter to a deep, branching root system with round tubers.

Photo; Weedbusters

Firethorn (*Pyracantha angustifolia*)

Also known as orange or yellow firethorn; Pyracantha.

Firethorn is a large spiny shrub growing 2-5m tall and up to 5m across. It can form dense stands, out-competing native species and restricting access to grazing by domestic and wild animals. It has hairy stems, shiny dark green leaves with undersides that are hairy and whitish, and white flowers in dense clusters. Its small berry-like fruit turn yellow or orange when ripe.

Photo; JLPC

Gypsywort (*Lycopus europaeus*)

Gypsywort is a perennial herb up to about 1m tall. It lacks the characteristic minty smell of similar species. Flowers occur summer-autumn and are small, white to pale pink/purple. This pest mainly occurs in the margins of lakes, rivers, ponds and other water bodies, in drainage ditches, damp pasture and waste land. Gypsywort is invasive in Waikato and overseas. It can spread rapidly via water movement followed by localised vegetative spread. It is presumed to displace native vegetation, but this and other potential biodiversity impacts are data deficient.

Photo; H. Zelif

Lesser knotweed (*Aconogonon campanulatum*)

Also known as: *Persicaria campanulata, Polygonum campanulatum.*

Lesser knotweed is a perennial herb that can grow to 1m tall. Little is known about potential impacts in New Zealand, but in Britain it is a vigorous coloniser that grows in dense patches and suppresses other plants. It has hairy leaves and bunches of white or pink flowers. Lesser knotweed spreads readily from rhizome (root) fragments.

Mexican feather grass (*Nassella tenuissima*)

Also known as: fine-stemmed needle grass.

Mexican feather grass is a densely tufted, perennial tussock grass that grows up to 70cm tall and prefers a dry, temperate climate. This invader crowds out pasture species and reduces productivity because it has no grazing value. Native species can also be replaced in open and coastal areas. Its feathery flower head appears between October and December.

Mickey Mouse plant (*Ochna serrulata*)

Also known as: bird's eye bush.

Mickey Mouse plant is a 1-2m tall shrub found in gardens, derelict building sites and the under-storey and edges of forest. It can form a dense monoculture that prevents regeneration of native species. It is easily dispersed, and could spread from urban areas to other habitats. Its black berry-like fruits are attached to red sepals, resembling the face of Mickey Mouse.

Photo; G. Williams

Monkey musk (*Erythranthe guttata*)

Also known as: monkey flower, *Mimulus guttatus.*

Monkey musk is a soft herb that grows up to 60cm tall, forming bright-green leafy clumps or large masses. It has yellow flowers with red spots on the bearded lower lip, and its seed capsules are 1cm long. This wetland plant grows along freshwater margins but it can also grow partially submerged in water. It will also occur on damp, disturbed ground away from wetlands. Monkey musk can out-compete native plants and has the potential to choke channels and impede drainage. Due to its relatively high light demand, it is out-competed by taller perennial or woody plants.

Photo; Weedbusters

Nassella tussock (*Nassella trichotoma*)

Also known as: serrated tussock.

Nassella tussock is a perennial tussock-forming grass found in dry farmland. It can form dense stands in low-growing plant communities such as pasture, preventing other species from establishing, and making large areas incapable of supporting livestock. It grows up to 1m high and has fine-bladed, wiry leaves. Drooping seed heads have a purplish tinge.

Photo; H. Rose

Nutgrass (*Cyperus rotundus*)

Also known as purple nut sedge.

Nutgrass is a grass-like perennial that grows to about 30cm high. It has been described as one of the 'world's worst weeds' based on its distribution and effect on crops. Nutgrass will compete with other plants for ground resources and is also allelopathic, with the roots releasing substances into the soil that can be harmful to other plants. Its roots are nut-shaped and are the main way in which it spreads.

Photo; J. jose

Rule 6.2.3

Land owners or occupiers must destroy all nutgrass on land that they occupy.

Royal fern (*Osmunda regalis*)

Royal fern is a deciduous fern that has large, feather-like fronds up to 3m long and 75cm wide. The fronds are subdivided twice, yellow-green and tough. Separate fertile fronds are brown and resemble tiny bunches of grapes. A short woody trunk grows up to 1.5m high and plants die back to the woody trunk in winter. Royal fern grows in wet, peaty habitats, roadside drains and occasionally on clay banks next to water bodies. It can naturalise and form dense colonies in a range of wetland habitats, especially in disturbed areas and under the shade of willows or manuka. The plants displace other small native wetland plants.

Spartina (*Spartina alterniflora, S. anglica* and *S. townsendii)*

Also known as: cord grass or salt grass.

Spartina is an estuarine grass that grows in clumps up 1.5m tall. It is an aggressive and persistent invader of inter-tidal mudflats, leading to a loss of habitat for birds and fish, surface flooding on adjacent land, and trapped sediment that raises ground levels. Spartina alterniflora is the most common spartina species in Northland, while S. townsendii is rare.

Yellow flag iris (*Iris pseudacorus*)

Yellow flag iris grows as leafy clumps up to 2m tall. The sword-like leaves emerge in fans from a reddish-purplish base. From October to December it produces pale-yellow to golden-orange flowers that are up to 12cm in diameter and are followed by seed capsules containing many brown, flattened, three-sided, disc-like seeds. Yellow flag iris is a fast-growing and fast-spreading invasive plant that can out-compete other plants, forming almost impenetrable thickets as it over-tops and replaces native species. It can also grow out across the water, forming floating mats that are strong enough to support the weight of a person. It is poisonous to grazing animals.

6.3 Progressive containment plants

Progressive containment plants are present in the region at numbers or distributions that mean eradication is not possible in the short term, but populations can be contained or reduced over time. These pest plants are capable of causing adverse effects to the environmental, economic, social or cultural values of the region.

Objective

For the duration of the Pest Plan, reduce impacts to biodiversity, cultural and economic values by containing and, where practicable,reducing or eradicating populations of pest plants and the geographic distribution of populations in Northland.

Aims

- Populations of African feather grass, Mile-a-minute and Pultenaea outside the mapped containment areas will be eradicated. By 2027 there will be no active African feather grass, Mile-a-minute and Pultenaea sites outside the containment zones.
- Populations of Lantana outside the mapped containment zones will reduce.
- Populations of Manchurian wild rice outside the mapped containment areas will be eradicated. All outlier populations of Manchurian wild rice will be eradicated.
- Populations of African feather grass, Mile-a-minute and Pultenaea inside the containment zones will decrease. By 2027 the size of the containment zone and the density of African feather grass, Mile-a-minute and Pultenaea within it will have reduced.
- Land occupiers will be encouraged to control Lantana on land that they occupy.
- All intransigent populations of Manchurian wild rice will be contained, reduced and eventually eradicated within the Northland region.
- Biocontrol agents for Lantana will be encouraged in Northland, and release will be prioritised inside the containment zones.
- New incursions of African feather grass, Mile-a-minute, Pultenaea and Manchurian wild rice will be detected and controlled before it becomes widely established in Northland.
- A prompt response with appropriate funding may be initiated to control or manage infestations in Northland.

Banned from sale and distribution

Under sections 52 and 53 of the Biosecurity Act 1993, no person can sell, propagate, breed, distribute, or otherwise spread any pest in this plan, or any unwanted organism. Not complying with section 52 or 53 is an offence under the Act, and may result in the penalties noted in s157(1).

Principal measures

Requirement to act

- People are required to report the presence or suspected presence of the progressive containment plants outside the mapped containment areas. Within the containment zones, people are required to implement a management plan to reduce the amount of African feather grass and Pultenaea on their properties to help prevent further spread.
- People are required to report the presence or suspected presence of the progressive containment plants and may not possess those pests outside the mapped containment areas.
- The purpose of the rules is to assist in the progressive containment of African feather grass in Northland.
- People are required to destroy Lantana or to implement a management plan to reduce the amount of Lantana on their property (outside the containment zones) to help prevent further spread.
- The purpose of the rules is to assist in the progressive containment of these pest plants in Northland.

Council inspection

- Council staff and /or their contractors will conduct searches in areas that are vulnerable to infestation by the progressive containment plants.
- Council staff may undertake compliance activities when required, such as rule enforcement, action of default, prosecution and processing exemptions.

Service delivery

- Eradication and reduction of infestations of the progressive containment plants will be attempted by the council in conjunction with relevant Crown agencies and stakeholders where practicable.
- Council will assist in the release of biocontrol agents for Lantana where appropriate.

Advocacy and education

- Council staff will assist land occupiers to develop management plans where required.
- Council will provide training to relevant council staff and stakeholders in the identification of pests to assist in early detection.
- Council staff will provide advice, attend events and undertake publicity campaigns to increase public awareness of pests.

African feather grass (*Cenchrus macrourus*)

Also known as: veld grass, *Pennisetum macrourum*

African feather grass is a perennial grass that forms large clumps up to 2m tall. From November to April, it produces long, thin flower heads. It has a distinctive yellow to purple flower, with prominent bristles. The shape of the flower head distinguishes it from the fluffy flower heads of pampas grass and toe toe. African feather grass requires full sunlight and prefers low-lying areas over drier sites, but it can tolerate drought and establish on dry shady banks. It can completely suppress all other low growing plants, and dense clumps restrict drainage and the movement of animals, people and machinery. African feather grass is very persistent and is difficult to eradicate.

African feather grass.

Rules

Rule 6.3.1

Every person who sees, or suspects the presence of any African feather grass outside the containment areas shall immediately report the sighting to the Northland Regional Council.

Rule 6.3.2

Where African feather grass is present on a property within the containment areas, the occupier shall implement a management plan, agreed to by the Northland Regional Council, that reduces the extent of the infestation on the property and ensures that it does not spread to non-infested areas.

A breach of these rules will create an offence under Section 154 N(19) of the Act.

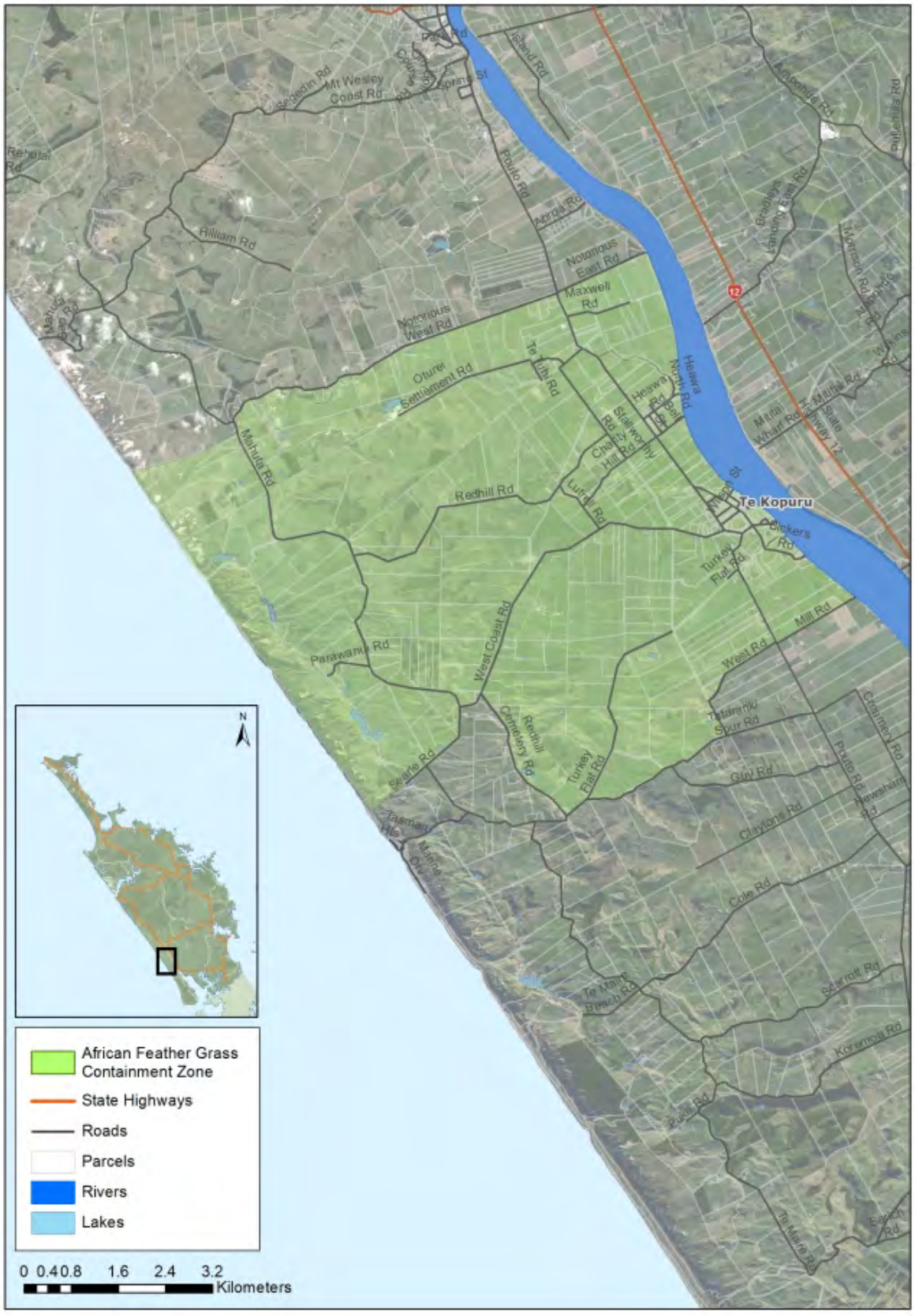


Figure 6.3 African feather grass containment zone.

Lantana (*Lantana camara*) - all varieties

Lantana is a prickly, multi-stemmed, evergreen shrub that grows 2-4m tall. The small flowers grow in clusters, often with more than one colour in a single cluster, for example, yellow and pink. *Lantana camara* var. *aculeata* is the most common variety of lantana in New Zealand and it has small cream and pink flowers. Other varieties have other flower colours, such as orange. The flowers are followed by small blue-black fruits. Lantana produces many well-dispersed seeds, is long-lived, and forms dense thickets that exclude other species. It also produces toxins that poison the soil around it so other species cannot replace it. Lantana is extremely versatile in its habitat preferences and tolerates drought, moderate shade, fire and a range of soil types.

Lantana.

Rules

Rule 6.3.3

Land owners or occupiers must destroy all Lantana on land that they occupy outside the mapped containment zones, where the property occupied is less then 0.5 hectares in size.

Rule 6.3.4

Where Lantana is present on a property larger than 0.5 hectares outside the containment zones, the occupier shall implement a management plan, agreed to by the Northland Regional Council, that reduces the extent of the infestation on the property and ensures that it does not spread to non-infested areas.

A breach of these rules will create an offence under Section 154 N(19) of the Act.

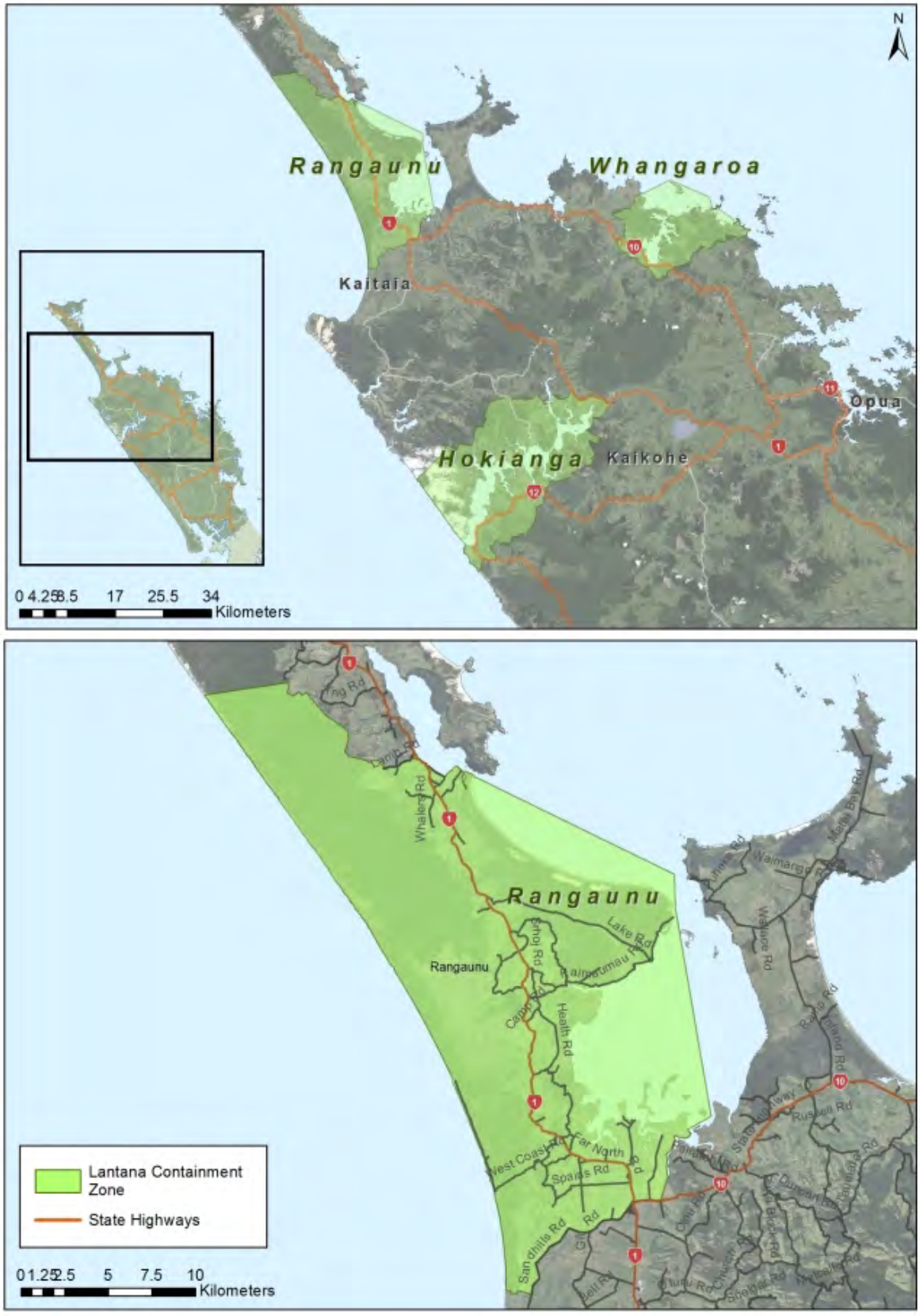


Figure 6.4 Lantana containment zones (1)

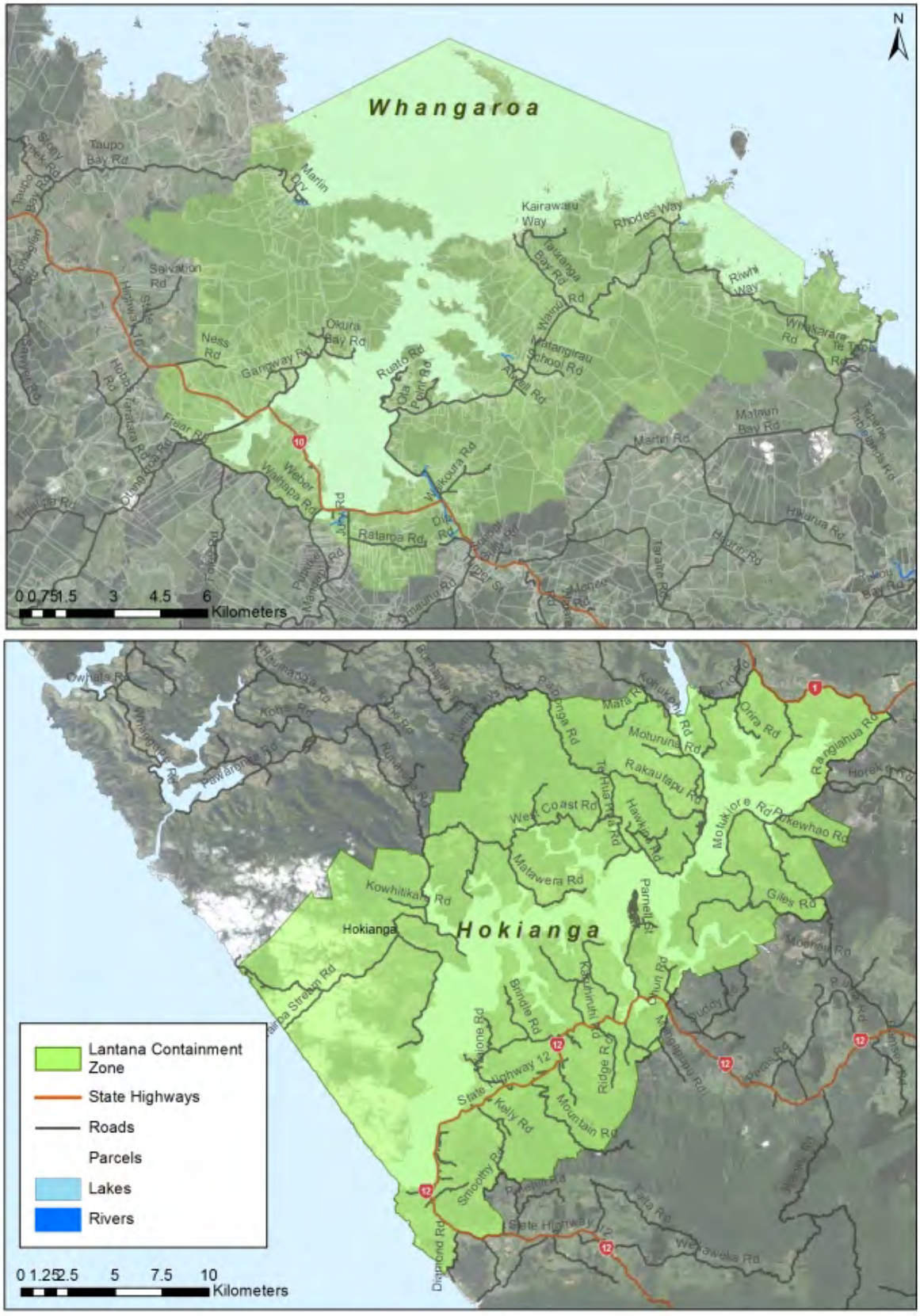


Figure 6.5 Lantana containment zones (2)

Manchurian wild rice (*Zizania latifolia*)

Manchurian wild rice

Also known as: Manchurian rice grass.

Manchurian wild rice is a giant grass that grows up to 4m high. It has harsh, dull green leaves that are 1-2cm wide and grow in fans. The purplish or red-brown flower heads are 40-60cm long and are produced from November to December. Manchurian wild rice is often confused with native raupō and flax, but raupō is slightly smaller and dies back in winter. In New Zealand, Manchurian wild rice has been recorded in lagoons and on river banks, tidal flats, roadside ditches, damp pasture and cropping land. Manchurian wild rice forms dense stands in aquatic or semi-terrestrial situations. It is very invasive and quickly spreads on land that is not grazed. It is tolerant of drought, frost and poor drainage but does not tolerate shade. Regrowth from underground rhizomes occurs after physical damage, such as fire and grazing.

Manchurian wild rice is found primarily in the Kaipara area, especially along the banks of the Northern Wairoa River, where it is widespread and forms dense, continuous infestations. There are other small infestations in the Kaipara, Far North and Whangārei districts.

Rules

Rule 6.3.5

Every person who sees, or suspects the presence of any Manchurian wild rice outside the containment areas shall immediately report the sighting to the Northland Regional Council.

A breach of these rules will create an offence under Section 154 N(19) of the Act.

Other relevant legislation or programmes

Manchurian wild rice is listed as an unwanted organism under the Biosecurity Act 1993, is a notifiable organism (Biosecurity (Notifiable Organisms) Order 2010), and is listed in the National Pest Plant Accord 2012. It is also one of 11 pest species that are part of the National Interest Pests Response (NIPR). Management of this pest plant is funded by the Ministry for Primary Industries and in Northland the programme is managed by the Northland Regional Council. Due to the extremely large scale of the infestation, the programme is reliant upon the continued funding from the Ministry of Primary Industries to achieve its goals.

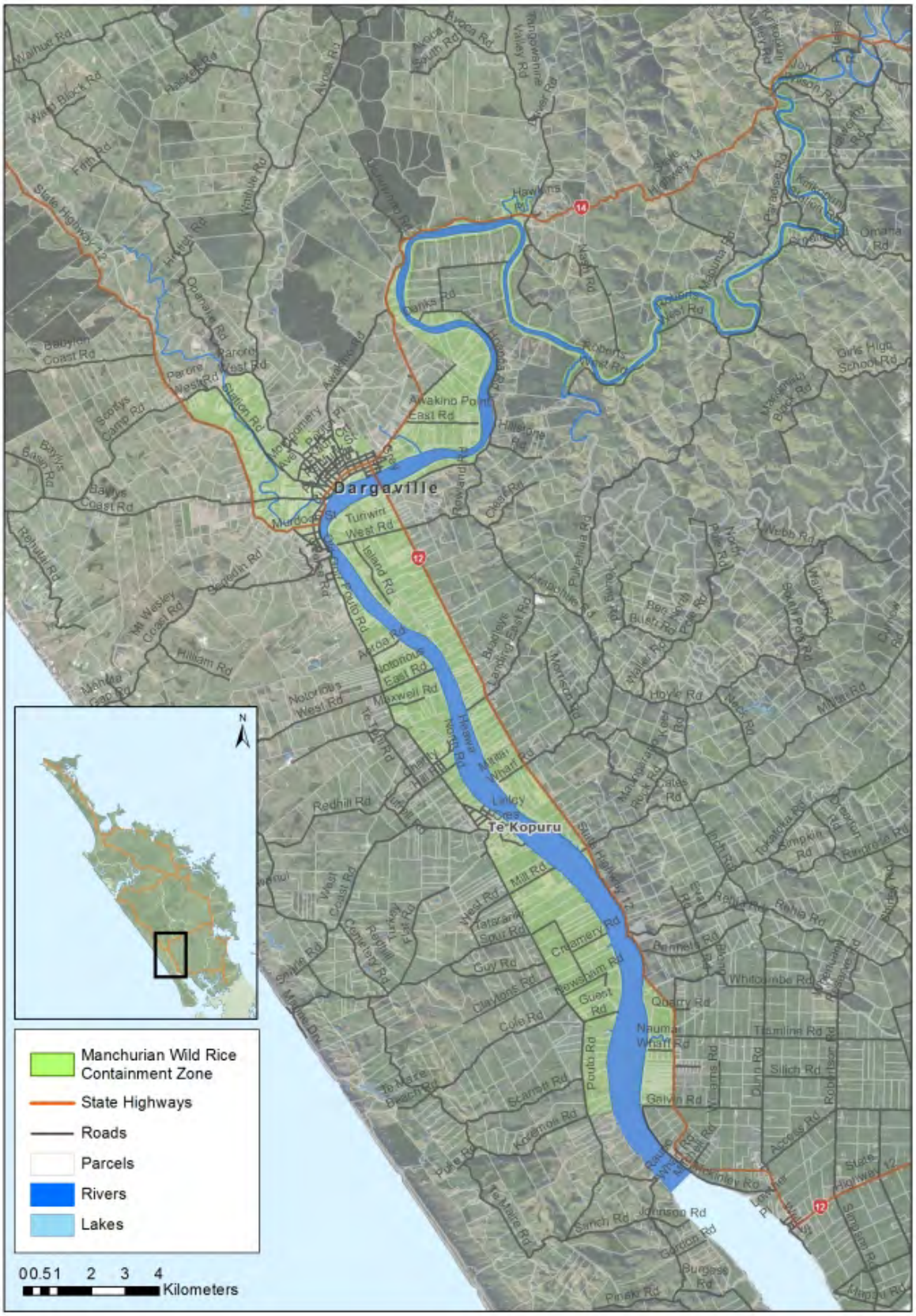


Figure 6.6 Manchurian wild rice containment zone.

Mile-a-minute (*Dipogon lignosus*)

Also known as: Cape sweet pea.

Photo; T. Rodd.

Mile-a-minute is a fast growing evergreen climbing vine. Each leaf has three, roughly triangular to heart-shaped leaflets. Between July and January it produces attractive, pea-type flowers ranging in colour from white, red, pink, and purple. The flowers are followed by sickle-shaped seed pods. Growth and seeding is vigorous, rapidly smothering native vegetation, weighing it down and causing plants to break. It also grows over the ground, smothering native groundcover plants, and reducing species diversity. In Northland, Mile-a-minute has infested a natural area with high ecological values and has the potential to invade forest margins, scrub and shrublands. Most infestations are in gardens, on roadsides and in locations where garden waste has been dumped.

Rules

Rule 6.3.6

Every person who sees, or suspects the presence of any Mile-a-minute outside the containment area/s shall immediately report the sighting to the Northland Regional Council.

Rule 6.3.7

No person shall possess any Mile-a-minute (including any seeds or live vegetation) outside the containment zone in the Northland region.

A breach of this rule will create an offence under Section 154 N(19) of the Act.

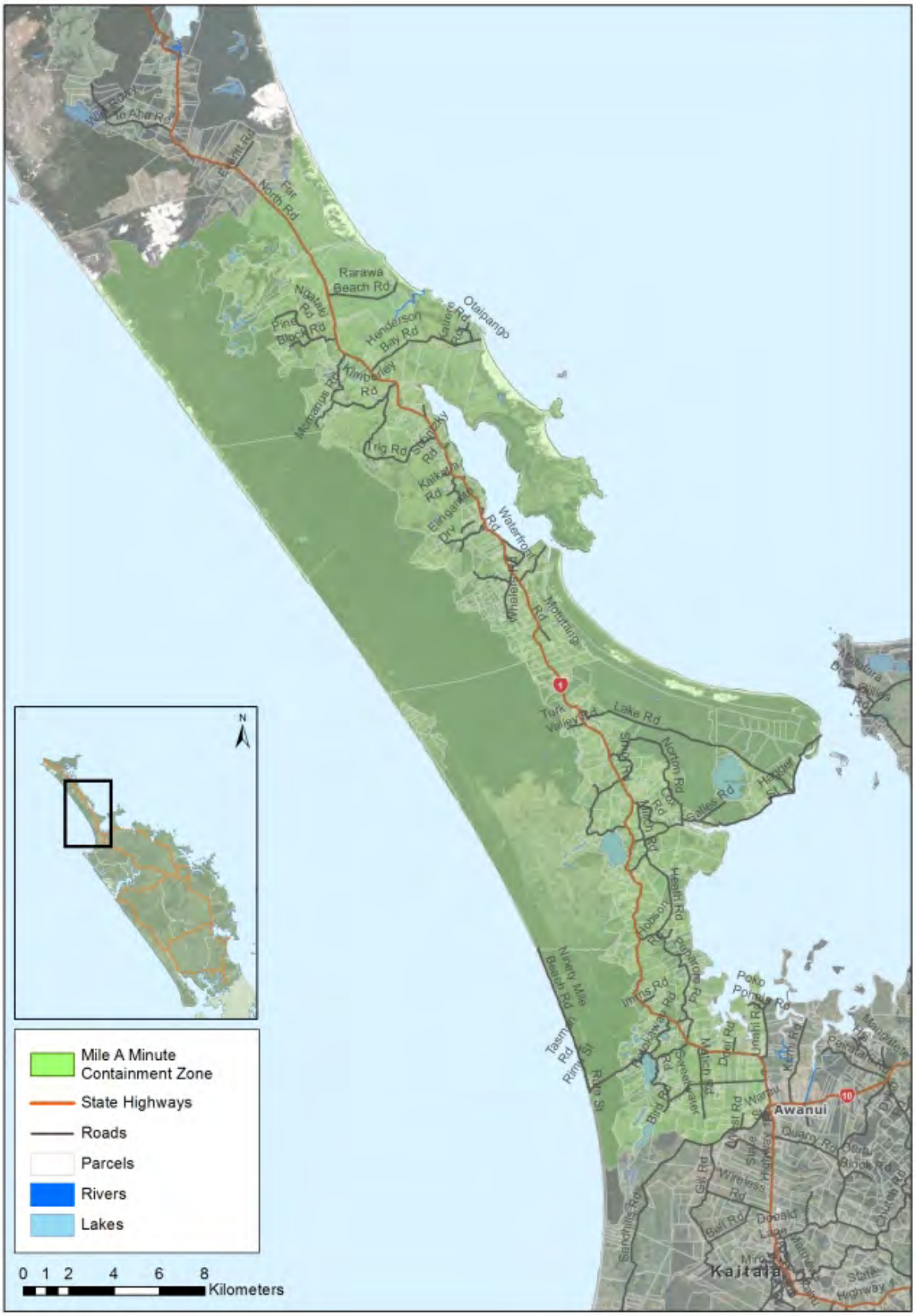


Figure 6.7 Mile-a-minute containment zone.

Pultenaea (*Pultenaea daphnoides*)

Also known as: pea daphne, large-leaf bush pea, Australian bush pea

Pultenaea is a medium-sized shrub that grows to 3m tall. Leaves are up to 40mm long, narrow at the base, broad at the top and end in a narrow point. The pea-like flowers are yellow with red-pink markings in the centre, and are followed by flat pods. Pultenaea has become naturalised at Mangawhai. It is spreading along approximately 2km of roadsides and on a hillside. It is present in manuka shrubland and on the edges of tracks in native forest. Pultenaea is fast-growing but apparently short-lived. It is resistant to drought and frost. Based on observations of the infestation at Mangawhai, it has the potential to invade gumland, shrubland, open road banks, cliffs and other lower fertility sites.

Rules

Rule 6.3.8

Every person who sees, or suspects the presence of any Pultenaea outside the containment areas shall immediately report the sighting to the Northland Regional Council.

Rule 6.3.9

No person shall possess any Pultenaea (including any seeds or live vegetation) outside the containment zones in the Northland region.

Rule 6.3.10

Where Pultenaea is present on a property within the containment areas, the occupier shall implement a management plan that reduces the extent of the infestation on the property and ensures that it does not spread to non-infested areas.

A breach of these rules will create an offence under Section 154 N(19) of the Act.

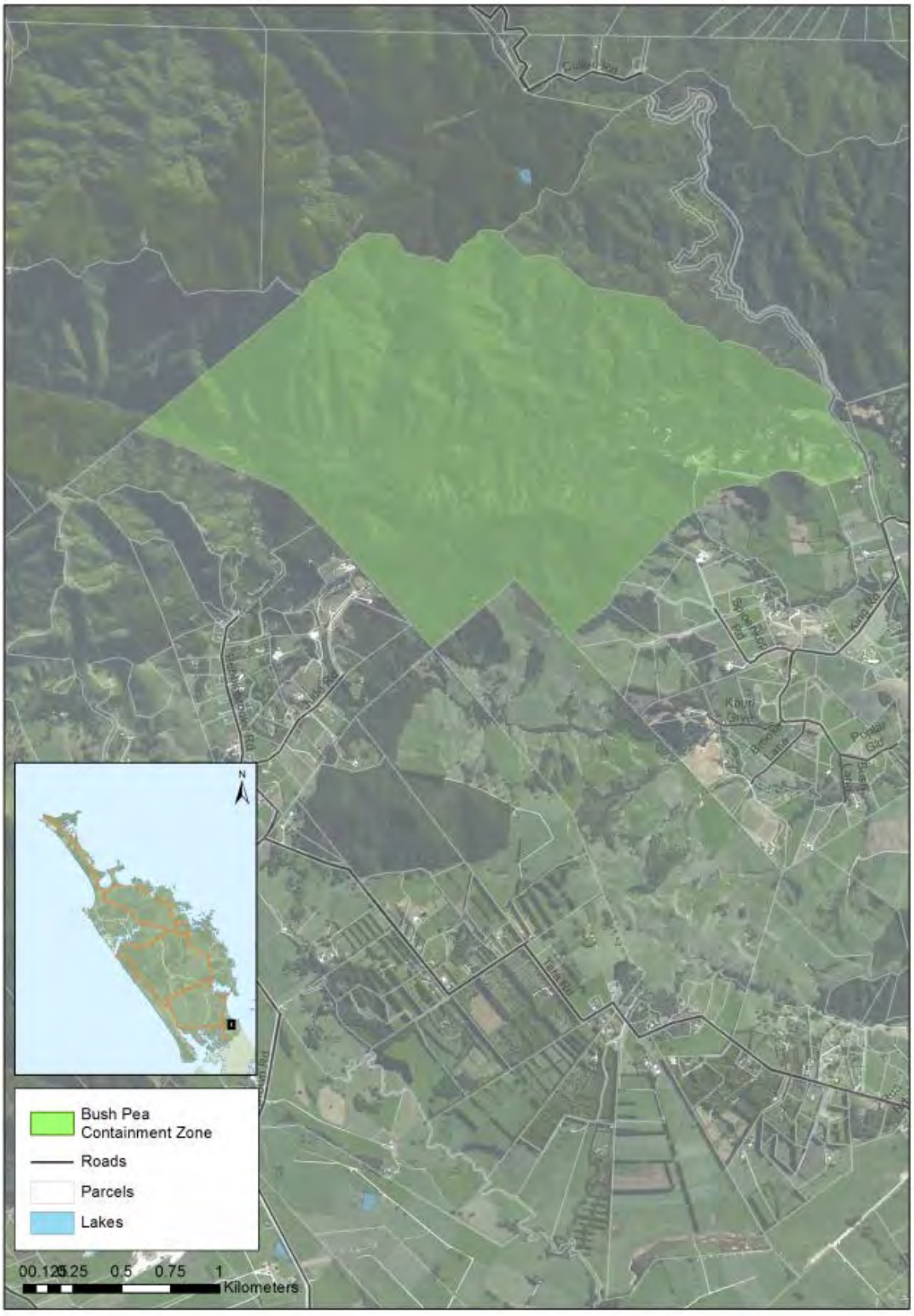


Figure 6.8 Pultenaea containment zone.

6.4 Sustained control plants

The pest plants in the sustained control programme are plants that are widespread in suitable habitat throughout Northland. They all cause adverse effects to the environmental, economic, social or cultural values of the region. Biodiversity programmes involving the sustained control of pest plants are managed outside the pest management plan through the biodiversity enhancement programme.

Land owners and occupiers

In the first instance, the management of most pest plants is the responsibility of individual land occupiers. This is because occupiers generally contribute to the pest plant problem and in turn benefit from the control of the plants. This includes the Crown where good neighbour rules have been identified. A good neighbour rule can help manage the costs incurred by one neighbour due to the spread of pest plants from an adjacent or nearby property. These rules can be useful to ensure that a person who is managing pest plants on a property is not incurring unreasonable ongoing costs resulting from a neighbour not controlling pests. For the good neighbour rules to be enforced, the pest plant must be present at a such a density that significant cost is being imposed on a neighbour or near neighbour.

Objectives

For the duration of the Pest Plan, reduce impacts to biodiversity, cultural and economic values by controlling identified pest plants in Northland and preventing unreasonable impacts from these plants spreading across property boundaries and causing unwanted effects on adjacent or nearby neighbours assets and values.

Aims

- To help landowners, occupiers and the public to gain knowledge and skills to help reduce the impacts and spread of the sustained control pest plants.
- To prevent unwanted effects caused by sustained control pest plants on adjacent or nearby neighbour's assets and values.

Banned from sale and distribution

Under sections 52 and 53 of the Biosecurity Act 1993 no person can sell, propagate, breed, distribute or otherwise spread any pest in this plan, or unwanted organism. Not complying with section 52 or 53 is an offence under the Act, and may result in the penalties noted in s157(1).

Principal measures

Requirement to act

- People are required to undertake actions to help reduce the impacts and spread of the sustained control pest plants and prevent unreasonable impacts from these plants spreading across property boundaries.
- The purpose of the rules is to assist in reducing the impacts of the sustained control pest plants on values and spread to other properties in Northland.

Council inspection

- Council staff and /or their contractors may visit places to determine whether rules and management programmes are complied with and effective.
- Council staff may undertake compliance activities such as rule enforcement, action of default, prosecution and exemptions.

Service delivery

- Council staff will provide education and advice to owners, occupiers and the public about the sustained control pest plants and how to control them.

Advocacy and education

- Council staff will encourage land owners and occupiers to control pest plants.

- Council will provide training to relevant council staff and stakeholders on the identification and control of the sustained control pest plants.
- Council staff will provide advice, attend events and undertake publicity campaigns to increase public awareness of these pest plants.

Bathurst bur(*Xanthium spinosum)*

Also known as: spiny cocklebur.

Bathurst bur is a spiny annual plant that grows up to 1m tall. It has narrow, three-pronged leaves with a white midrib above and a whitish underside. Burs with hooked spines occur in late summer. Bathurst bur spreads entirely by seeds, which are within the spiny burs. Seed may lie dormant for many years before germinating, forming a very long-lived seed bank. Bathurst bur is a highly invasive weed that is capable of growing in a range of habitats and environmental conditions. It is usually found on fertile, disturbed or bare ground, particularly in pasture and cultivated areas.

Rule 6.4.1

Land occupiers within Northland must destroy all Bathurst bur on land they occupy prior to bur formation.

A breach of this rule will create an offence under Section 154 N(19) of the Act.

Brazilian pepper tree (*Schinus terebinthifolius*)

Photo; Forest & K. Starr

Also known as: Christmas berry, pepper tree.

Brazilian pepper tree is a small, fast-growing evergreen tree that grows 3-7m tall. Its short trunk is usually hidden in a dense head of branches with leathery fern-like leaves. Crushed leaves smell peppery or turpentine-like. Small, white flowers on the female trees are followed by bright red fruit. It grows in sites with a range of light levels (though faster in full sunlight) and water availability, and is highly competitive in wet habitats. Brazilian pepper tree fruits, leaves and resinous seep from the trunk may be toxic to humans. They commonly cause an allergic reaction that includes an itchy rash and swelling of the face. In some people, sneezing and asthma-like reactions often occur near blooming plants.

Rule 6.4.2

Land occupiers within Northland must destroy Brazilian pepper tree on their land where the plant exacerbates human health problems. A medical certificate/letter must be provided by the affected person.

Rule 6.4.3

Land occupiers within Northland must destroy all Brazilian pepper tree on their land where it is deemed to be the source of wilding plants.

A breach of this rule will create an offence under Section 154 N(19) of the Act.

Gorse (*Ulex spp.*)

Gorse is a deep-rooted, woody perennial shrub that can grow to 4m tall. It has densely spined branches and is woody when mature. Gorse has bright yellow flowers from May to November, and black seed pods in summer. Gorse seed reserves in the soil are long-lasting and abundant under and near established infestations. Gorse has the ability to occupy a wide range of soil types, and recovers quickly after burning. It very quickly colonises new areas, forming dense thickets. It invades pasture land and roadsides as well as low growing or regenerating native vegetation. However, it can act as a nurse crop for the regeneration of native bush if left for long periods.

Rule 6.4.4

Land occupiers within Northland shall destroy all gorse within 10m of an adjacent property, where the adjacent land occupier is taking reasonable measures to manage gorse or its impacts on pastoral production or environmental values. This good neighbour rule will be enforced on receipt of a complaint from a directly affected land occupier.

Rule 6.4.5

Land occupiers within Northland must destroy all gorse in the operational areas of a quarry and a 50m strip of land around the operational areas of a quarry.

A breach of this rule will create an offence under Section 154 N(19) of the Act.

Exemption

Where existing vegetation around a quarry reduces the risk of gorse spreading, the 50m buffer zone may be reduced by written agreement with the council.

Gravel groundsel (*Senecio skirrhodon*)

Gravel groundsel is a member of the daisy family. It is a semi-annual to perennial bush-like herb that curves upwards in growth and usually grows to 25-40cm tall.

Flowers are bright yellow and appear individually at the tips of stems. The plant has narrow leaves and downy, wind-borne seeds. Preferred habitats include grasslands, coastal areas, waste areas and railway lines. It is an aggressive invader of grasslands and is not eaten by cattle.

Rule 6.4.6

Land occupiers within Northland shall destroy all gravel groundsel within 50m of an adjacent or nearby property, where the adjacent or nearby land occupier is taking reasonable measures to manage gravel groundsel or its impacts on pastoral production or environmental values. This good neighbour rule will be enforced on receipt of a complaint from a directly affected land occupier.

Rule 6.4.7

Land occupiers within Northland must destroy all gravel groundsel in the operational areas of a quarry and a 50m strip of land around the operational areas of a quarry.

A breach of this rule will create an offence under Section 154 N(19) of the Act.

Exemption

Where existing vegetation around a quarry reduces the risk of gravel groundsel spreading, the 50m buffer zone may be reduced by written agreement with the council.

Phoenix palm (*Phoenix canariensis*)

The stocky Phoenix palm has a trunk up to 18m tall and 1.2m in diameter. The trunk has a diamond-shaped pattern. Large leaves form a spreading crown at the top of the trunk and there are sharp spines on the leaf stalks. The cylinder-shaped berries are 1-5cm long, fleshy, date-like, and orange-yellow to dark purple in summer. Phoenix palm prefers coastal cliffs, forest, sand dunes, saline wetlands, urban areas and roadsides. It is capable of invading native bush. Phoenix palm has been widely cultivated as an ornamental in urban gardens and parks. The sharp spines on frond tips can cause minor to moderate injuries and reactions in those who come into contact with the spines.

Photo; Weedbusters

Rule 6.4.8

Land occupiers within Northland must destroy Phoenix palms on land they occupy where the plant exacerbates human health problems. This rule will be enforced on receipt of a complaint from a directly affected person. A medical certificate/letter must be provided by the person affected.

Privet (*Ligustrum spp.*)

Privet is an evergreen shrub or tree and four species are found in New Zealand: Tree privet (*Ligustrum lucidum),* Chinese privet *(Ligustrum sinense),* Privet *(Ligustrum ovalifolium)* and Common privet *(Ligustrum vulgare).* Tree and Chinese privet are common in Northland. Tree privet can grow to 15m tall and has tiny fragrant, cream coloured flowers from November to March, followed by bluish or purplish-black berry-like fruit. Chinese privet grows to more than 5m tall and has loose drooping clusters of fragrant white flowers from July to March, followed by round berries. Privet inhabits bush, gardens, roadsides and ungrazed wasteland areas. It spreads dense carpets of seedlings that displace native shrubs and prevent native plant regeneration. The highly scented flowers are an irritant to most allergy sufferers.

Rule 6.4.9

Land occupiers within Northland shall destroy all Privet within 10m of an adjacent or nearby property, where the adjacent or nearby land occupier is taking reasonable measures to manage Privet or its impacts on pastoral production or environmental values. This good neighbour rule will be enforced on receipt of a complaint from a directly affected land occupier.

Rule 6.4.10

Land occupiers within Northland shall destroy Privet on land they occupy where the plant exacerbates human health problems. This rule will be enforced on receipt of a complaint from a directly affected person. A medical certificate/letter must be provided by the person affected.

A breach of this rule will create an offence under Section 154 N(19) of the Act.

Queen of the night (*Cestrum nocturnum*)

Also known as: night-scented jasmine.

Queen of the night is a shrub up to 2.5 m tall, with oval leaves that have an unpleasant smell when they are crushed. In summer it produces bunches of greenish-white flowers that release a fragrant scent at night. Queen of the night can prevent native plant seedlings from establishing by forming dense stands. All parts of the plant are poisonous to people and animals. Queen of the night may cause hayfever-like symptoms in some people.

Rule 6.4.11

Land occupiers within Northland must destroy Queen of the night on land they occupy where the plant exacerbates human health problems. This rule will be enforced on receipt of a complaint from a directly affected person. A medical certificate/letter must be provided by the person affected.

Rhus tree (*Toxicodendron succedaneum*)

Also known as: Japanese wax tree, wax tree, Synonym - *Rhus succedanea.*

Rhus tree is a small deciduous tree or large shrub that is highly toxic and allergy causing. The tree grows to 8-12m. Its leaves change from their bright green colour to orange/scarlet in autumn. Tiny yellow-green flowers form in spring and early summer, followed by clusters of pale brown papery fruit through autumn and winter. Seed remains viable for many years, and the tree may also reproduce vegetatively by suckering. Rhus tree can be invasive in disturbed sites, forests, open woodlands, urban bushland, roadsides, gardens and waste areas. It is a serious weed in Sydney where birds spread the seeds and thousands of seedlings are found. It appears to be naturalising in Northland, and it is unclear what the impacts might be.

Rule 6.4.12

Land occupiers within Northland must destroy rhus tree on land they occupy where the plant exacerbates human health problems. This rule will be enforced on receipt of a complaint from a directly affected person. A medical certificate/letter must be provided by the person affected.

Rule 6.4.13

Land occupiers within Northland must destroy all rhus tree on land they occupy where it is deemed to be the source of wilding plants.

A breach of this rule will create an offence under Section 154 N(19) of the Act.

Wild ginger - yellow ginger (*Hedychium flavescens*) and kahili ginger (*Hedychium gardnerianum*)

Wild ginger is listed as an unwanted organism under the Biosecurity Act 1993 and is listed in the National Pest Plant Accord 2012. There are two species - yellow ginger and Kahili ginger. Kahili ginger is the most common and most invasive of the two. Both species are non-woody perennials, growing up to 2m tall from thick-branching rhizomes (swollen underground stems). Rhizomes form dense beds up to 1m deep excluding all other species. Kahili ginger produces lemon-yellow flowers with red stamens from January to March, followed by fruiting spikes. Yellow ginger produces scented, cream-coloured flowers in clusters, from May to June and does not produce fruit. Both species form dense colonies in native bush, forestry, road sides and riverbanks, smothering and eventually replacing all other species.

Rule 6.4.14

Land occupiers within Northland shall destroy all Wild ginger within 10m of an adjacent property, where the adjacent or nearby land occupier is taking reasonable measures to manage Wild ginger or its impacts on pastoral production or environmental values. This good neighbour rule will be enforced on receipt of a complaint from a directly affected land occupier.

Rule 6.4.15

Land occupiers within Northland must destroy all Wild ginger in the operational areas of a quarry and a 50m strip of land around the operational areas of a quarry.

A breach of this rule will create an offence under Section 154 N(19) of the Act.

Exemption to rule 6.4.15

Where existing vegetation around a quarry reduces the risk of Wild ginger spreading, the 50m buffer zone may be reduced by written agreement with the council.

Wilding conifers (*Pinus contorta*), douglas fir (*Pseudostuga menziesii*), maritime pine (*Pinus pinaster*) and radiata pine (*Pinus radiata*)

Wilding conifers are the natural regeneration (that is the seedling spread) of introduced conifer trees. They are well established in Northland and their range is increasing. They are of particular concern in drier coastal areas and rare and vulnerable habitats such as gumlands and wetlands at Kaimaumau. *Pinus contorta* has successfully invaded a number of nutrient-poor sites. They reduce the productivity of primary industries and damage environmental, social,

cultural and landscape values. While wilding conifers are pests, planted conifers are valuable resources. Two of the spread-prone conifer species in New Zealand are important commercial species which contribute significantly to forestry exports.

Rule 6.4.16

All land occupiers within Northland shall destroy all wilding conifers present on their land within 10m of an adjacent or nearby property, prior to cone-bearing, where the affected adjacent or nearby land occupier is taking reasonable steps to control wilding conifers on their property to protect pastoral production and biodiversity integrity. This rule will be enforced on receipt of a complaint from a directly affected land occupier.

Exemption to rule 6.4.16

This rule focuses on wilding conifers that are acting as a dispersal source. A good neighbour rule cannot be applied to manage spread from planted conifer plantations (including but not limited to shelter belts, plantation forestry, and amenity plantings), as the cost of control would exceed the benefits. Impacts deriving from commercial and other deliberate plantings of conifers are best managed through other avenues such as the Resource Management Act or through the New Zealand Wilding Conifer Management Strategy.

Woolly nightshade *(Solanum mauritianum)*

Photo; Weedbusters

Also known as: tobacco plant, tobacco tree

Woolly nightshade is a shrub or small tree that can rapidly grow to 10m tall. It has large, grey-green leaves with fine hairs, purple flowers with yellow centres and bunches of yellow berries. Woolly nightshade can invade forest margins, disturbed forest, light gaps within forest, shrublands, riparian margins, estuarine margins, consolidated sand dunes, wetlands and urban areas. It rarely invades intact habitats. Woolly nightshade is widespread throughout the Northland region. It poisons the soil to inhibit or prevent the establishment of native plant seedlings and slows the regeneration of native forests. Even very young plants can produce seed. All parts of the plant are poisonous to humans, especially the green berries. The minute hairs can cause contact irritation or respiratory issues if inhaled when the plant is disturbed.

Rule 6.4.17

Land occupiers within Northland must destroy Woolly nightshade on their land where the plant exacerbates human health problems. This rule will be enforced on receipt of a complaint from a directly affected person. A medical certificate/letter must be provided by the person affected.

6.4.1 Plant nurseries and retail outlets

The following species pose significant risks to various economic, biodiversity, recreational, cultural and aesthetic values of Northland. They are included in the pest management plan to help reduce their spread through sale and distribution.

Objectives

For the duration of the pest management plan, reduce the impacts on values caused by the spread of plants that are sold and distributed through gardening practices.

Aims

- Landowners, occupiers and the public have the knowledge and skills to help reduce the impacts and spread of sustained control plants.
- Land owners and occupiers are encouraged to control these pest plants on land that they occupy.
- Nurseries and plant retail outlets are not selling plants in the National Pest Plant Accord (NPPA), plants banned from sale in Northland, or any other unwanted organism.

Banned from sale and distribution

Under sections 52 and 53 of the Biosecurity Act 1993 no person can sell, propagate, breed, distribute or otherwise spread any pest in this plan, or unwanted organism. Not complying with section 52 or 53 is an offence under the Act, and may result in the penalties noted in s157(1).

Principal measures

Requirement to act

- Nurseries and plant retail outlets are required to ensure that they are not selling any of the species included in the pest management plan, the NPPA or any other unwanted organism.
- The purpose of the rules is to help reduce the spread of these pests caused by sale and distribution.

Council inspection

- Council staff and /or their contractors may visit places to determine whether rules and management programmes are complied with and effective.
- Council staff may undertake compliance activities such as rule enforcement, action of default, prosecution and exemptions.

Service delivery

- Council staff will provide education and advice to owners, occupiers and the public about sustained control pests and how to control them.

Advocacy and education

- Council staff will encourage land owners and occupiers to control pests.
- Council will provide training to relevant council staff and stakeholders regarding the identification and control of sustained control pests.
- Council staff will provide advice, attend events and undertake publicity campaigns to increase public awareness of these pest plants.

Common name	Scientific name	Description
Agapanthus	*Agapanthus praecox*	Agapanthus is widely cultivated in Northland. It grows as clumps of arching, green, strap-like leaves. In summer it produces showy balls of purplish-blue or white flowers that grow at the top of tall stalks. Agapanthus flourishes in coastal, frost-free (or lightly frosted), temperate climates. It is commonly cultivated in public and private gardens. It grows wild on roadsides and in urban areas, on cliffs, streamsides, damp sites within dunes, beside ditches and on forest margins.
Broom	*Cytisus scorparius*	Broom is an aggressive invasive woody shrub, up to 3m tall. Leaves are sparse, mostly narrow and simple. It has golden-yellow flowers in spring and seeds prolifically in summer. Seed pods are black when ripe and explode loudly on warm days, scattering the seed, which is poisonous. It can dominate low canopy habitats and is drought tolerant.
Brush wattle	*Paraserianthes lophantha*	Brush wattle is a short-lived, fast growing tree, usually 5-10m tall, with densely hairy twigs. It has many tiny green-yellow flowers from May to August on flower heads resembling a bottle brush. Flowers are followed by flat, green to brown seed pods, containing long-lived black seeds. Brush wattle forms tall stands that over-top low-growing vegetation. It tolerates high to low rainfall, poor soils, salt, wind and low fertility and fixes nitrogen which can alter soils and change habitats.
Buddleia	*Buddleja davidii*	Buddleia is a fast-growing, woody, deciduous ornamental shrub that grows up to 3m tall. It has mauve to purple flowers with orange centres. The flowers form distinctive cone-shaped hanging clusters of many small flowers from December to February. Buddleia establishes and grows quickly, forming dense thickets in a wide range of habitats, including river beds, streamsides, disturbed forest and shrub land, stony and bare land.
Camphor laurel	*Cinnamomum camphora*	Camphor laurel is an evergreen tree up to 30m high, with a dense and spreading canopy. Leaves are alternate and glossy green. Flowers are minute, white, and borne on panicles near the ends of branches. It is easily identified by the pungent camphor odour arising from crushed leaves or exposed wood. Overseas, it is most commonly naturalised in riparian areas and disturbed areas such as roadsides and fence rows. It is also able to naturalise in both disturbed and undisturbed forest and scrubland areas. The tree has been widely planted as an ornamental.
Cape honey flower	*Melianthus major*	Cape honey flower is a smelly, clump-forming shrub that grows to about 2m tall, with hollow stems and a suckering root system. It has frond-like leaves and is covered in grey, hairy down. Tall, erect flower stalks have foul smelling, dark reddish-brown flowers from July to April. Cape honey flower tolerates wind, salt, hot and cold temperatures, and damp or drought conditions. It is poisonous and not grazed by stock.
Cape ivy	*Senecio angulatus*	Cape ivy is a hairless, scrambling plant which can form a dense tangled shrub 2-3m tall, or a vine able to climb up to 5m. It has wiry stems and very fleshy, leathery leaves with coarse serrations on each side. Dense clusters of yellow, ragwort-like flowers are produced from March to August, followed by fluffy seeds. Cape ivy can become an aggressive weed once established and can scramble over large trees and the ground, forming dense, tall thickets.

Common name	Scientific name	Description
Century plant	*Agave americana*	Century plant is a very large, distinctive-looking succulent plant. It doesn't have a stem so the bases of the leaves are at ground level, like those of a flax. The leaves are fleshy, grey-green in colour and have coarse, spiky teeth on their margins. After 10 to 15 years, century plant produces a large, woody spike up to 10m tall with many yellow flowers at the tip. Young plants are tolerant of salt water. Century plant can out-compete dune plants but it requires open sites, is slow-growing and dies after flowering.
Coastal banksia	*Banksia integrifolia*	Coastal banksia is a large, long-lived shrub or small tree that grows up to about 15m high. Oval leaves are a dark, shiny green on the upper surface and white beneath, and are leathery and tough. Flowers occur from May to July, and are greenish-yellow forming a broadly cylindrical cone. Flowers are followed by hard wooden cones, with a covering of brown felt-like hairs. Coastal banksia is likely to out-compete native plants and is fast growing with a high seed output.
Cotoneaster	*Cotoneaster glaucophyllus*, *C. franchetii*	Cotoneasters are long-lived, evergreen shrubs, up to 3m tall. They have small, white flowers borne in clusters, followed by red berries, and are widely naturalised in native habitats in Auckland and Northland (especially *C. glaucophylla*). Open coastal forest may be most at risk from the shrubs. Dense thickets can form which exclude regeneration of other plant species.
Eleagnus	*Eleagnus x reflexa*	Elaeagnus is a vigorous, dense, evergreen shrub that can scramble over supporting vegetation or structures to a height of 20m. It has long, arching, tough stems. The leaves have silvery or browny-scaly undersides. Elaegnus produces pale reddish-orange, berry-like fruits. A weed of scrub, forest margins and secondary forest, it slowly smothers the plants it grows over and can reach canopy height.
Elephant's ear	*Alocasia brisbanensis*	Elephant's ear is a robust perennial with thick stems up to 1.2m long and large, wide arrow-shaped leaves. Mature plants can form dense stands reaching 1-2m in height. The plant produces erect, cream-coloured flowers up to 6cm long with small orange or scarlet berries. Elephant's ear prefers wet or damp areas such as wetlands, riverbanks or damp open areas. Plants will re-grow after slashing, and can re-grow from fragments.
English Ivy	*Hedera helix*	English ivy is an evergreen perennial climber. It forms a groundcover and climbs on trees, walls and other structures. Many cultivars are available, leading to variation in leaf shape, habit and colour. The ivy produces numerous deep purple to black berries. Its preferred habitat includes roadsides, native forest, riparian zones and cliffs. Because it is herbicide tolerant, control requires frequent repeat treatments to be successful.
Furcraea	*Furcraea spp.*	Furcraea has fleshy or leathery leaves held in a rosette, with or without a basal trunk, and grows up to 3m tall. Flowers occur on distinctive flower spikes up to 12m tall. Bulbils often replace flowers in the axils of leaves. The plant's preferred habitat includes open or semi-open coastal areas including banks, cliffs and rocky outcrops, and other disturbed or open sites. It is capable of forming localised mono-cultures which exclude most other plant species.
German ivy	*Delairea odorata*	German Ivy is a scrambling or climbing vine that can reach heights of 5m. It has thin, weak, green stems and thin, soft, glossy leaves that are ivy-shaped and clammy to the touch. It is in the same family as ragwort, and has ragwort-like

Common name	Scientific name	Description
		yellow flowers during May to October, that go on to form fluffy seeds. German ivy is fast-growing and has a dense, smothering habit.
Great bindweed	Calystegia silvatica	Great bindweed is a scrambling, twining vine, which produces white, trumpet-like flowers from October to May. The large, arrow-shaped leaves are arranged alternately along the stems and usually die back during winter. It has thick, white roots that can spread out over wide distances, helping it spread easily. It scrambles up and over other plants and out-competes them by smothering, particularly affecting the survival of native species on streambanks, forest margins and in wetlands.
Hakea	*Hakea spp.*	Hakea spp. are upright shrubs or small trees often characterised by extremely spiny hairs or leaves with wooden fruits and small yellow, white or cream flowers. Hakea grows on thin, poor soils including gumlands, scrub, open hillsides and sandy soils, and can form dense populations. Winged seeds, two per fruit, are released on the death of the adult plant.
Himalayan fairy grass	*Miscanthus nepalensis*	Himalayan fairy grass is a tall perennial grass that forms tufted clumps 1-2m tall. It has long, stiff leaf blades, mid-green in colour with a white mid-rib. The drooping, fan-shaped, golden-brown flower heads grow on a long stem that is purple-green to yellow-green. It grows in sunny areas such as roadsides, waste areas, forest margins, cliffs, and disturbed sites. Himalayan fairy grass produces large numbers of wind-dispersed seeds. It will rapidly colonise disturbed or open areas.
Himalayan honeysuckle	*Leycesteria formosa*	Himalayan honeysuckle is a shrub that grows up to 2m tall. It has straight, hollow stems and heart-shaped leaves. From December to May, drooping spikes of white and reddish-purple flowers grow from the tips of the branches. They are followed by juicy, dark brownish-purple or red berries. Himalayan honeysuckle grows rapidly to produce dense thickets that replace and exclude other species. It prefers sunny sites but can tolerate shade, frost, physical damage, damp, and most soils.
Jasmine	*Jasminum polyanthum*	Jasmine is a vigorous scrambling climber that forms large, dense mats. It can climb up trees and produce underground runners that begin new patches. It is evergreen, but is frost tender. Leaves are opposite, usually with seven long-stalked, spear or egg-shaped leaflets. Flowers are white and very fragrant, and occur in clusters. Jasmine grows rapidly and forms dense long-lived masses. It competes with slower-growing native species in riparian zones and clearings, particularly when these are at the juvenile stage.
Kangaroo acacia	*Acacia paradoxa*	Kangaroo acacia is a perennial shrub up to about 3m tall with leaves that are reduced to small flattened leaf stalks. Spines are up to 10mm long. Clusters of many yellow flowers are borne between July and October. It produces numerous seeds with a hard seed coat, which probably remain viable for more than a year. Seed banks in the invasive range have been recorded at 1000 seeds/m2. Kangaroo acacia can form very dense stands and is known to be invasive overseas.
Lily of the valley vine	*Salpichroa origanifolia*	Lily of the valley vine is a scrambling, fast-growing perennial herb. It has numerous stems which are erect at first, then grow outwards trailing for up to

Common name	Scientific name	Description
		3m. Oval-shaped, hairy leaves are produced singly or in pairs and each pair is unequal in size. Flowers are bell-shaped, white or cream. Small berries are pale yellow when ripe. Mainly found in disturbed habitats including scrub, roadsides, waste places, gardens, river banks and coastal ecosystems.
Oxylobium	*Callistachys lanceolata*	Oxylobium is a tall evergreen shrub with densely hairy angular stems. Leaves are oval-shaped and narrow, silky when young and hairless and smooth when mature. Dense flower clusters of yellow/orange pea-like flowers appear in spring. Seedpods are densely silky initially but become hairless, hard and ribbed when mature. xylobium is a fast growing, thicket forming species that colonises rapidly after disturbance. It can out-compete other plants, particularly low growing shrubs and ground cover species.
Pampas	*Cortaderia jubata & C. selloana*	Pampas is a perennial, tussock-like grass. There are two species present in Northland which grow 2 to 3m high and have flowering stems with distinctive, fluffy white or pinky-purple flower heads. Pampas may be confused with native toe toe species which have more creamy-yellow flower heads. Pampas inhabits a range of areas including dunelands, quarries and roadsides. It will establish most easily in wet, sandy, bare soil with wind blown seeds being distributed up to 50km.
Paperbark poplar	*Melaleuca quinquinervia*	Paperbark poplar is an evergreen tree up to 20-30m tall. The bark is shed in pale, papery layers and leaves are aromatic. It has prolific roots capable of penetrating to depths of over 1m. Flowers are white with pronounced stamens, and seeds are minute. The deep and extensive root system provides a competitive advantage in accessing water. Foliage is highly flammable and can fuel fires which may damage co-occurring vegetation.
Periwinkle	*Vinca major*	Periwinkle is a scrambling groundcover plant that resembles a vine. It has blue-violet flowers and trailing stems that can grow more than 2m long and take root where they come in contact with the soil. Its leaves are glossy and arranged in opposite pairs on the stem. Periwinkle is fast-growing, tolerant of shade, and moderately tolerant of dry or wet conditions. Its creeping, layering habit allows it to form dense, long-lived stands.
Prickly moses	*Acacia verticillata* (*A. v. subsp. cephalantha and A. v. subsp. ruscifolia*)	Prickly moses is a short-lived shrub or small tree. Twigs are ribbed and hairy and leaves are reduced to flattened leaf stalks. Flowers are pale yellow and grouped on flower heads during September and November. Prickly moses can dominate disturbed ecosystems such as regenerating bush and roadsides. Coastal dune ecosystems may be vulnerable due to frequent disturbance, suitable habitat and a lack of structurally equivalent natives. Mass recruitment following fire or soil disturbance can lead to almost impenetrable stands with little under-storey.
Sexton's bride	*Rhaphiolepis umbellata*	Sexton's bride is a perennial shrub up to about 3m tall. Flowers are borne in clusters of about 20 from July to December. Petals are white, stamens and sepals pink/red. Fleshy, purple-black fruit, about 6 to 12mm diameter, ripen during March-April. Coastal cliff habitats are most at risk. There is some displacement of native plants in coastal areas, based on the current level of naturalisation.
Sycamore	*Acer pseudoplatanus*	Sycamore is a large tree up to 20m tall, with a smooth trunk. Leaves are five-lobed, green but with reddish petioles up to 15cm long. Sycamores have a

Common name	Scientific name	Description
		copious seed production (producing more than 10,000 seeds/tree/year). Seeds have wings up to 4cm long. Preferred habitats include open or regenerating forest/scrub and forest margins (including pine plantations as well as native vegetation). Sycamore seedlings grow rapidly, and the tree is a competitive coloniser of open sites.
Sydney golden wattle	*Acacia longifolia*	Sydney golden wattle is a shrub or small tree that grows up to about 10m tall. Its leaves are narrow with two prominent veins. It produces spikes of pale or golden yellow flowers during July and August and seed pods up to 120mm long. Sydney golden wattle has high growth rates and uses a lot of water, so it can shade-out other species and reduce water availability. Its deep leaf litter layer suppresses seedling establishment and its ability to fix nitrogen gives it a competitive advantage in a wide range of soil types.
Taiwan cherry	*Prunus campanulata*	Prunus campanulata is a deciduous, small, spreading tree usually 3-8m tall when mature. Leaves are hairless and thin, with a long tapered tip. Red bell-shaped flowers appear between July-September, hanging in clusters of 2-3 on short stalks. Fruit are scarlet, and like a small cherry. The tree invades native forest; and there is likely to be competition with and displacement of native plant species. It is likely that this species is still in a lag phase, with potential to substantially increase in abundance in forest fragments due to bird-dispersed seeds.
Velvet groundsel	*Roldana petasitis*	Velvet groundsel is a large shrub or bush up to 2m tall. It has round, lobed, hairy leaves that feel soft and velvety. Its stems are also hairy and are usually reddish in colour. The bush has small, bright-yellow, daisy-like flowers from July to November, followed by white fluffy seed heads. It is fast growing and can out-compete other plant species, smothering them and shading them out.
Wilding kiwifruit	*Actinidiaceae spp.*	Kiwifruit is a vigorous vine that is cultivated for its fruit. The entire plant is hairy with oval leaves and reddish leaf stem. Wilding kiwifruit can grow in a wide variety of habitats including scrub, gullies, young and old stands of native bush and pine plantations. Wild kiwifruit vines can grow more than 20m up into the forest canopy and are also very long-lived, out-competing native seedlings and smothering growth. Wilding kiwifruit are a vector for PSA (*Pseudomonas syringaepv actinidiae*).

Table 6.1 Pest plants banned from sale in Northland

6.4.2 Road and rail

Road reserves and rail corridors can exacerbate the spread of weeds to new places. They include large areas of disturbed ground very suitable for weeds, and can spread weeds into farmland and environmental areas and popular tourist routes. The pest plants in the road and rail sustained control programme are pests that are widespread in suitable habitat throughout Northland. These pest plants all cause adverse effects to the environmental, economic, social or cultural values of the region.

Objective

For the duration of the pest management plan, reduce the impacts on environmental, economic, social or cultural values of the road reserve and rail control plants in Northland.

Aims

- Road and rail authorities have developed and implemented prioritised operational plans for weed control along transport corridors.
- The impacts of the road and rail pest plants along transport corridors are reduced.
- Transport corridors are rehabilitated to improve resilience to reduce future weed re-invasion.
- Land owners and occupiers are encouraged to help control weeds along transport corridors from the safety of their property boundary.

Responsibilities

Road and rail authorities are responsible for controlling pests on road reserves and rail corridors that they occupy. This also includes:

- Rest areas;
- Weigh pits and stockpile areas;
- Road reserves or rail corridors where works have contributed to the establishment of named pests;
- Other isolated areas of road reserve or rail corridor, mainly for safety reasons;
- Road reserves or rail corridors adjacent to land where the landowner or occupier is undertaking pest management.

Where the road reserve boundary is unknown it will be taken as 10m from the road centre line.

Adjacent land owners or occupiers are responsible for controlling pests on road reserves and rail corridors in the following situations:

- Unformed (paper) roads or rail corridor that they occupy, or are contiguous to the land they occupy;
- On land beyond 10m of the road centre line where the road reserve boundary is unknown;
- Where fences encroach into a surveyed road reserve, the occupier adjoining the road reserve is responsible for pests within that fenced area;
- Where adjacent occupiers do not support the use of toxins to control pests (e.g. organic farming practices), the occupier adjoining the road reserve is responsible for pest control in the road reserve as well. An approved traffic management plan from the roading authority may be required.

Priorities

The Northland region includes about 8380km of road reserve and 223km of rail corridor. The council recognises the difficulties faced by road and rail authorities undertaking weed control over large areas and encourages development of annual operational plans for transport corridors with the following priorities:

- through high visibility public spaces such as town entrances;
- near schools and other public spaces;
- where resealing and/or rehabilitation is already underway or is planned;
- through areas of high biodiversity value;
- in areas with a low incidence of the target weed species;
- in areas adjacent to low re-infestation areas such as weed-free farmland;
- in areas with high traffic volumes;
- on receipt of a complaint from a directly affected land occupier.

Rules

Rule 6.4.2.1

Road and rail authorities must control the road and rail species on land they occupy where the adjacent or nearby land occupier is taking reasonable measures to manage these species or their impacts on pastoral production or environmental values.

Rule 6.4.2.2

Road and rail authorities are required to prepare and implement a five year road and rail weed management plan negotiated with, and agreed to by the Northland Regional Council. This plan shall include any or all of the pest plant species in this Pest Plan. Priority species include Broom, Taiwanese cherry, Cotoneaster, Gorse, Wilding conifers, Pampas and Wild ginger.

A breach of this rule will create an offence under Section 154 N(19) of the Act.

Exemptions

This rule will be enforced on complaint from a directly affected land occupier, where the pest plant is present at a such a density that significant cost is being imposed on a neighbour or near neighbour.

An exemption to this rule may be granted subject to development and implementation of a prioritised annual operational plan agreed to by the Northland Regional Council.

Principal measures

Requirement to act

- Road and rail authorities are required to undertake actions to help reduce the impacts and spread of the sustained control pests.
- The purpose of the rules is to assist in reducing the impacts on values and spread to other properties of the sustained control pest plants in Northland.

Council inspection

- Council staff and /or their contractors may visit places to determine whether rules and management programmes are complied with and effective
- Council staff may undertake compliance activities such as rule enforcement, action of default, prosecution and exemptions.

Service delivery

- Council will assist road and rail authorities to develop and implement operational plans for weed control.
- Council will encourage other land occupiers to help control weeds along transport corridors from the safety of their property boundary.

Advocacy and education

- Council will provide training to relevant council staff and stakeholders in the identification and control of the road and rail control pest plants.
- Council will provide advice, attend events and undertake publicity campaigns to increase public awareness of these pest plants.

7 Animals | Ngā kararehe

Photo; I. Middleton

7.1 Exclusion animals

The exclusion animals are potential pests which are not known to have established in Northland, or have previously established and have been eradicated. These pests all have the potential to re-establish in the region and are capable of causing adverse effects to the environmental, economic, social or cultural values of the region. The following information applies to all of the exclusion pest animals.

Objective

For the duration of the Pest Plan, avoid impacts to biodiversity, cultural, and economic values by preventing the establishment of exclusion animals in Northland.

Aims

- The exclusion animals will be detected before they become widely established in Northland.
- A prompt response with appropriate funding will be initiated to control or manage infestations in Northland.

Banned from sale and distribution

Under sections 52 and 53 of the Biosecurity Act 1993 no person can sell, propagate, breed, distribute, release or otherwise spread any pest in this plan. Not complying with section 52 or 53 is an offence under the Act, and may result in the penalties noted in s157(1).

Rules

Rule 7.1.1

Every person who sees, or suspects the presence of any exclusion animal, shall immediately report the sighting to the Northland Regional Council.

Rule 7.1.2

No person shall possess any exclusion animal within the Northland region.

A breach of these rules will create an offence under Section 154 N(19) of the Act.

Other relevant legislation or programmes

Rooks are unwanted organisms under the Biosecurity Act 1993. Rainbow lorikeets are unwanted organisms under the Biosecurity Act 1993, with an exemption for people to hold and sell birds.

Principal measures

Requirement to act

People are required to report the presence or suspected presence of the exclusion animals and may not possess those pests.

The purpose of the rules is to assist in preventing the exclusion animals from becoming established in Northland.

Council inspection

Council staff and/or their contractors will conduct searches in areas that are vulnerable to infestation by the exclusion animals.

Council staff may undertake compliance activities when required, such as rule enforcement, action on default, prosecution and processing exemptions.

Service delivery

Eradication of infestations of the exclusion animals will be attempted by the council in conjunction with relevant Crown agencies and stakeholders where practicable.

Advocacy and education

Council will provide training to relevant council staff and stakeholders about the identification of the exclusion animals to assist in early detection.

Council will provide advice, attend events and undertake publicity campaigns to increase public awareness of the exclusion animals.

Big headed ant (*Pheidole megacephala*)

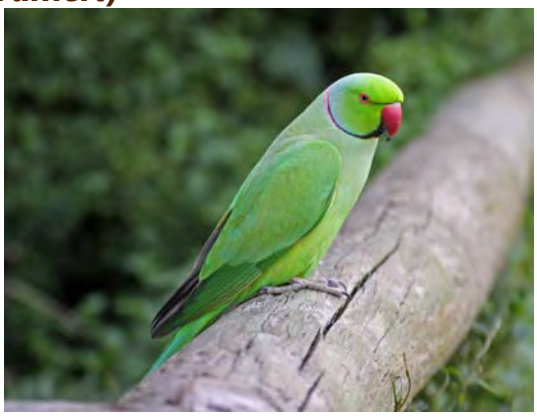
Big-headed ants are relatively small, grey-yellow to dark brown in colour and covered in many sparse, long hairs. They have two main growth forms. Major workers are usually about 3.5mm long and have very large heart-shaped heads while minor workers are about 2mm long. Major workers usually remain in the nest and minors do most of the foraging. Big-headed ants are omnivorous, feeding on seeds, invertebrates and small vertebrates. This can affect invertebrate communities, vegetation and ecosystem processes. They are aggressive to other ants and can reach high densities.

Photo; Sarefo

Indian ring-necked parakeet (*Psittacula krameri*)

Also known as: rose-ringed parakeet.

Indian ring-necked parrots are 38-42cm, typically with a green body. Colour variations are available due to selective breeding/mutation. The neck is encircled by a red band (males) or indistinct emerald band (females). Life-span in captivity is approximately 20 years (in some cases up to 34 years). The parrots are gregarious and feed and breed in groups. They are highly aggressive to other species, including birds and small mammals such as bats, and have the potential to competitively exclude other cavity-nesting species through eviction or early occupancy and successful defence of cavities.



Photo; D Daniels

Exemption

Indian ring necked parakeets may be held in captivity, bred and sold, but it is illegal to release them into the wild.

Rainbow lorikeet(*Trichoglossus haematodus*)

Rainbow lorikeets are long-tailed, brightly-coloured parrots, about 30cm long. They have a bright-red beak and eyes, a blue head and belly, green wings, tail and back and an orange/yellow breast. They make distinctive screeching and chattering calls and are almost always seen in pairs or in flocks. Rainbow lorikeets look very similar to the more common eastern rosella, but rosellas have a red head and the lorikeet's head is blue. Rainbow lorikeets are prolific breeders and can compete with native birds for food and nesting sites. They can also carry diseases that can threaten the health of native bird species.

Photo; D. Gordon E. Robertson

Exemption

Rainbow lorikeets may be held in captivity, bred and sold, but it is illegal to release them into the wild.

Rook (*Corvus frugilegus*)

Rooks are black birds about the same size as magpies. Adults are black except for their face, which has light-grey skin bare of feathers. Juvenile birds have a black-feathered face. Rooks have long, pointed black beaks and dark-brown eyes and fly with steady wing beats. They can cause serious damage to farms and market gardens as they feed on most types of crops, either eating the seed heads or pulling out young plants. They occasionally pierce fruit such as apples and pears with their bills, and can also tear up large areas of pasture looking for invertebrates.

Photo;: H. Zell

Wallaby (*Macropus, Petrogale* and *Wallabia* species)

Wallabies are small marsupial animals that look like small kangaroos. They are silver-grey to dark brown in colour. Wallabies live in scrub, native forest and production forests, preferring the edges of these habitats. They are nocturnal and start feeding during early to late evening when they eat grasses, native shrubs and trees. Their browsing of native plants changes vegetation composition with subsequent negative impacts on the indigenous flora and fauna.

Photo; B. Dupoint

7.2 Sustained control animals

Sustained control animal pests are pests that are widespread in suitable habitats throughout Northland. These pests all cause adverse effects to the environmental, economic, social or cultural values of the region. Biodiversity projects involving the sustained control pests are managed outside the pest management plan through Biosecurity Partnership Programmes. The following information applies to all of the sustained control animals, except feral deer.

Objective

For the duration of the Pest Plan reduce the impacts of sustained control animal pests on the biodiversity, cultural and economic values in Northland.

Aim

- To help landowners, occupiers and the public to gain knowledge and skills to help reduce the impacts and spread of the sustained control pests.

Banned from sale and distribution

Under sections 52 and 53 of the Biosecurity Act 1993 no person can sell, propagate, breed, distribute, release or otherwise spread any pest in this plan. Section 53 also includes organisms which may contain or harbour a pest or unwanted organism. Not complying with section 52 or 53 is an offence under the Act, and may result in the penalties noted in s157(1).

Other relevant legislation or programmes

The Wild Animal Control Act 1977 includes requirements for keeping wild animals in captivity including identification and fencing, and restricts the release of wild animals.

Principal measures

Requirement to act

People are required to undertake actions to help reduce the impacts and spread of the sustained control pests.

The purpose of the rules is to assist in reducing the impacts on values and spread to other properties of the sustained control pests in Northland.

Council inspection

Council staff and/or their contractors may visit places to determine whether rules and management programmes are complied with and effective.

Council staff may undertake compliance activities such as rule enforcement, action on default, prosecution and exemptions.

Service delivery

Council staff will provide education and advice to owners, occupiers and the public about the sustained control pests and how to control them.

Advocacy and education

Council will provide training to relevant council staff and stakeholders regarding the identification and control of the sustained control pests.

Council will provide advice, attend events and undertake publicity campaigns to increase public awareness of these animal pests.

Argentine ant (*Linepithema humile*)and Darwin's ant (*Doleromyrma darwiniana*)

Argentine ants are only 2–3mm long and are a uniform honey-brown colour. Foraging ants move steadily in defined continuous trails that can often be seen going up trees or shrubs, especially if these are flowering. The ants can't sting but some people react to their bite. They have a slight greasy odour when crushed, as opposed to the strong formic acid smell of some ant species. Darwin's ants are about 2mm long. They have a dark-brown head but the rest of the body and the legs are light brown. They look similar to Argentine ants but they give off a strong odour when crushed.

Photo; A. Townsend.

Rule 7.2.1

No person shall knowingly transport, distribute, sell or offer for sale any material or equipment that my contain or harbour Argentine ant or Darwin's ant without first undertaking suitable control measures to eliminate those ants.

Rule 7.2.2

Where a property, through activities undertaken on the property, is identified as a portal for the active distribution of ants, a management programme to control or contain the infestation is required to be implemented by the land occupier.

A breach of these rules will create an offence under Section 154 N(19) of the Act.

Cats - feral and stray (*Felis catus*)

Feral and stray cats are widely distributed throughout New Zealand and live in most terrestrial habitats. Feral cats have none of their needs provided by humans. They do not usually live around centres of human habitation and their population is self-sustaining. Stray cats are companion/domestic cats that have been lost or abandoned. They may have many of their needs indirectly supplied by humans and live around centres of human habitation. Groups of stray cats may live together in colonies. Companion cats, which are excluded from this plan, live with humans as a companion and are dependent on them for their welfare. Cats are generalist predators and can have large home ranges. It is estimated that feral, stray and companion cats kill up to 100 million birds in New Zealand each year. They are a major predator of kiwi chicks and also eat eggs, lizards, invertebrates and frogs. Cats that are not given regular preventative treatments can spread diseases, such as toxoplasmosis.

Feral goat (*Capra hircus*)

Under the Wild Animal Control Act 1977, any goat that is not suitably identified and effectively contained is recognised as a "wild" or feral goat. Feral goats vary in size and colour and are social, preferring to travel in small groups. Goats destroy the under-storey of vegetation and, when combined with possum damage to the upper canopy, severe deterioration of native forest occurs. Browsing reduces vegetation cover and density and causes the loss of plant species' richness and altered community composition in favour of unpalatable species. Goats also damage vegetation planted on land retired for soil conservation purposes and newly planted or young trees in exotic forests.

Rule 7.2.3

No person shall keep in captivity or farm goats within one kilometre of the boundaries of areas of regionally significant indigenous habitat identified on maps held by Northland Regional Council (Figure 7.1).

A breach of this rule will create an offence under Section 154 N(19) of the Act.

Exemption to rule 8.2.3

Goats may be kept within these areas subject to the conditions stated in a consent issued by the Northland Regional Council.

Figure 7.1 Restricted goat farming areas

Feral pig (*Sus scrofa*)

Under the Wild Animal Control Act 1977, any pig that is living in a wild state and is not being herded or handled as a domestic animal or kept within an effective fence or enclosure for farming purposes, is recognised as a "wild" or feral pig. Feral pigs occur in both native forest and exotic plantations, and are well established throughout New Zealand. They are smaller and more muscular than domestic pigs.

Feral pigs eat grasses and crops and and cause damage through uprooting. They can destroy forests by uprooting trees and saplings and eating native plants. Feral pigs eat native animals and are particularly damaging to native insect numbers. They are known to be carriers of bovine tuberculosis and leptospirosis and may also contribute to the spread of kauri dieback disease.

Rules

Rule 7.2.4

No person shall knowingly feed or provide access to food for feral pigs in Northland.

Rule 7.2.5

No person shall liberate or release pigs, feral or domestic, in Northland

A breach of this rule will create an offence under Section 154 N(19) of the Act.

Exemption to rule 7.2.5

Using feed to trap and kill wild pigs is permitted.

Mustelids - Including ferrets (*Mustela furo*), stoats (*Mustela erminea*) and weasels (*Mustela nivalis vulgari*)

Photo; S. Hillebrand

Ferrets, stoats and weasels belong to a group of animals known as mustelids. Ferrets are the largest of the three species at about 48-56cm long, including the tail, and their colours vary but they are usually dark brown or blackish with a creamy under fur. Stoats - the most common of the three mustelids - grow to 34-40cm long, are very thin. Stoats have a chestnut-brown coat, which turns white in winter, a light-coloured belly, and a bushy, black-tipped tail. Weasels are the smallest and least common of the three mustelids, growing to 20-25cm long with similar colouring to a stoat. Weasels will attack prey that is much larger than themselves.

Mustelids are widespread throughout Northland. They can be devastating to native bird life and other fauna. Native bird species, lizards, frogs and large native insects (like weta) are particularly susceptible to mustelid attack.

Rule 7.2.6

No person shall keep any live mustelid in captivity or as a pet in the Northland region.

A breach of this rule will create an offence under Section 154 N(19) of the Act.

Possum (*Trichosurus vulpecula*)

Possums are furry marsupial animals of medium to stout build with thick, bushy tails. Their bodies are 38-45cm long (65-95cm long including the tail). There are two main colour forms, grey and black. Possums have large eyes and catlike whiskers, which are characteristic of nocturnal animals. The average lifespan of a possum is seven to 10 years.

Possums are found throughout the region, although their density varies from area to area. They are one of the most destructive animals in a forest environment. Their browsing damages and destroys forests, and affects pasture, vegetable and horticultural crops. Possums can be a vector in the spread of diseases affecting domestic animals and people, including bovine tuberculosis.

Rule 7.2.7

No person shall transport any possum, dead or alive, into the Northland region.

Rule 7.2.8

No person shall keep any live possum in captivity or as a pet in the Northland region.

A breach of these rules will create an offence under Section 154 N(19) of the Act.

Rabbit (*Oryctolaques cuniculus cuniculus*)

Rabbits are usually grey-brown in colour, with other colour varieties occasionally occurring in the wild. They may live in communal warrens (underground tunnels with multiple entrances) or above-ground where sufficient cover exists.

Rabbits are widespread throughout Northland at varying levels of infestation. Soil type and land management have a significant influence on population levels, with the greatest densities on hard-grazed lighter and drier sandy and volcanic soils. Rabbits breed rapidly and populations can recover quickly after being reduced by disease, control pressures or environmental changes. They eat a variety of plant matter including grasses (they compete directly with stock for grazing and can sour pasture by eating out the most palatable species of grass), seedlings of trees and crops.

Domestic rabbit varieties, when in proper confinement, are excluded from the Pest Plan.

Rats - including Norway rat(*Rattus norvegicus*) and ship rat(*Rattus rattus*)

Photo; DOC

Rats are widespread throughout Northland. Norway rats are the larger of the two European rats found in New Zealand. Their coats are grey-brown and shaggy with a pale underside. Ship rats are smaller than Norway rats but their tails are larger and thicker and longer than their bodies.

Rats are mainly nocturnal. They have a varied diet that includes native birds, eggs and chicks, invertebrates, frogs, and lizards. They eat large quantities of native seeds, either from the ground or straight from the tree (in the case of ship rats, which can climb high into the canopy). Norway rats are common in wet habitats and urban areas. Ship rats are found in most habitats and they are the most abundant and widespread rat on mainland New Zealand. Since their arrival in New Zealand, rats have had significant impacts on native flora and fauna, and have been implicated in the decline of many native species.

Domestic rat varieties, when in proper confinement, are excluded from the Pest Plan.

The following information applies to feral deer.

Objectives

- To maintain low densities of wild deer in Northland through deer farmer liaison, fence inspections, surveillance, wild deer response activities, and statutory management, to prevent the successful establishment of wild deer populations.
- To increase community awareness of the risks and environmental consequences of wild deer establishing in Northland in order to gain wide community support for the vision of 'No wild populations of deer in Northland'.

Aims

- Council will work co-operatively with DOC and other stakeholders to achieve the objectives of the Northland Wild Deer Response Plan 2016-2025.
- Landowners, occupiers and the public understand the risks and environmental consequences of feral deer establishing in Northland, and are supportive of the programme.

Principal measures

Requirement to act

- People are required to report the presence or suspected presence of feral deer.
- The purpose of the rule is to help prevent the successful establishment of feral deer in Northland.

Council inspection

- Council staff, other agencies and/or contractors will conduct searches in areas that are vulnerable to infestation by feral deer.
- Council staff may undertake compliance activities such as rule enforcement, action of default, prosecution and exemptions.

Service delivery

- Reduction and eradication of infestations of feral deer will be attempted by the Northland Deer Response team where practicable as part of the joint agency programme run by the council, Department of Conservation and other stakeholders.

Advocacy and education

- Council will provide training to relevant council staff and stakeholders in the identification of pests to assist in early detection.
- Council will provide advice, attend events and undertake publicity campaigns to increase public awareness of pests.

Banned from sale and distribution

Under sections 52 and 53 of the Biosecurity Act 1993 no person can sell, propagate, breed, distribute or otherwise spread any pest in this plan. Not complying with section 52 or 53 is an offence under the Act, and may result in the penalties noted in s157(1).

Rules

Rule 7.2.9

Every person who sees or suspects the presence of any feral deer in Northland, must immediately report the sighting to the Northland Regional Council.

A breach of this rules will create an offence under Section 154 N(19) of the Act.

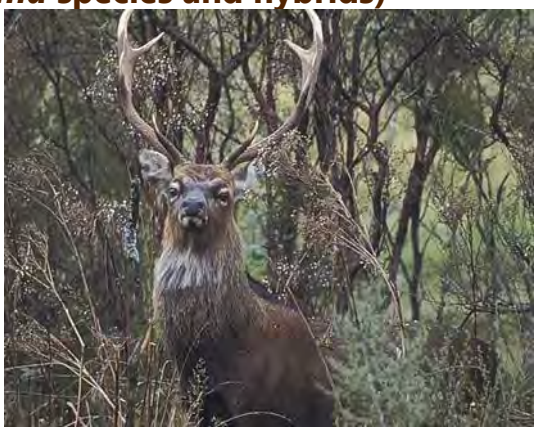
Other relevant legislation or programmes

Deer are considered feral wherever they are not:

- held behind fencing that meets the requirements of the Deer Farming Regulations; and
- identified as required by those Regulations.

The Department of Conservation is responsible for regulating deer farming under the Wild Animal Control Act 1977. This includes specifying the areas deer farming is allowed, the fencing requirements and other requirements.

Feral deer (All *Cervus, Odocoileus and Dama* species and hybrids)



There are currently three species of deer known to be present in Northland: red deer (*Cervus elaphus scoticus*), fallow deer (*Dama dama*) and sika deer (*Cervus nippon*). Red deer and fallow deer are farmed but sika deer is present only as a result of illegal releases.

Red deer are the largest of the three species and tend to be reddish-brown, occasionally with white spots around the spine. Sika deer are one of the few deer species that does not lose its spots upon reaching maturity. Fallow deer are the most variable of any deer species in New Zealand with four quite distinctive colour phases. The most common colour is a brown-black back with paler grey-brown underside and neck,and no spots.

Deer are selective browsers and target particular forest species over others. This can result in significant changes to forest composition and has effects on the fauna that rely on those plants. Deer can destroy the under-storey of native forest by browsing, grazing, bark stripping and trampling, which in turn may increase soil erosion. Feral deer can reduce production by damaging crops and exotic forests. They have also been implicated in the transmission of bovine tuberculosis.