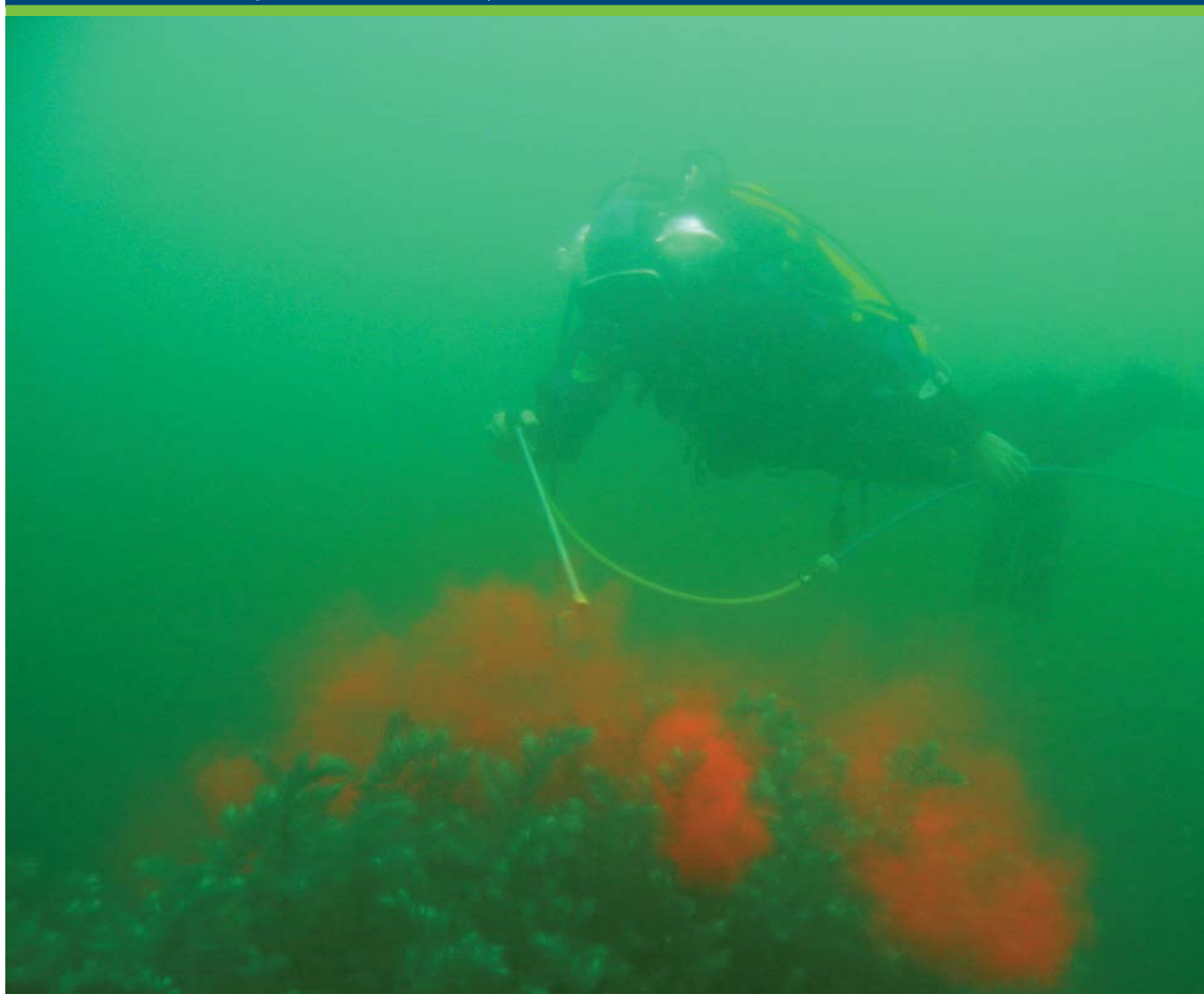


# Regional Pest Management Plan for the Bay of Plenty

## Annual Report for 2011/2012



Bay of Plenty Regional Council  
Operations Publication 2012/07  
November 2012

5 Quay Street  
P O Box 364  
Whakatane  
NEW ZEALAND

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*Working with our communities for a better environment  
E mahi ngatahi e pai ake ai te taiao*



**Bay of Plenty**  
REGIONAL COUNCIL



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

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Prepared by Greg Corbett

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Cover Photo: Deep water application of Diquat on individual Hornwort plants



## Executive Summary

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The Bay of Plenty Regional Council approved an Operational Plan to implement its Regional Pest Management Plan for the Bay of Plenty 2011 – 2016 (RPMP) in October 2011. The Biosecurity Act 1993 requires Council to report progress on implementing the Operational Plan annually. This report is the first annual report of the Operational Plan and covers the period from the time the Operational Plan was approved through to 30 June 2012.

It should be noted that funding allocated to biosecurity through Council's Annual Plan for 2011/12 was insufficient to effectively deliver the outcomes and objectives of the RPMP. This resourcing issue was identified in the Operational Plan; therefore, for some pests, funding was only allocated to specific pest control projects or targeted areas.

This report provides an overview of highlights and issues from the last year as well as progress against specific targets set in the Operational Plan for pests classified as Agency, Exclusion, Eradication and Containment Pests in the RPMP. The report also gives an overview of other Council activities carried out during 2011/12 relating to the implementation of the RPMP.

In general, progress with implementing the RPMP Operational Plan is considered to be on-track with 78% of pest programmes either on schedule or ahead of schedule.

Of particular note, surveillance for new pest incursions, management of the Lake Ōkātina Hornwort incursion and the eastern Bay of Plenty feral goat programme are progressing well and are currently ahead of schedule.

The remaining 22% of pest programmes are currently considered behind schedule. This is because either, through implementation of a more systematic and rigorous surveillance programme, we have detected more incidences of pests, or, in a few cases, the level of control effort has been insufficient to halt pest spread. Notable inclusions in this latter category are woolly nightshade and wallabies.

It should be noted that we are in the relative early stages of implementing the new RPMP and Operational Plan so in some cases trends in progress are not yet clearly evident.



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# Part 1: Introduction and Overview

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## 1.1 Introduction

The Regional Pest Management Plan for the Bay of Plenty 2011–2016 (RPMP) became operative on 30 September 2011. Council approved an Operational Plan to implement the RPMP in accordance with section 85<sup>1</sup> of the Biosecurity Act 1993 in October 2012. As Council is also the Management Agency for the RPMP it is required by section 100B (2) (a) to report progress on implementing the Operational Plan annually.

This report is divided into four parts:

- Part 1 Introduction and overview
- Part 2 2011/2012 Highlights and issues
- Part 3 Council activities
- Part 4 Operational progress and current pest status
- Part 5 Monitoring performance and reporting progress

## 1.2 Purpose

This paper reports progress over 2011/12 on implementing activities and actions outlined in the Operational Plan, and progress towards achieving the objectives of the RPMP. The report also provides the current known status of pests classified as exclusion, eradication and containment pests in the Bay of Plenty.

## 1.3 Definitions and terminology

The terms and definitions of the RPMP also apply to this report. A glossary of definitions can be found on page 51 of the RPMP.

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<sup>1</sup> This section was amended to section 100B in September 2012





## Part 2: 2011/2012 Highlights and issues

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### 2.1 Highlights

#### 2.1.1 New incursions

The RPMP puts increased emphasis on surveillance to identify new pest incursions before they become established. Surveillance over the last year has detected two pests that were previously not known to be present in the Bay of Plenty:

- Delta arrow head (*Sagittaria platyphylla*)
- Climbing gloxinia (*Lophospermum erubescens*)

##### (a) Delta arrow head

The most significant discovery was delta arrow head which is an invasive plant of ponds, lakes and slow-moving waterways. It spreads locally by a creeping root/rhizome system and can be spread to other sites via seed. It is currently classified as an unwanted organism and is named in the National Pest Plant Accord.

Following its discovery at Poike, investigations have revealed another four infestations; all in the western Bay of Plenty. These sites are currently under management, including a trial involving the use of weed matting to smother the plants instead of the traditional use of herbicides.



*Sagittaria* infesting a wetland at Poike

##### (b) Climbing gloxinia

Climbing gloxinia is a vine that grows up to four metres tall and inhabits open areas, grasslands, scrublands, and forest margins. It can grow over and smother other vegetation which can significantly impact native biodiversity especially on forest margins. It currently has no legal pest status within New Zealand and there are no controls on its propagation or sale.

Surveillance detected the first infestation in the Te Puke area with subsequent investigations revealing another four sites within the western Bay of Plenty area. These sites are currently being controlled.

### 2.1.2 Lake Ōkātina Hornwort eradication progress

Up until recently Lake Ōkātina was free of the aquatic pest plant Hornwort (*Ceratophyllum demersum*) which is a containment pest under the RPMP. Surveillance programmes detected a number of Hornwort incursions in Lake Ōkātina between 2007 and 2010. The 2010 discovery was significant with the largest of the three detections covering approximately 50 m<sup>2</sup> while the remaining populations consisted of three or less plants. Following this discovery an eradication operation was initiated involving:

- Ongoing surveillance within Lake Ōkātina for undetected Hornwort sites
- Containment of the biggest infestation site using a weed cordon
- Control of known infestations using Diquat herbicide and manual methods
- Monitoring of control programme effectiveness
- Construction of a weed cordon at the boat ramp to minimise risk of further Hornwort introductions.
- Increased public awareness programmes aimed at Lake Ōkātina users.

While excellent results were achieved during control operations at the three original sites, surveillance during 2011 detected a further five infestations. These sites were controlled during that year.

Surveillance carried out this season revealed that Hornwort is now absent from four sites and only low infestations at the other four active sites, no new infestations were discovered.

These active sites have been controlled following advice from NIWA on deep water application of Diquat.

Good control results have been achieved over the past three seasons and this has reduced Hornwort infestations in the Lake to four sites. An intensive surveillance and control programme will continue during the next year.

### 2.1.3 Eastern Bay of Plenty feral goat control programme progress

The Eastern Bay of Plenty Feral Goat Programme is a collaborative approach to goat control supported by Council, Department of Conservation (DOC), Nga Whenua Rāhui, and the Gisborne District Council. In 2011/12, goat control operations resulted in 1410 goats killed. As with previous years, most of the goats killed came from operations lead by DOC out of the areas still classified as medium-high density, namely the Otara and Takaputahi catchments. Council has worked closely with Nga Whenua Rāhui over the last year focusing on eradicating satellite goat populations at Mangaroa (inland from Te Kaha) and in the lower Raukōkere River. Notable achievements for Council during the last year include:

- Mangaroa goat control is ahead of schedule with no new goat detections this year. The block is now under surveillance to determine whether local eradication has been achieved.

- Management objective (contain and eliminate population) met in west Raukōkere management unit to eliminate the current population. This area is now under surveillance.

This programme is a good example of a collaborative approach to manage a significant pest issue.

## 2.2 Issues

### 2.2.1 Woolly nightshade

The 2011/12 Operational Plan focused inspection and surveillance work to the western Tauranga Harbour catchments and coastal Bay of Plenty east of Te Puke. While some limited progress has been made in reducing high density sites, inspections have shown continuing expansion in medium and low density sites. Woolly nightshade currently occupies approximately 21% of its potential habitat within the Bay of Plenty and is currently present in nearly all potential habitats within the Tauranga harbour catchments. If the risk of further range expansion is to be minimised, resources will need to be directed into controlling satellite populations in the Rotorua, Pongakawa, Rangitāiki and Eastern Bay of Plenty areas.

The challenges of containing woolly nightshade are not unique to the Bay of Plenty region; all northern North Island regions are facing similar problems with this pest.

### 2.2.2 Wallabies

With no proven control methods, other than aerial 1080, and limited surveillance and monitoring techniques available, the management of dama wallabies continues to prove challenging. However, over the last year, our work with the Waikato Regional Council and the Department of Conservation has continued to improve the use of wallaby surveillance dogs and “trail” cameras for validating wallaby reports. Council has also successfully used DNA analysis of animal fur and droppings collected from the field to confirm wallaby presence. This work is essential for identifying any spread of this pest from its current known range.

While progress is being made with developing effective surveillance and control tools, we are not currently achieving operational targets set. However, given the relatively catastrophic impact that wallabies could have on our native forests, especially in association with other forest pests, continued effort to contain or minimise spread is warranted while new and better control tools are developed.

### 2.2.3 Climbing spindle berry and Lantana

While both of these plants currently occupy less than 1% of their potential habitat within the Bay of Plenty, there is concern regarding their continuing range expansion. As mentioned for Woolly nightshade above, resources will need to be directed to satellite infestations to minimise risks of further spread.

### 2.2.4 Hornwort (Lake Ōkāreka)

The discovery of Hornwort in Lake Ōkāreka has been particularly disappointing. While the full extent of this incursion is yet to be determined, it is likely that any effective management will prove very challenging.



## Part 3: Council activities

---

This section provides an overview of operational activities carried out by Council which aim to support RPMP objectives. Details of pest specific progress and actions are covered in Part 4 of this report and a summary of progress is provided in Part 5.

### 3.1 Providing support, advice and information

Raising awareness of pests, the threats they pose and how they are spread, continues to be a priority across the region. This section summarises key actions undertaken during the last year.

### 3.2 Survey of rural stakeholders and landowners

APR Consultants were contracted during 2011/12 to survey rural landowners and stakeholders to establish a baseline measure of the RPMP intermediate outcome:

*“Our regional communities are experienced and effective pest managers”.*

This work also aimed to provide information to help Council better engage with the region’s rural communities and identify barriers to the uptake of Council programmes. The survey was informed by responses from 98 stakeholder groups and 403 rural landowners.

The survey found that there is a strong commitment from our rural communities for pest management and Council’s continued involvement. Most respondents communicated a desire to work closely with Council in achieving good pest management outcomes, and it was generally believed that Council should continue to have a lead role.

However, overall, there was poor awareness of RPMP pests and / or many of the services offered by Council to support pest management. Many respondents also considered Council’s conflicting roles as an advisor and enforcer, and associated problems of trust, were inhibiting their engagement with Council on pest management.

However, there were also many comments that indicate where engagement with Council has occurred a very successful positive working relationship has developed.

The findings from this survey are currently being used to inform and underpin the development of a Pest Management Community Relations Plan.

### 3.3 Providing advice and information

Responding to enquiries from landowners and community groups is a high priority activity. During the past year staff have responded to 1126 enquiries from the public and investigated 61 incidences of concern. These investigations have identified a further 20 pest infestation sites.

Council staff have also been involved in a number of workshops that provided technical advice to the public regarding pest control. These workshops typically focus on the techniques currently available to target specific pests, and allowed the public to interact with pest control equipment and ask questions relevant to their situation. Examples of workshops included:

- Predator workshop in collaboration with Fish and Game educating duck shooters regarding pest control techniques to improve gamebird populations.
- Weed-swap days where the public are encouraged to bring in pest plants to swap for a native plant. During these events, educational material is provided to inform the public regarding effective pest control.
- Care group facilitation days where local care groups meet and have the opportunity to share their successes and problems with others doing similar work.

Council has also carried out targeted awareness programmes; an example is the Aquatic Pest Advocacy Programme.

### **3.3.1 Aquatic Pest Advocacy Programme**

Council (with support from Ministry of Primary Industries (MPI)) continues to undertake a targeted advocacy programme to educate the public on aquatic pests.

The Aquatic Pest Summer Awareness Programme aims to identify levels of public awareness and educate recreational users of the threats aquatic pest plants, fish and didymo pose to our lakes and waterways and how to prevent their spread. Surveys were conducted at lake boat ramps and on the regions' rivers. During the survey waterway users were provided with promotional material and merchandise containing educational information. Awareness and decontamination stations were also provided to sporting events (e.g. fishing competitions, kayak races) and aquatic pest awareness material was also provided to retail outlets, information centres and tourist accommodation.

During the 2011/12 campaign a total of 794 individuals (who were using our waterways) were surveyed through the Bay of Plenty region. Results showed that interest in aquatic pest issues was high (84%), which is encouraging. The survey also showed that 36% of vessels entering our waterways had last been used outside the region, which identifies a relatively high potential risk for aquatic pests to be brought into our region. This highlights the need for our continued support and involvement in national aquatic pest awareness.

## **3.4 Supporting approved programmes**

Council provides resources and funding, through approved programmes, to support landowners, occupiers and community groups to control containment and restricted pests.

### **3.4.1 Care groups**

Council continued to provide technical and financial support to community groups involved in pest management. Currently Council supports 52 care groups across the region. Of these, 34 groups are involved in pest animal control and 19 are also doing some form of pest plant control. Often this support is in collaboration with other government departments, private businesses and trusts.

### **3.4.2 Environmental Enhancement Fund**

During 2011/12 Council supported 70 community groups through its Environmental Enhancement Fund to carry out projects that involved pest animal and plant control.

### 3.4.3 Wild kiwifruit programme

The Wild kiwifruit programme continued to be an example of collaboration with the industry to control a highly valuable commercial plant that can become a significant pest plant if waste fruit and prunings are not carefully managed.

During 2011/12, surveillance was undertaken on approximately 2800 hectares of land for Wild kiwifruit. As a result of this surveillance wild kiwifruit was controlled on 30 properties.

Educational campaigns for *Pseudomonas syringae* pv. *actinidiae* (Psa), has increased the awareness of wild kiwifruit in the region, this has resulted in increasing numbers of landowners contacting Council to report wild plants.

### 3.4.4 Dama wallaby management programme

Council works closely Waikato Regional Council (WRC) and the DOC to manage wallabies. Short-term management goals include identifying and controlling satellite populations outside the feral gazetted range to zero density, with the priority being populations within the WRC region and the Mamaku area.

Activities undertaken during 2011/12 include:

- Certification of a new wallaby detection dog and the development of trail cameras as a surveillance tools.
- Surveillance for reported populations outside the gazetted feral range including at Mamaku (Highlands Farm), Okere and Omataroa Forest.
- Review of the inter-agency Management Plan, Operational Plan, and Containment Strategy, all to be finalised in 2012/13.

## 3.5 Surveillance and monitoring

The RPMP has put an increased emphasis on surveillance for new pests within the region. While general surveillance for new pests is part of day to day work, specific surveillance programmes have been put in place to cover ornamental ponds which present a risk to our waterways. Outcomes of surveillance are provided in Part 4 of this report.

## 3.6 Ornamental ponds survey

A survey of ornamental ponds has been initiated with work focusing on the Rotorua area during the last year. If ornamental ponds have been stocked with pest plants and/or fish (or other animals) they potentially pose risks to the region's waterways. This survey is a proactive measure to reduce the likelihood of unwanted species from entering waterways and provides an opportunity to engage with landowners regarding pest management.

During the surveillance programme 1721 properties were inspected with 138 (12%) properties having an ornamental pond present.

The inspections revealed that 30% of the ponds found contained species known to be pests, however, with one exception, the pests found were already known to be present in the adjoining water bodies. The exception was one discovery of Senegal tea (an exclusion and eradication pest) which has subsequently been controlled.



### **3.7 National pest plant accord inspections**

80 nurseries were inspected during 2011/12 for pest plants named in the National Pest Plant Accord and therefore banned from sale and propagation. This inspection work detected 20 prohibited plants all of which were destroyed. Subsequent investigations revealed that 18 of these plants originated from a single nursery located in the lower North Island. Council has informed the local Regional Council and MPI.

### **3.8 Enforcement of rules**

No formal enforcement actions were required during the last year.

### **3.9 Exemptions**

No exemptions to RPMP rules were applied for during the last year.

## Part 4: Operational progress and current pest status

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The implementation of the Operational Plan is funded through Council's Biosecurity Programme. The Operational Plan identified that funding allocated to the Biosecurity Programme through Council's 2011/12 Annual Plan was insufficient to fully and effectively deal with the full range of pests and management actions required by the RPMP. This has meant that, for some pests, funding was only allocated to specific pest control projects and/or "focus areas" of the region.

In these incidences, progress is assessed in terms of whether the specific pest control project or work within the "focus" area has been implemented and is progressing satisfactorily.

Operational targets have been amended (from those stated in the 2011/12 Operational Plan) to reflect the current known status of each pest.

The following summarises progress for new pest incursion surveillance and control, Agency Pests and for each pest species named as an exclusion, eradication and containment pests in the RPMP.

The summary for each pest is shown with a table of progress against the targets given in the Operational Plan and a map showing the current known distribution and density of the pest. The progress table provides the known area of high, medium, low and zero density infestation for the pest at 1 November 2011 (The Operational Plan was approved by Council in October 2011) and change in densities as at 30 June 2012. The table also provides Council's targets for 2014 and 2016. Other information provided includes the total area of potential habitat for the pest within the Bay of Plenty and the percentage of that potential habitat that is currently occupied. Budget information is provided as well.

### 4.1 New pest incursion surveillance and control.

**Current programme status:** On-track



**Comments:** As stated in Part 2 of this report, surveillance detected two new pest incursions during the last year:

- Delta arrow head (*Sagittaria platyphylla*)
- Climbing gloxinia (*Lophospermum erubescens*)

Management plans for all sites are in development, and initial control has been undertaken at all sites.

Council also supported the Ministry of Primary Industries (MPI) response to the Queensland fruit fly incursion identified in the Avondale/Mt Roskill area of Auckland during May 2012. This work was undertaken as part of the National Biosecurity Capability Network which coordinates responses to biosecurity emergencies.

No notifiable organisms detected.

Financial expenditure on new pest incursion surveillance and control:

<b>Operational Plan Budget (2011/12)</b>	\$173,000.00
<b>Expenditure (2011/12)</b>	
<b>TOTAL</b>	<b>\$122,268.50</b>
Variance	\$50,731.50

## 4.2 Agency pests

These are pests of national significance that are managed by or subject to programmes co-ordinated by the Crown. Council supports the Crown to manage these pests.

**Current programme status:** On-track



**Comments:** Council also supported MPI with two agency pest investigations:

- Johnson grass
- Rainbow lorikeet

Assistance was provided to investigate a suspected Johnson grass incursion. The plant was subsequently identified as *Sorghum xsudan* a relative of Johnson grass, which poses little threat.

In May 2012, Council received reliable reports of three Rainbow lorikeets in Welcome Bay. MPI was notified of the report however due to two of the birds being captured by the landowner, MPI believed the risk was alleviated and no further action was taken.

At request from MPI, staff also carried out inspections of historic and active Water hyacinth, Salvinia and Cape tulip sites with no new plants found.

Financial Expenditure on Agency Pests	
Operational Plan Budget (2011/12)	\$100,000.00
Expenditure (2011/12)	
TOTAL	\$33,136.65
Variance	\$66,863.35

## 4.3 Exclusion and eradication pests

Council takes a lead role in controlling these pests if they are present. This includes surveillance of known populations and investigating reports and implementing control programmes.

Below are tables summarising the progress toward the objectives of the RPMP by species.

## 4.4 Exclusion and eradication pest plant reporting

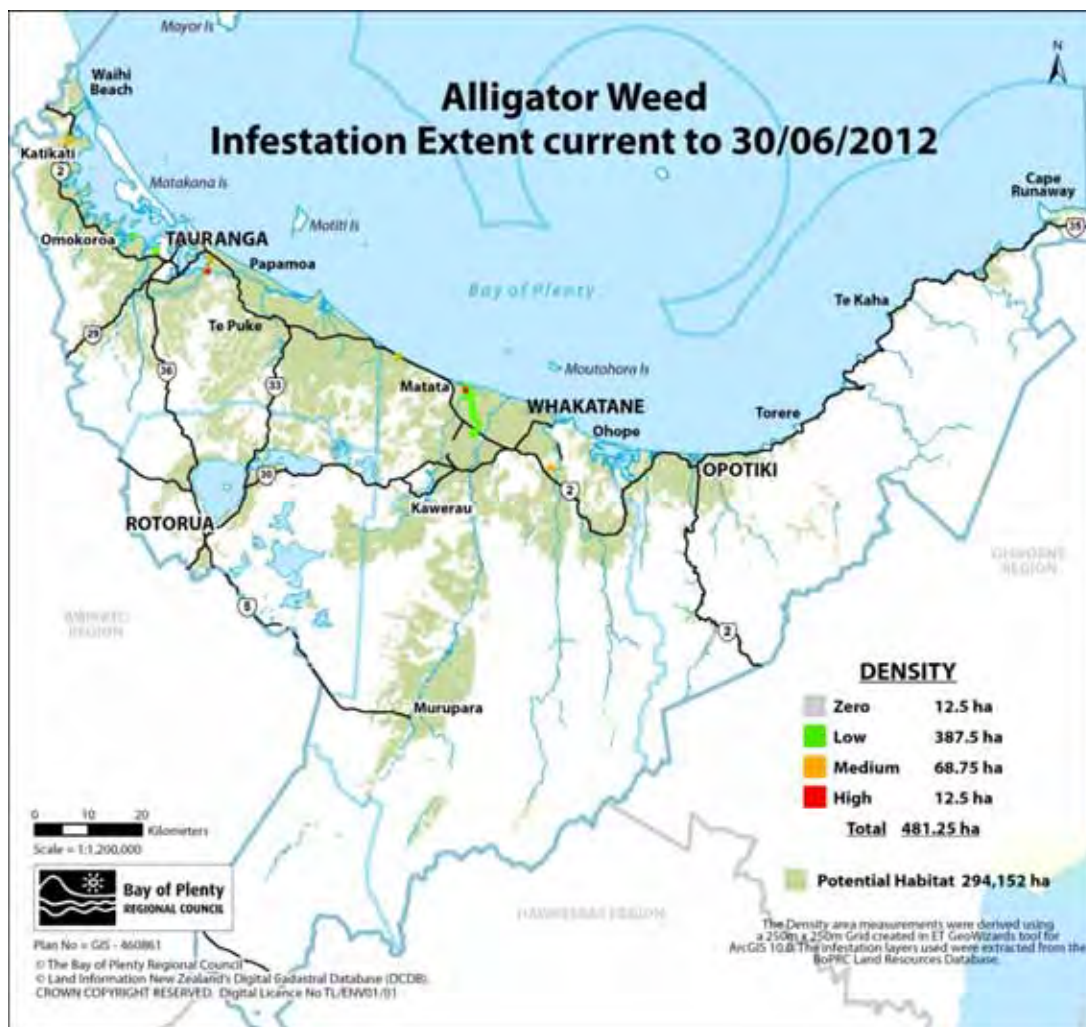
### 4.4.1 Alligator weed

**Current programme status:** On-track



**Comments:** Increased surveillance effort has revealed small increases in area infested, however, programmed control work is proceeding satisfactorily. Support has also been provided into biocontrol research.

Alligator weed		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		13	13	0	0	0
Medium density active sites (ha)		69	69	0	74	52
Low density active sites (ha)		375	388	13	391	413
Zero density active sites (ha)		13	13	0	17	17
<b>Total area of active sites infested (ha)</b>		<b>469</b>	<b>481</b>	<b>13</b>	<b>481</b>	<b>481</b>
Percentage of potential habitat infested		0.16%	0.16%	0.00%	0.16%	0.16%
Hectares classed historical		0.5	0.5	0	0.5	0.5
<b>Area of potential habitat (ha)</b>	294,152					
<b>Budget allocated for 2011/12</b>	\$52,400					
<b>Budget spent in 2011/12</b>	\$40,505					
<b>Variance</b>	\$11,895					



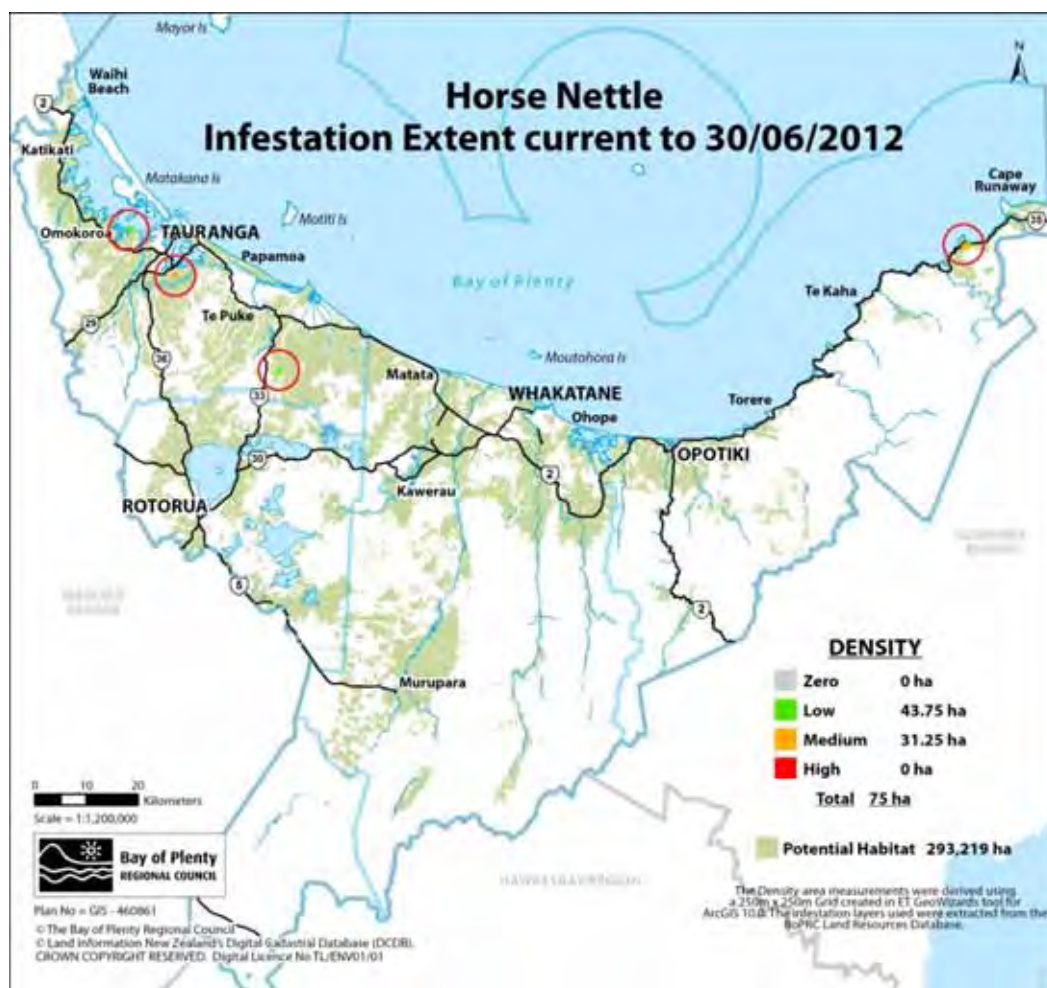
#### 4.4.2 Horse nettle

**Current programme status:** On-track



**Comments:** Site management plans are being implemented with steady progress being made.

Horse nettle		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		31	31	0	31	0
Low density active sites (ha)		44	44	0	44	75
Zero density active sites (ha)		0	0	0	0	0
<b>Total area of active sites infested (ha)</b>		<b>75</b>	<b>75</b>	<b>0</b>	<b>75</b>	<b>75</b>
Percentage of potential habitat infested		0.03%	0.03%	0.00%	0.03%	0.03%
Hectares classed historical		0	0	0	0	0
<b>Area of potential habitat (ha)</b>	293,219					
<b>Budget allocated for 2011/12</b>	\$17,000					
<b>Budget spent in 2011/12</b>	\$3,007					
<b>Variance</b>	\$13,993					





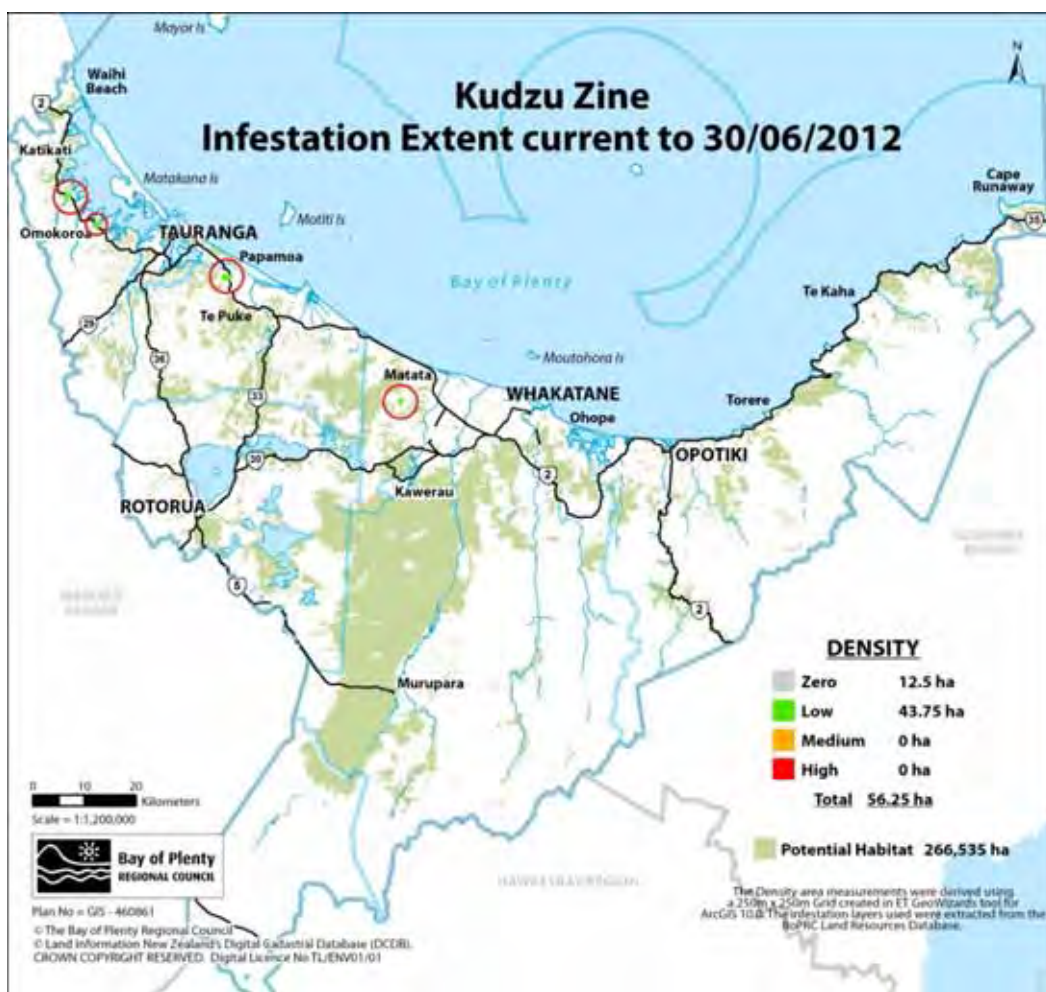
#### 4.4.3 Kudzu vine

**Current programme status:** On-track



**Comments:** Site management plans are being implemented with steady progress being made.

Kudzu vine		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		0	0	0	0	0
Low density active sites (ha)		44	44	0	44	44
Zero density active sites (ha)		13	13	0	13	13
<b>Total area of active sites infested (ha)</b>		<b>56</b>	<b>56</b>	<b>0</b>	<b>56</b>	<b>56</b>
Percentage of potential habitat infested		0.02%	0.02%	0.00%	0.02%	0.02%
Hectares classed historical		1.5	1.5	0	1.5	1.5
<b>Area of potential habitat (ha)</b>	266,535					
<b>Budget allocated for 2011/12</b>	\$2,500.00					
<b>Budget spent in 2011/12</b>	\$127.00					
<b>Variance</b>	\$2,373.00					



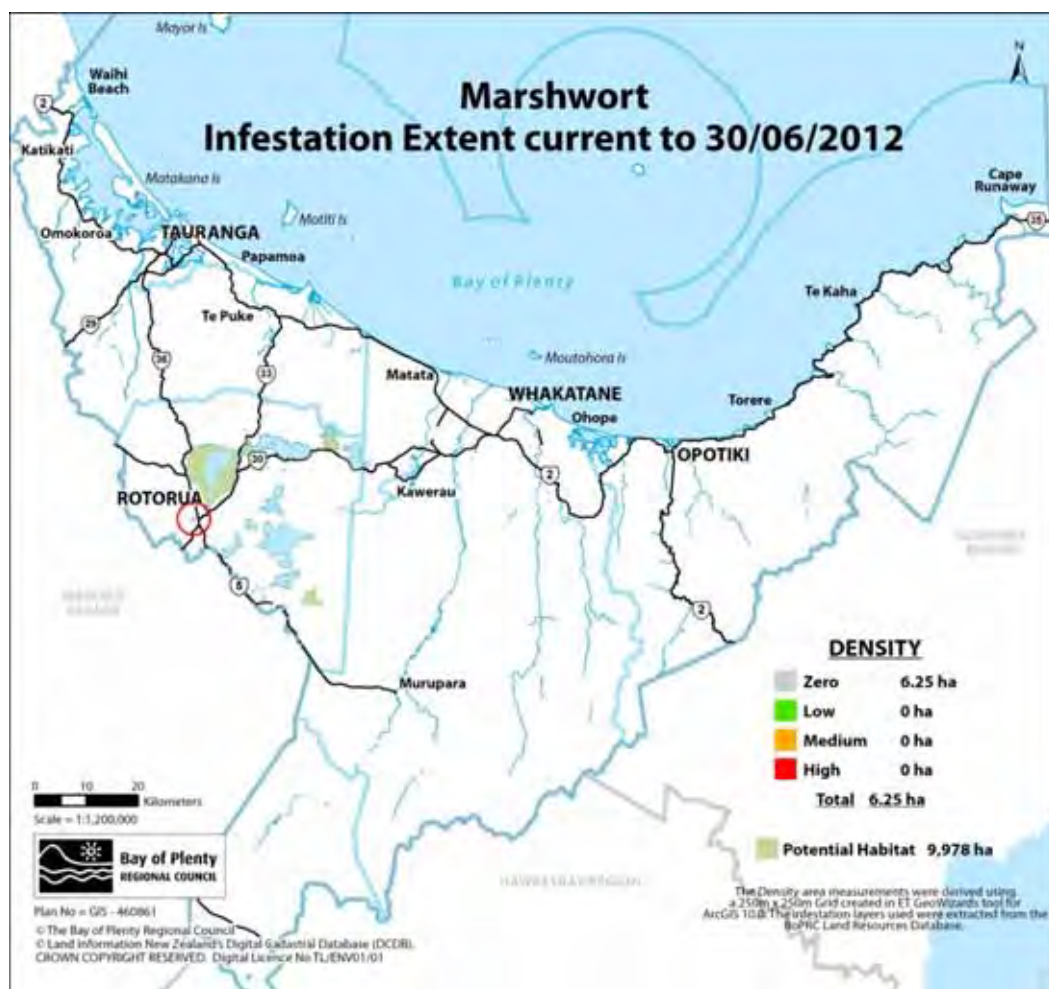
#### 4.4.4 Marshwort

**Current programme status:** On-track



**Comments:** Active site inspected with no evidence of re-invasion. Surveillance included as part of ornamental pond surveys.

Marshwort		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		0	0	0	0	0
Low density active sites (ha)		0	0	0	0	0
Zero density active sites (ha)		6	6	0	0	0
<b>Total area of active sites infested (ha)</b>		<b>6</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>
Percentage of potential habitat infested		0.00%	0.00%	0.00%	0.00%	0.00%
Hectares classed historical		0	0	0	6.25	6.25
<b>Area of potential habitat (ha)</b>	128,552					
<b>Budget allocated for 2011/12</b>	\$9,000					
<b>Budget spent in 2011/12</b>	\$913					
<b>Variance</b>	\$8,087					





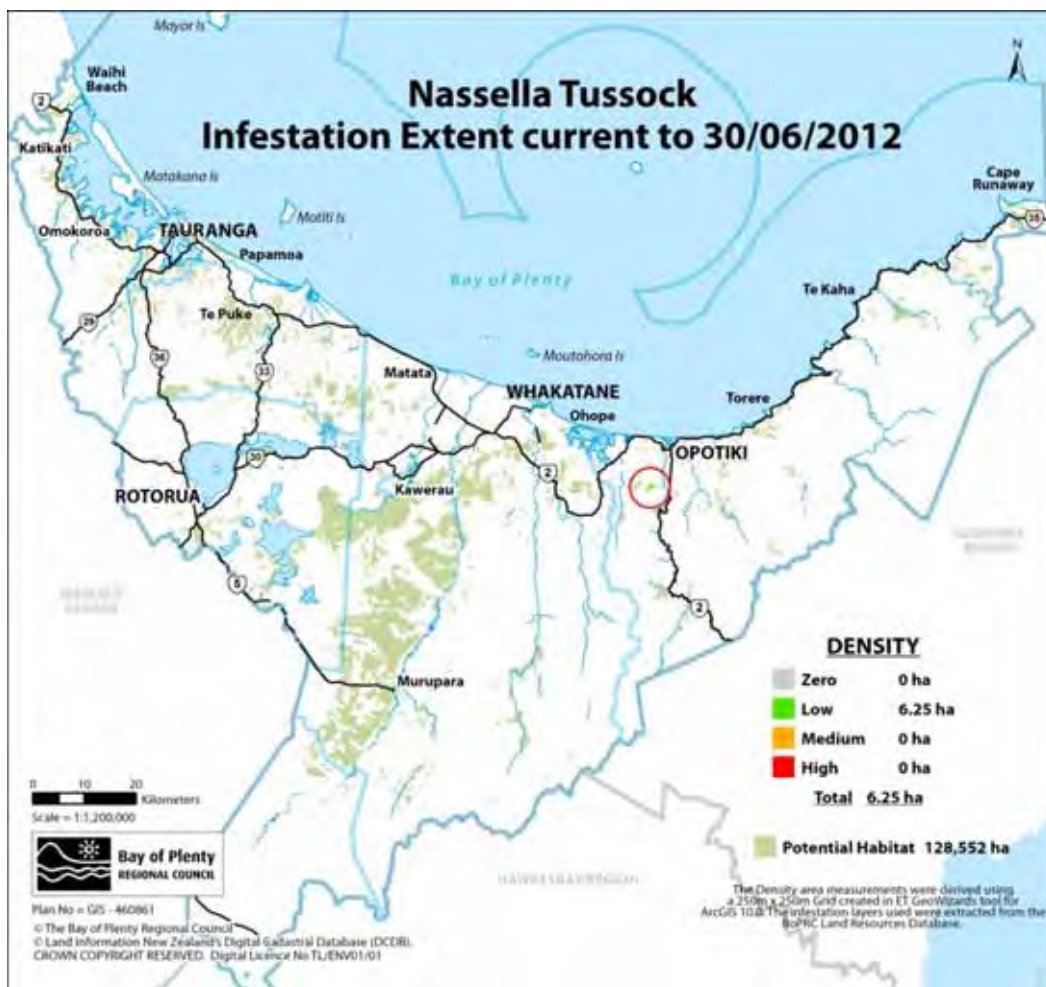
#### 4.4.5 Nassella tussock

**Current programme status:** On-track



**Comments:** programme progressing well (site inspection completed by DOC). One suspected new site investigated but confirmed negative. Support has also been provided into biocontrol research.

Nassella tussock		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		0	0	0	0	0
Low density active sites (ha)		6	6	0	6	6
Zero density active sites (ha)		0	0	0	0	0
<b>Total area of active sites infested (ha)</b>		<b>6</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>6</b>
Percentage of potential habitat infested		0.00%	0.00%	0.00%	0.00%	0.00%
Hectares classed historical		99	99	0	99	99
<b>Area of potential habitat (ha)</b>	128,552					
<b>Budget allocated for 2011/12</b>	\$3,000.00					
<b>Budget spent in 2011/12</b>	\$0.00					
<b>Variance</b>	\$3,000.00					



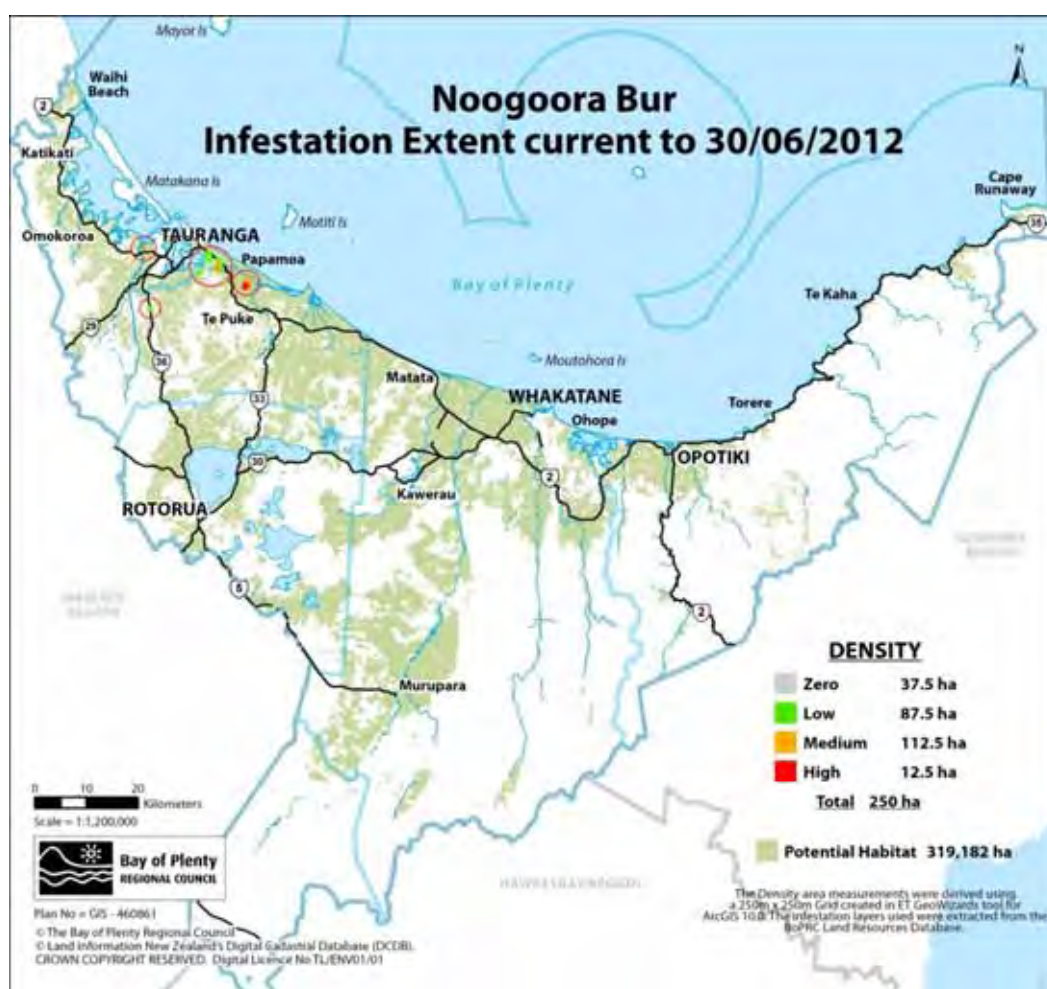
#### 4.4.6 Noogoora bur

**Current programme status:** On-track



**Comments:** All known maize growers in the western Bay of Plenty have been contacted and informed of risks relating to this plant. Intensive surveillance by summer students has revealed an increase in infested area; however, control programmes are progressing satisfactorily.

Noogoora bur		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	13	13	0	0
Medium density active sites (ha)		81	113	31	115	0
Low density active sites (ha)		81	88	6	97	212
Zero density active sites (ha)		25	38	13	38	38
<b>Total area of active sites infested (ha)</b>		<b>188</b>	<b>250</b>	<b>63</b>	<b>250</b>	<b>250</b>
Percentage of potential habitat infested		0.06%	0.08%	0.02%	0.08%	0.08%
Hectares classed historical		0	0	0	0	0
<b>Area of potential habitat (ha)</b>	319,182					
<b>Budget allocated for 2011/12</b>	\$36,000.00					
<b>Budget spent in 2011/12</b>	\$9,600.00					
<b>Variance</b>	\$26,400.00					



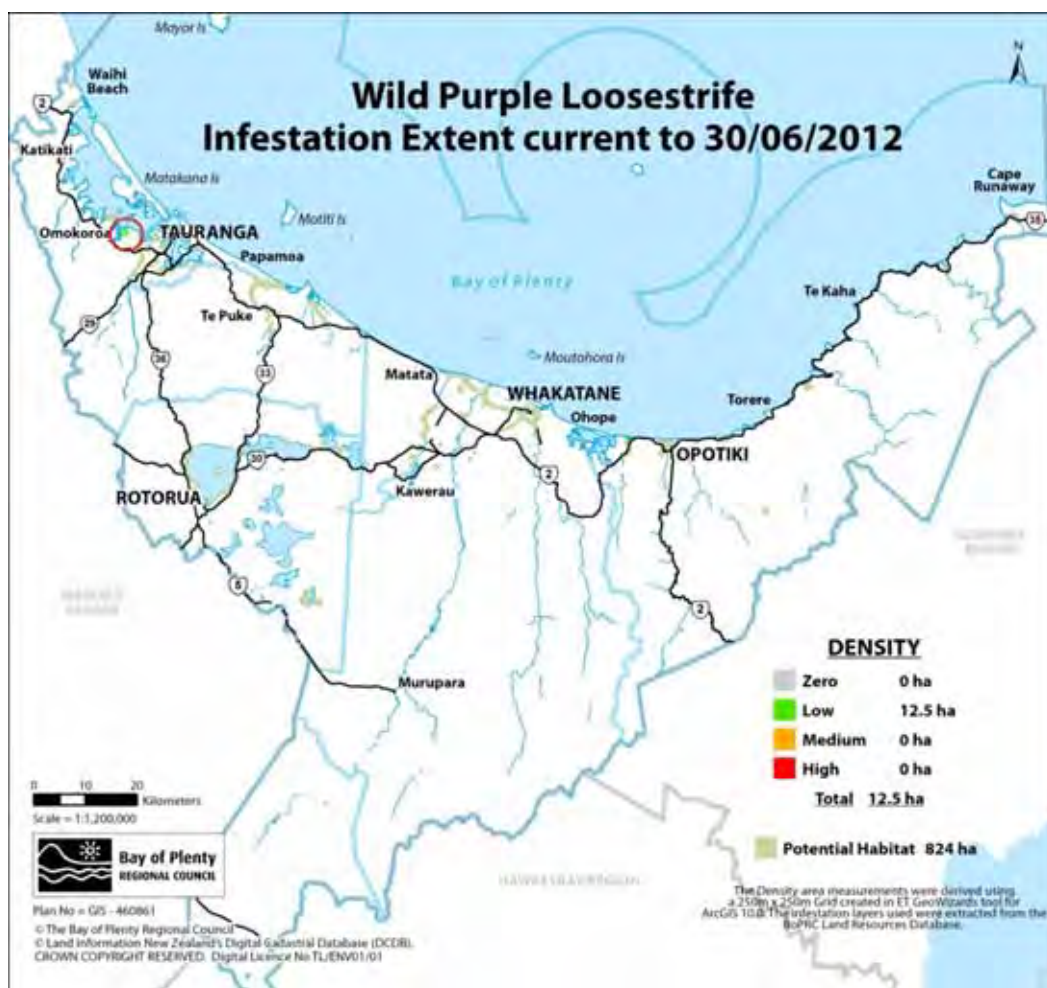
#### 4.4.7 Wild purple loosestrife

**Current programme status:** On-track



**Comments:** Not currently known to be present in the wild (one garden site).  
Surveillance included as part of ornamental pond surveys.

Wild purple loosestrife		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		0	0	0	0	0
Low density active sites (ha)		13	13	0	13	13
Zero density active sites (ha)		0	0	0	0	0
<b>Total area of active sites infested (ha)</b>		<b>13</b>	<b>13</b>	<b>0</b>	<b>13</b>	<b>13</b>
Percentage of potential habitat infested		1.52%	1.52%	0.00%	1.52%	1.52%
Hectares classed historical		0	0	0	0	0
<b>Area of potential habitat (ha)</b>	824					
<b>Budget allocated for 2011/12</b>	\$2,500.00					
<b>Budget spent in 2011/12</b>	\$912.00					
<b>Variance</b>	\$1,587.00					





#### 4.4.8 Senegal tea

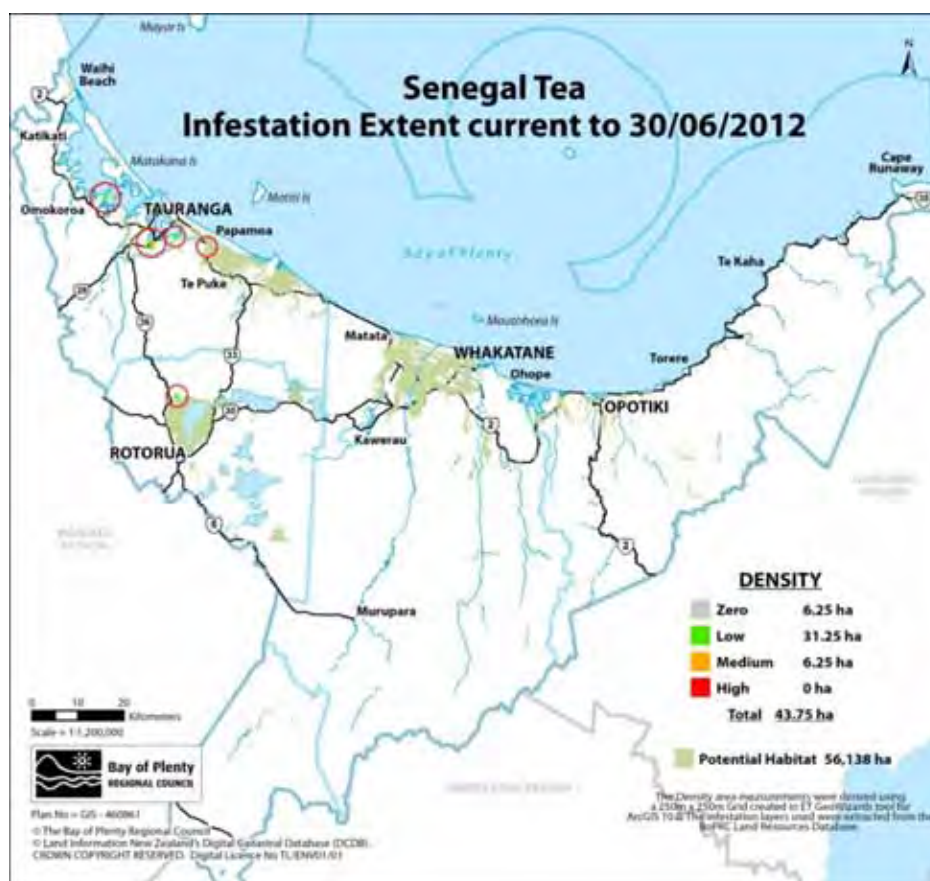
**Current programme status:** On-track



**Comments:** As already stated, an infestation of Senegal tea was detected at Hamurana during surveillance programme targeting aquatic pests in ornamental ponds.

A management plan has been established and the infestation has been controlled with good results. Monitoring will continue in the upcoming years to ensure no regrowth occurs.

Senegal Tea		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		6	6	0	0	0
Low density active sites (ha)		25	31	6	38	38
Zero density active sites (ha)		6	6	0	6	6
<b>Total area of active sites infested (ha)</b>		<b>38</b>	<b>44</b>	<b>6</b>	<b>44</b>	<b>44</b>
Percentage of potential habitat infested		0.07%	0.08%	0.01%	0.08%	0.08%
Hectares classed historical		0	0	0	0	0
<b>Area of potential habitat (ha)</b>	56,138					
<b>Budget allocated for 2011/12</b>	\$7,000.00					
<b>Budget spent in 2011/12</b>	\$1,039.97					
<b>Variance</b>	\$5,960.03					



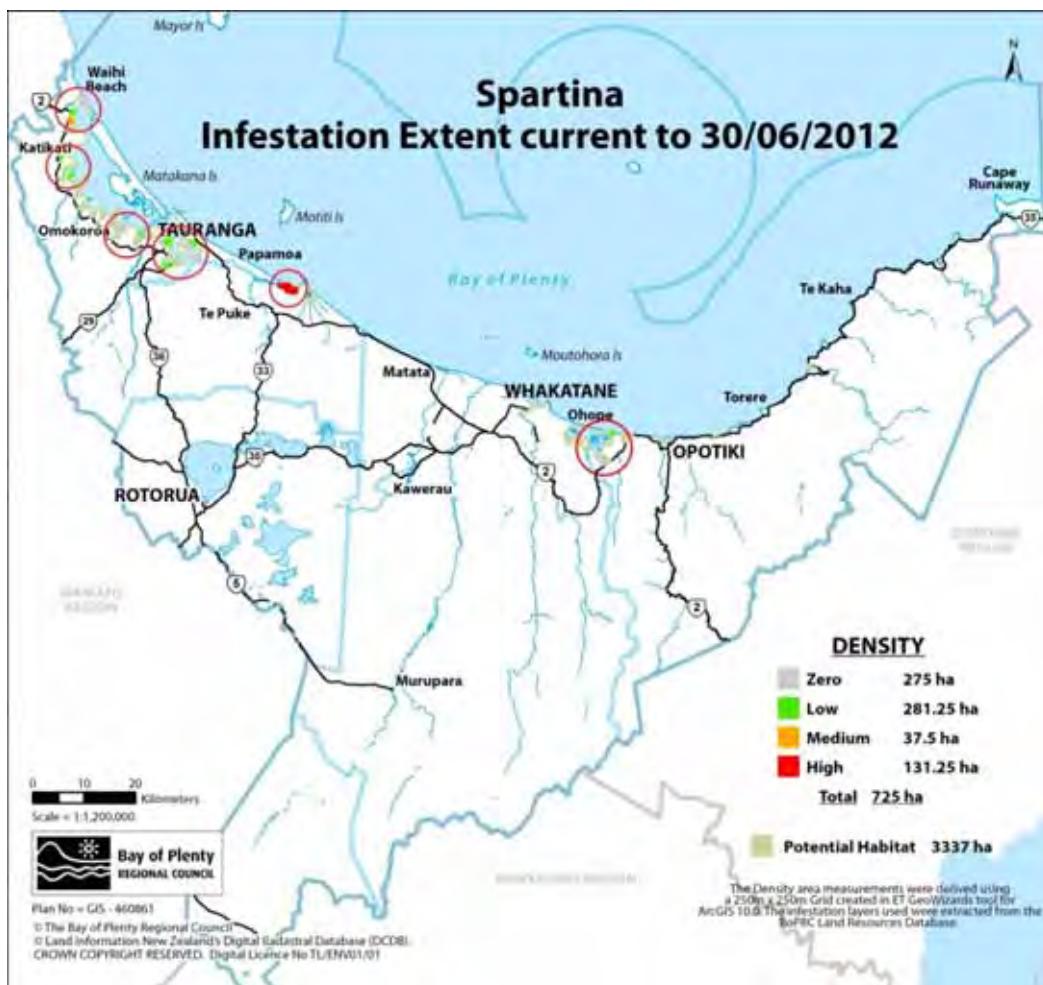
#### 4.4.9 Spartina

**Current programme status:** Behind schedule



**Comments:** Consents for herbicide use have not been pursued as the Environmental Protection Agency (EPA) is currently considering revising restrictions on the use of a number of herbicides in aquatic environments.

Spartina		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		131	131	0	131	0
Medium density active sites (ha)		38	38	0	38	169
Low density active sites (ha)		281	281	0	281	281
Zero density active sites (ha)		275	275	0	275	275
<b>Total area of active sites infested (ha)</b>		<b>725</b>	<b>725</b>	<b>0</b>	<b>725</b>	<b>725</b>
Percentage of potential habitat infested		21.73%	21.73%	0.00%	21.73%	21.73%
Hectares classed historical		0	0	0	0	0
<b>Area of potential habitat (ha)</b>	3,337					
<b>Budget allocated for 2011/12</b>	\$21,500.00					
<b>Budget spent in 2011/12</b>	\$0.00					
<b>Variance</b>	\$21,500.00					



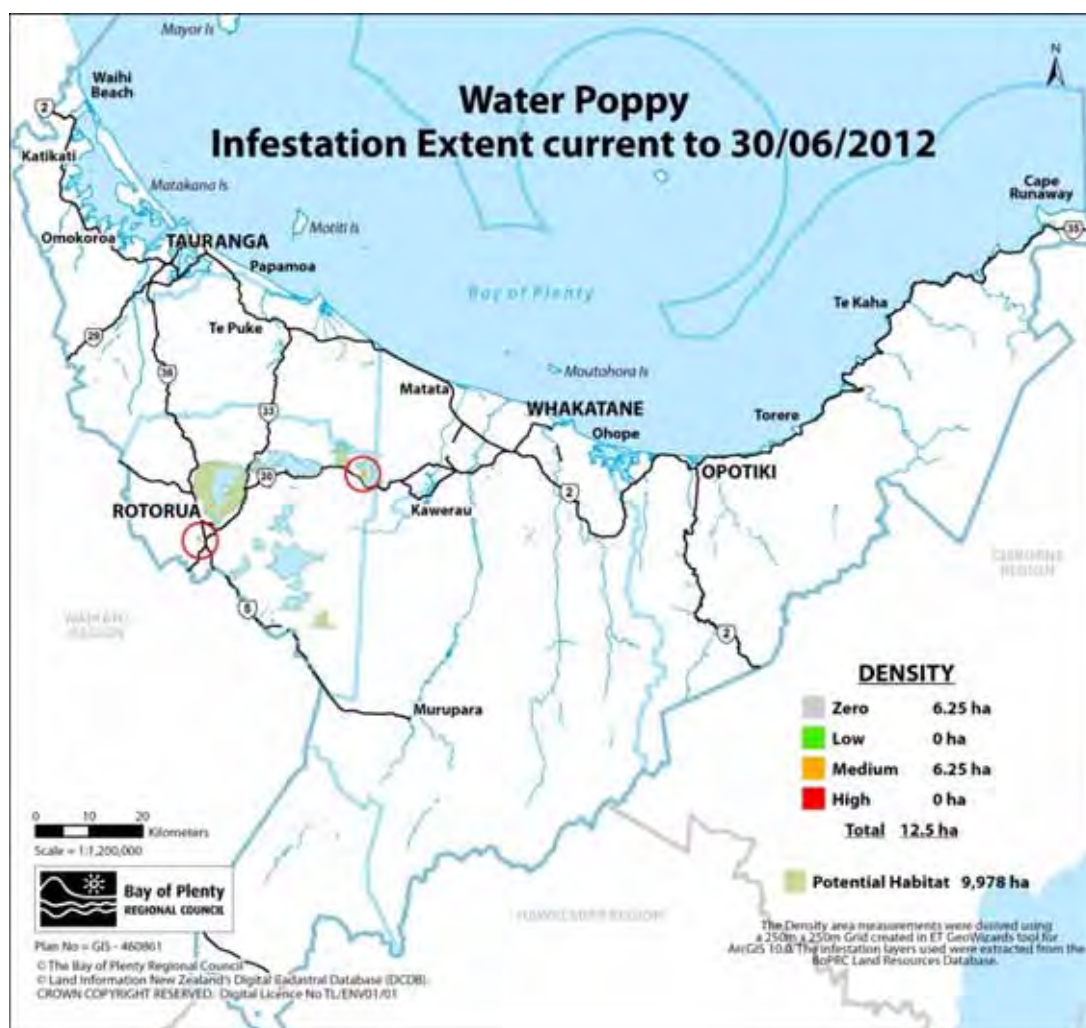
#### 4.4.10 Water poppy

**Current programme status:** On-track



**Comments:** Surveillance included as part of ornamental pond surveys.

Water poppy		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		6	6	0	6	0
Low density active sites (ha)		0	0	0	0	6
Zero density active sites (ha)		6	6	0	6	6
<b>Total area of active sites infested (ha)</b>		<b>13</b>	<b>13</b>	<b>0</b>	<b>13</b>	<b>13</b>
Percentage of potential habitat infested		0.13%	0.13%	0.00%	0.13%	0.13%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	9,978					
Budget allocated for 2011/12	\$9,500.00					
Budget spent in 2011/12	\$912.97					
Variance	\$8,587.03					





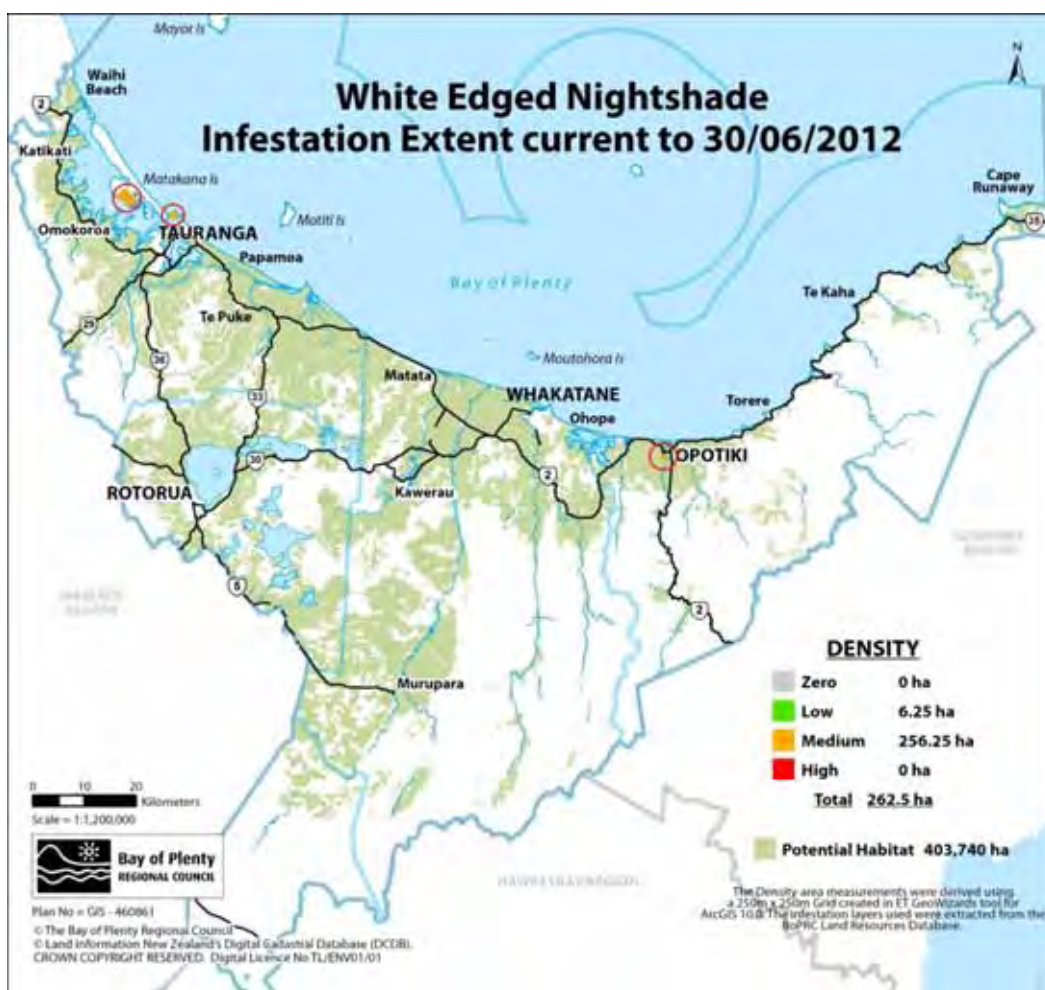
#### 4.4.11 White edged nightshade

Current programme status: On-track



Comments: Programme on-track.

White edged nightshade		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		256	256	0	256	256
Low density active sites (ha)		6	6	0	6	6
Zero density active sites (ha)		0	0	0	0	0
<b>Total area of active sites infested (ha)</b>		<b>263</b>	<b>263</b>	<b>0</b>	<b>263</b>	<b>263</b>
Percentage of potential habitat infested		0.07%	0.07%	0.00%	0.07%	0.07%
Hectares classed historical		0	0	0	0	0
<b>Area of potential habitat (ha)</b>	403,740					
<b>Budget allocated for 2011/12</b>	\$6,000.00					
<b>Budget spent in 2011/12</b>	\$127.00					
<b>Variance</b>	\$5,873.00					



## 4.5 Exclusion and eradication pest animal reporting

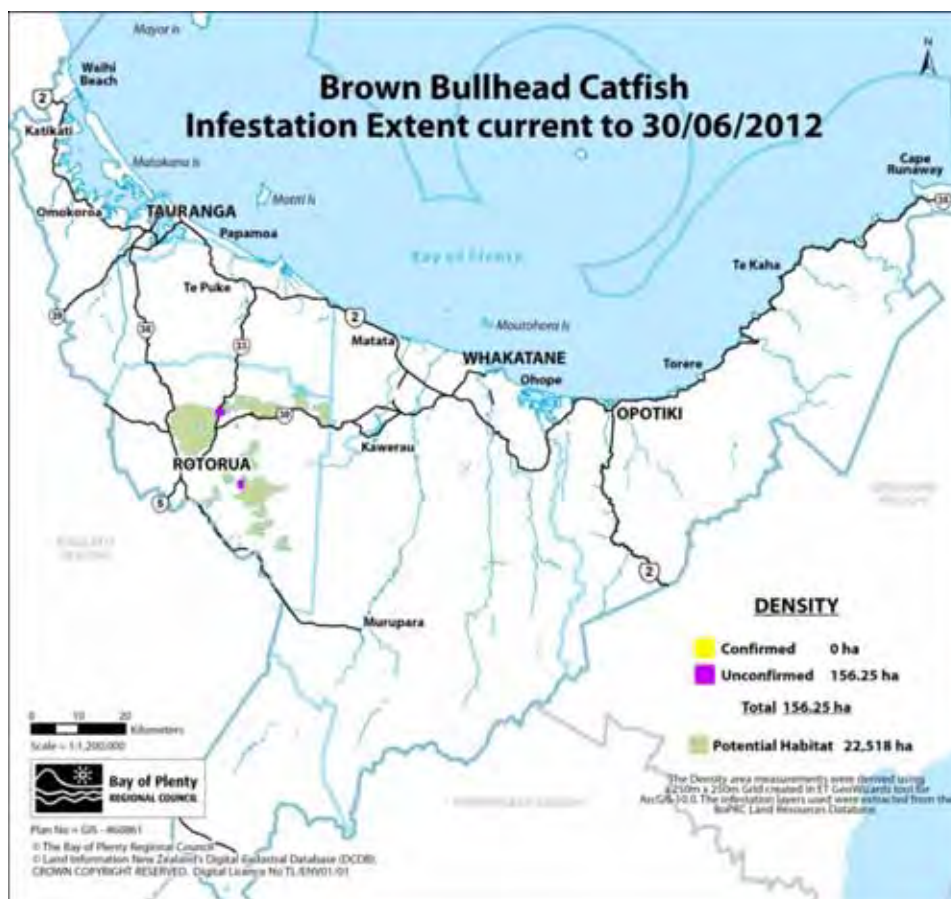
### 4.5.1 Brown bullhead catfish

**Current programme status:** On-track



**Comments:** Reports of catfish in Lake Tarawera were investigated in collaboration with DOC, but currently remain unconfirmed. Further surveillance is scheduled for 2013.

Brown bullhead catfish		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		0	0	0	0	0
Low density active sites (ha)		0	0	0	0	0
Zero density active sites (ha)		0	0	0	0	0
<b>Total area of active sites infested (ha)</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Percentage of potential habitat infested		0.00%	0.00%	0.00%	0.00%	0.00%
Hectares classed historical		0	0	0	0	0
<b>Area of potential habitat (ha)</b>	22,518					
<b>Budget allocated for 2011/12</b>	\$9,500					
<b>Budget spent in 2011/12</b>	\$3,066					
<b>Variance</b>	\$6,434					





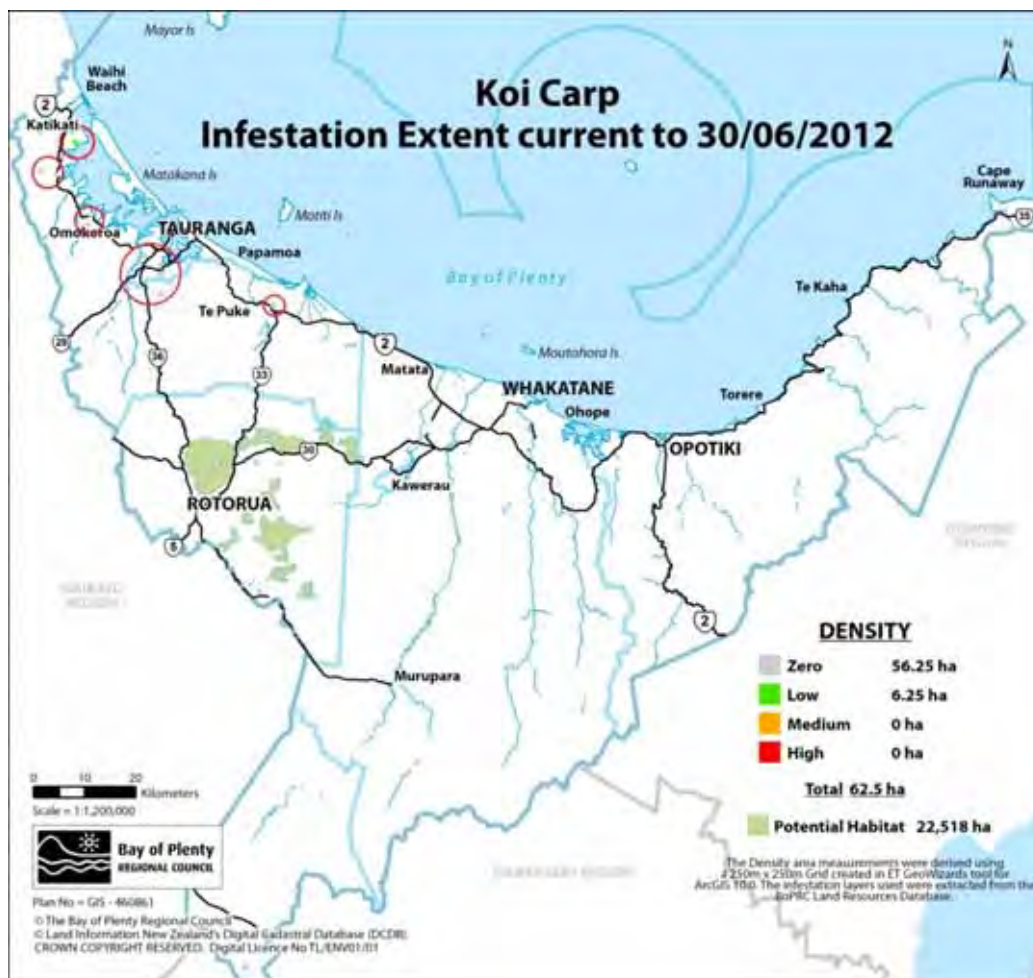
## 4.5.2 Koi carp

**Current programme status:** On-track



**Comments:** A report of Koi carp was referred to DOC. Support was provided to DOC for a control programme carried out in the western Bay of Plenty. Further follow-up control is scheduled for 2013.

Koi carp		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		0	0	0	0	0
Low density active sites (ha)		6	6	0	6	0
Zero density active sites (ha)		56	56	0	56	63
<b>Total area of active sites infested (ha)</b>		<b>63</b>	<b>63</b>	<b>0</b>	<b>63</b>	<b>63</b>
Percentage of potential habitat infested		0.27%	0.27%	0.00%	0.27%	0.27%
Hectares classed historical		0.4	0.4	0	0.4	0.4
<b>Area of potential habitat (ha)</b>	23,000					
<b>Budget allocated for 2011/12</b>	\$14,000					
<b>Budget spent in 2011/12</b>	\$1,718					
<b>Variance</b>	\$12,282					



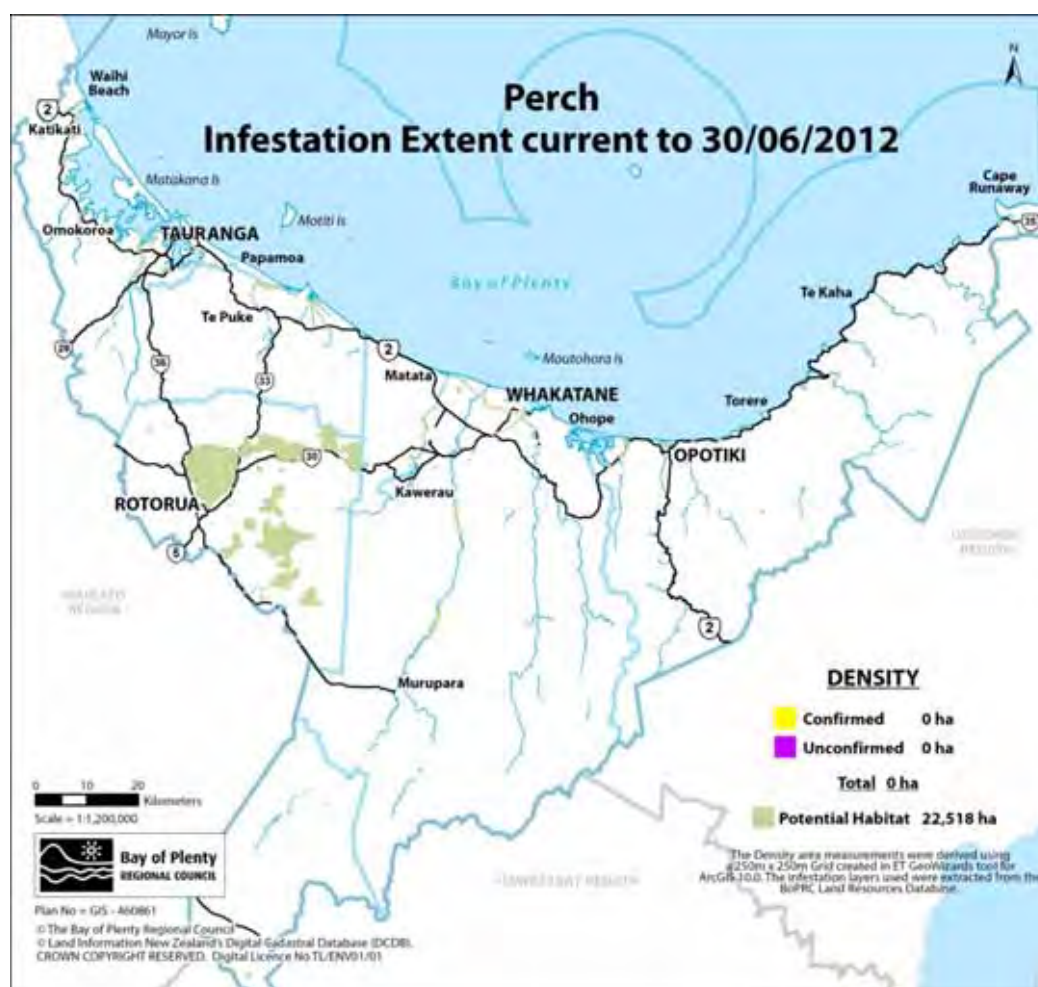
### 4.5.3 Perch

**Current programme status:** On-track



**Comments:** Not currently known to be present. Surveillance included as part of ornamental pond surveys.

Perch		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		0	0	0	0	0
Low density active sites (ha)		0	0	0	0	0
Zero density active sites (ha)		0	0	0	0	0
<b>Total area of active sites infested (ha)</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Percentage of potential habitat infested		0.00%	0.00%	0.00%	0.00%	0.00%
Hectares classed historical		0	0	0	0	0
<b>Area of potential habitat (ha)</b>	23,000					
<b>Budget allocated for 2011/12</b>	\$1,280					
<b>Budget spent in 2011/12</b>	\$290					
<b>Variance</b>	\$990					



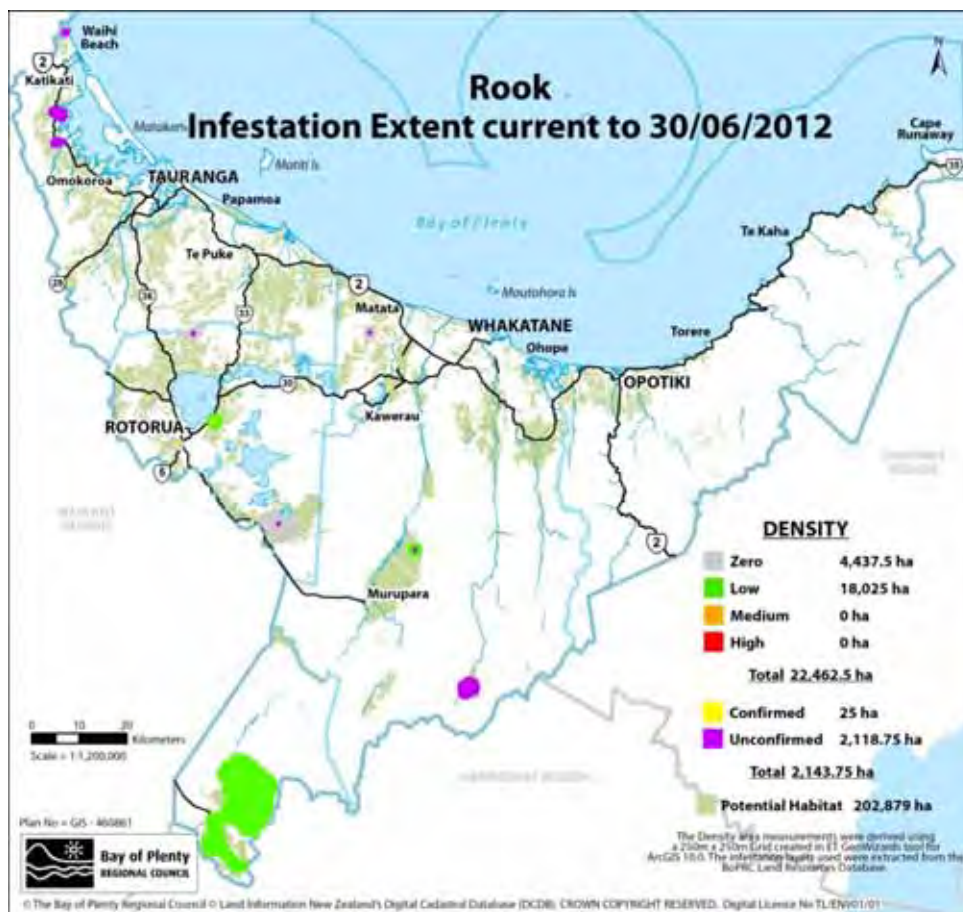
#### 4.5.4 Rooks

**Current programme status:** Behind schedule



**Comments:** Unfavourable weather conditions meant no rook control was carried out during the 2011/12 year. A small population of birds still exist in the east Taupō area. Reports were also received of rooks in the Katikati area; however, despite considerable surveillance effort their presence has not been confirmed. A report from the Ruatāhuna area is yet to be investigated.

Rooks		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		0	0	0	0	0
Low density active sites (ha)		18025	18025	0	18025	16384.725
Zero density active sites (ha)		4437.5	4437.5	0	4437.5	6077.775
<b>Total area of active sites infested (ha)</b>		<b>22462.5</b>	<b>22462.5</b>	<b>0</b>	<b>22462.5</b>	<b>22462.5</b>
Percentage of potential habitat infested		11.07%	11.07%	0.00%	11.07%	11.07%
Hectares classed historical		0	0	0	0	0
<b>Area of potential habitat (ha)</b>	202,879					
<b>Budget allocated for 2011/12</b>	\$30,000					
<b>Budget spent in 2011/12</b>	\$22,806					
<b>Variance</b>	\$7,194					



## 4.6 Containment pests

Occupiers and agencies take a lead role in controlling these pests. Council's primary role is to provide advice and support as well as enforce rules and statutory obligations. Below are tables summarising the progress toward the objectives of the RPMP by species.

## 4.7 Containment pest plant reporting

### 4.7.1 African feather grass

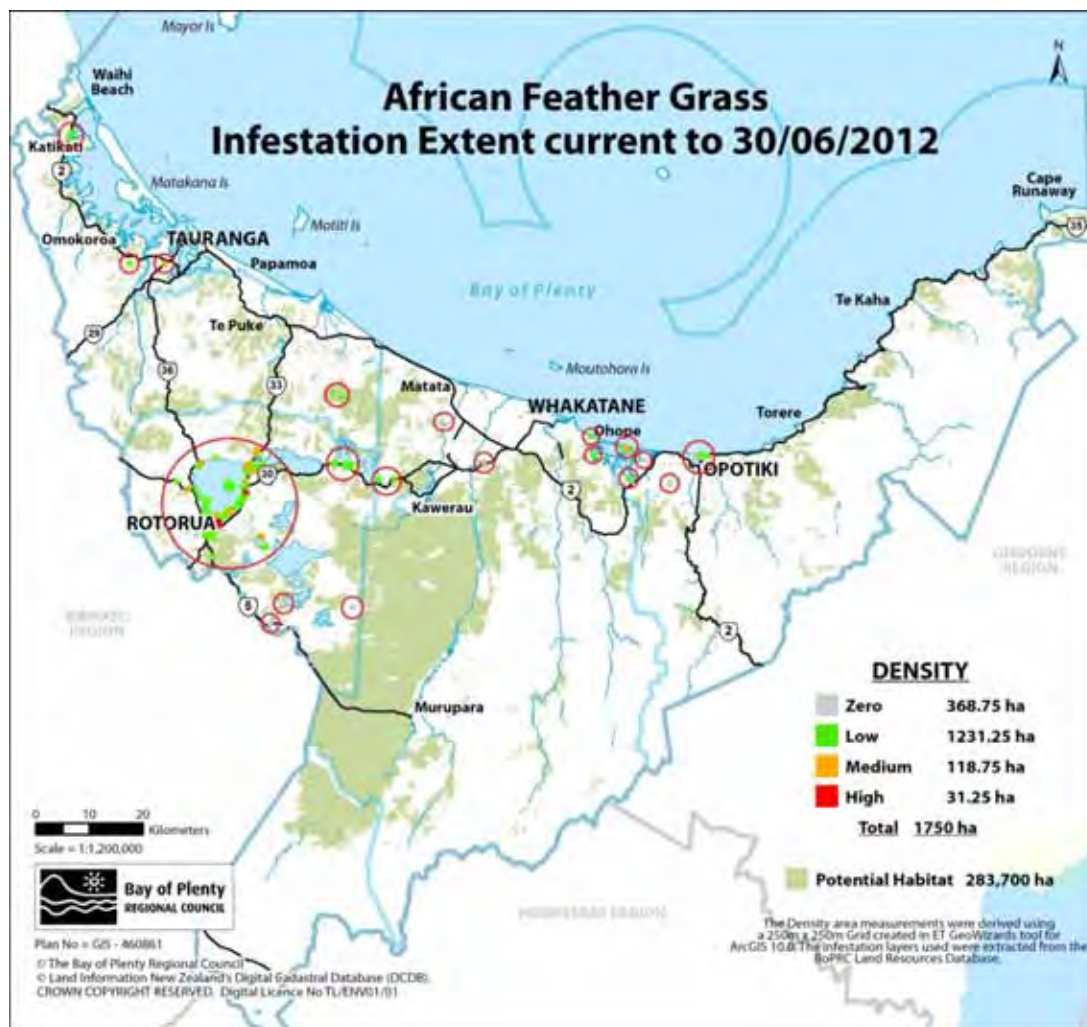
**Current programme status:** On-track



**Comments:** Surveillance has revealed small increases in medium and low density area, however programme is considered to be on-track.

African Feather Grass		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		31	31	0	20	0
Medium density active sites (ha)		113	119	6	130	150
Low density active sites (ha)		1225	1231	6	1231	1157
Zero density active sites (ha)		369	369	0	369	443
<b>Total area of active sites infested (ha)</b>		<b>1738</b>	<b>1750</b>	<b>13</b>	<b>1750</b>	<b>1750</b>
Percentage of potential habitat infested		0.61%	0.62%	0.01%	0.62%	0.62%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	283,699					
Budget allocated for 2011/12	\$14,000					
Budget spent in 2011/12	\$12,758					
Variance	\$1,242					





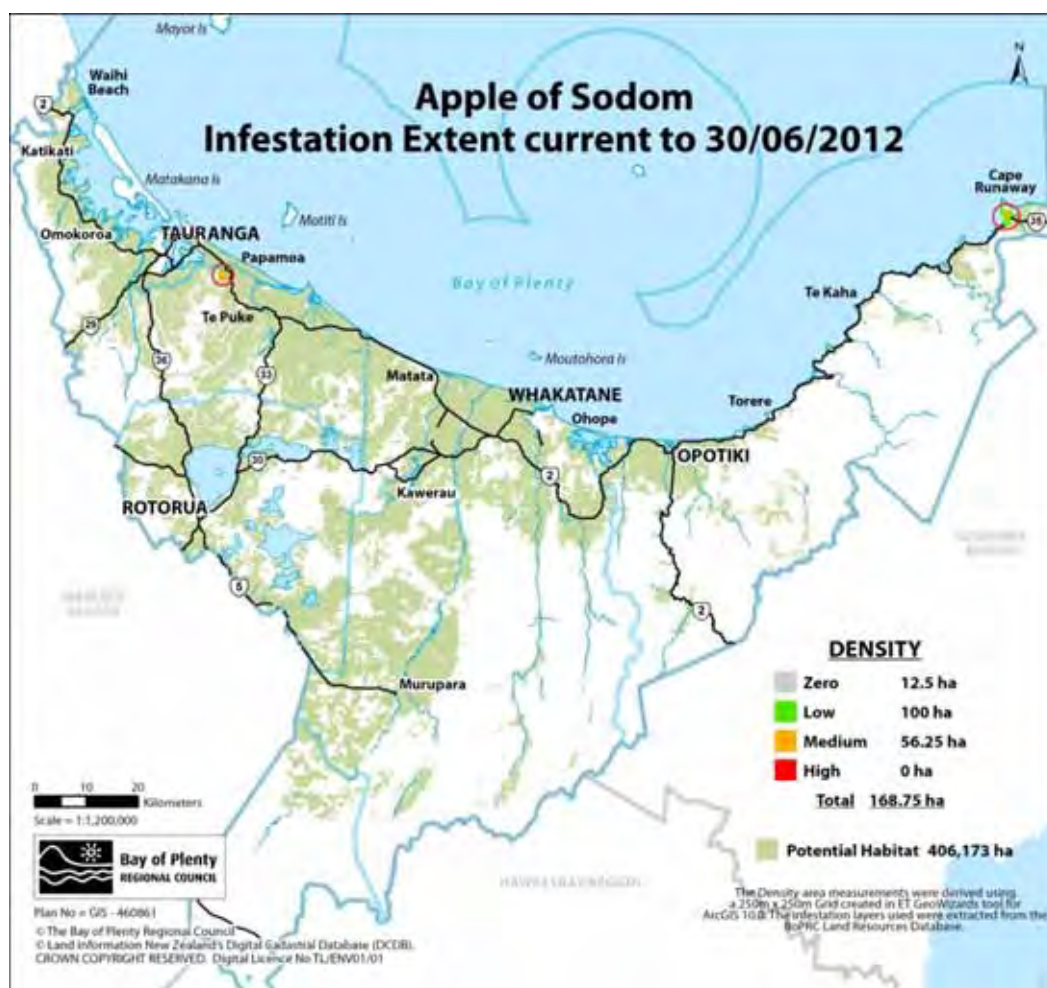
#### 4.7.2 Apple of Sodom

**Current programme status:** On-track



**Comments:** Good progress is being made at Pāpāmoa; however, no work was completed at Waihou Bay due to limited resources.

Apple of sodom		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		63	56	-6	56	0
Low density active sites (ha)		94	100	6	100	153
Zero density active sites (ha)		13	13	0	13	15
<b>Total area of active sites infested (ha)</b>		<b>169</b>	<b>169</b>	<b>0</b>	<b>169</b>	<b>169</b>
Percentage of potential habitat infested		0.04%	0.04%	0.00%	0.04%	0.04%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	406,173					
Budget allocated for 2011/12	\$8,000					
Budget spent in 2011/12	\$170					
Variance	\$7,830					



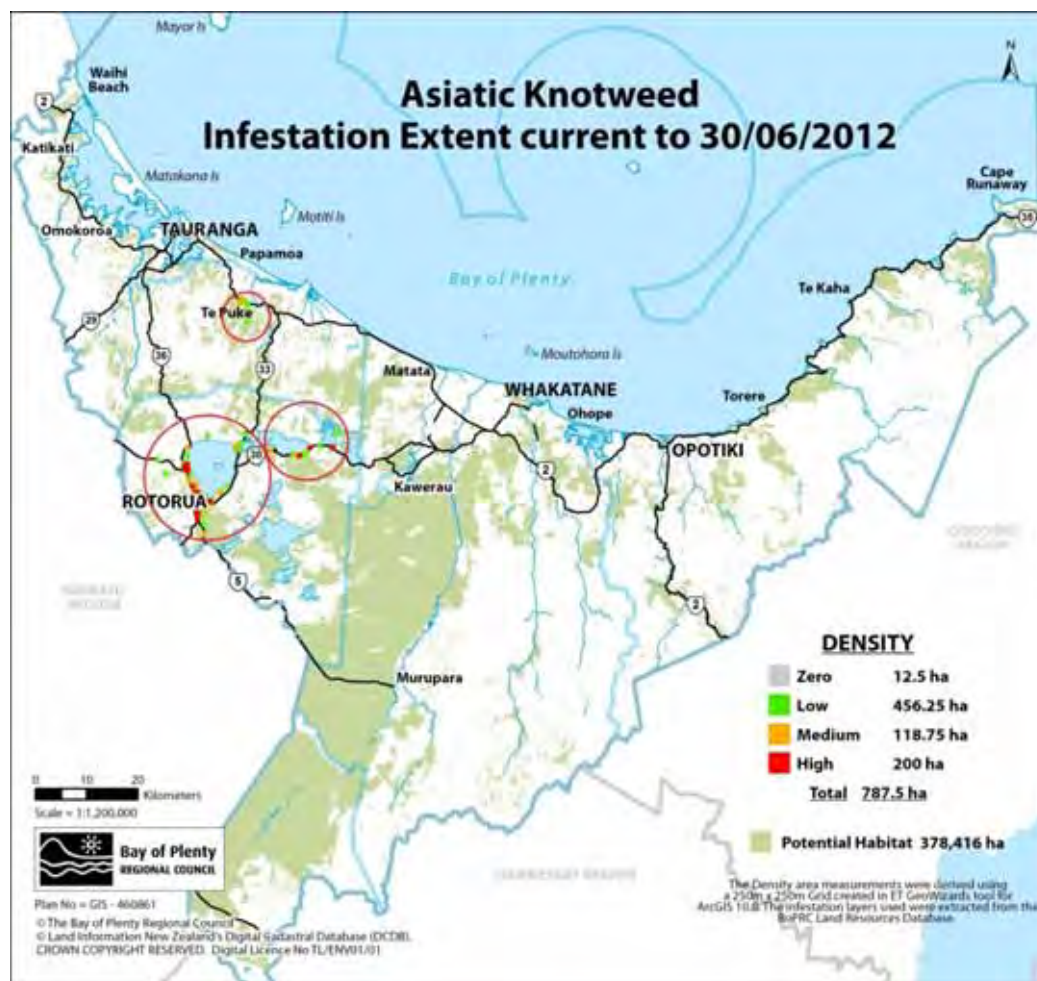
### 4.7.3 Asiatic knotweed

**Current programme status:** On-track



**Comments:** Programme is on-track. Increased surveillance has revealed an increase in infested area however current control programmes are appearing effective.

Asiatic knotweed		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		200	200	0	200	200
Medium density active sites (ha)		106	119	13	119	106
Low density active sites (ha)		419	456	38	456	469
Zero density active sites (ha)		13	13	0	13	13
<b>Total area of active sites infested (ha)</b>		<b>738</b>	<b>788</b>	<b>50</b>	<b>788</b>	<b>788</b>
Percentage of potential habitat infested		0.19%	0.21%	0.01%	0.21%	0.21%
Hectares classed historical		0	0	0.00%	0	0
Area of potential habitat (ha)	378,416					
Budget allocated for 2011/12	\$20,000					
Budget spent in 2011/12	\$7,803					
Variance	\$12,197					



#### 4.7.4 Blackberry

**Current programme status:** On-track



**Comments:** Multiple complaints and enquires received which were resolved without needing formal enforcement.

Blackberry		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		Widespread			Widespread	
Medium density active sites (ha)						
Low density active sites (ha)						
Zero density active sites (ha)						
<b>Total area of active sites infested (ha)</b>		<b>Present in available habitat</b>			<b>All available habitat</b>	
Percentage of potential habitat infested		100.00%	100.00%	100.00%	100.00%	100.00%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	628,556					
Budget allocated for 2011/12	\$6,700					
Budget spent in 2011/12	\$2,387					
Variance	\$4,313					



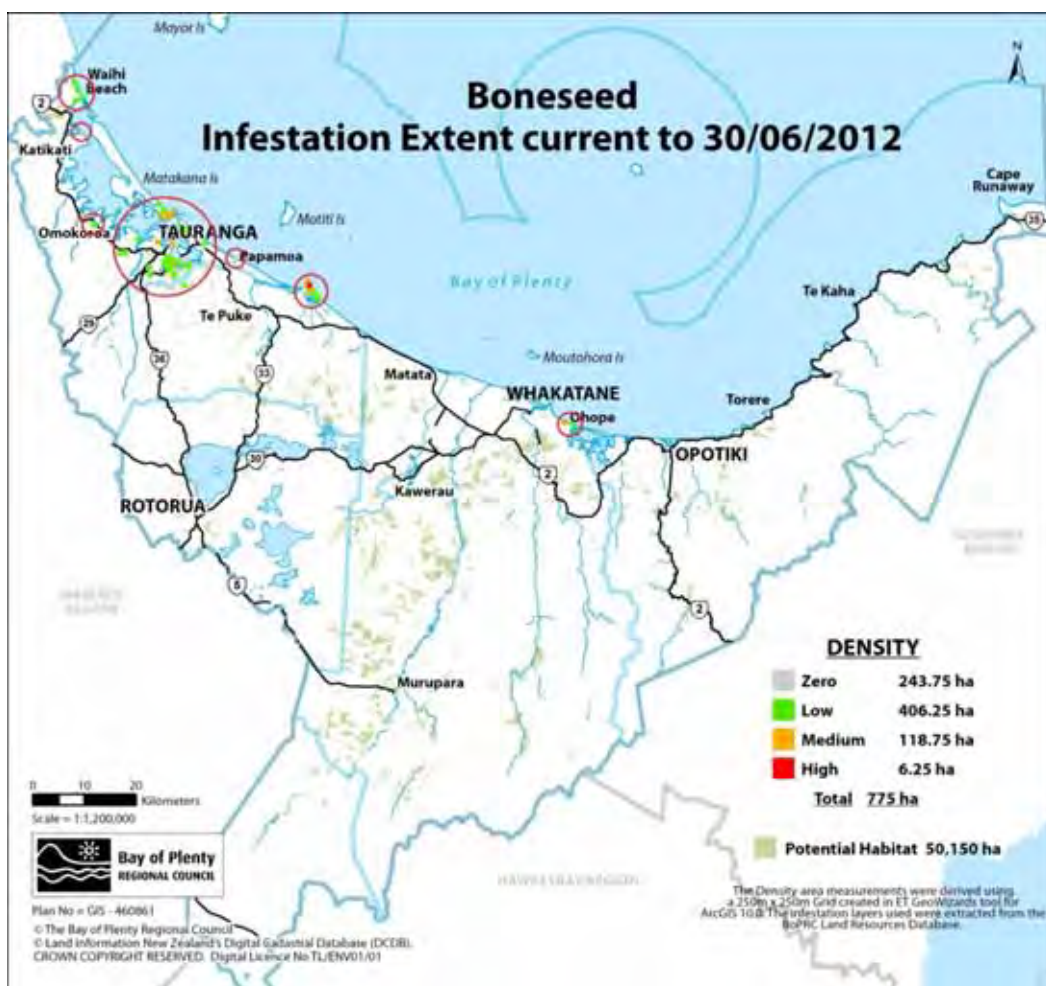
#### 4.7.5 Boneseed

**Current programme status:** On-track



**Comments:** Programme on-track. Support has been provided into biocontrol research.

Boneseed		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		6	6	0	6	6
Medium density active sites (ha)		119	119	0	119	119
Low density active sites (ha)		406	406	0	406	406
Zero density active sites (ha)		244	244	0	244	244
<b>Total area of active sites infested (ha)</b>		<b>775</b>	<b>775</b>	<b>0</b>	<b>775</b>	<b>775</b>
Percentage of potential habitat infested		1.55%	1.55%	0.00%	1.55%	1.55%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	50,150					
<b>Budget allocated for 2011/12</b>	\$6,000					
<b>Budget spent in 2011/12</b>	\$3,540					
<b>Variance</b>	\$2,460					



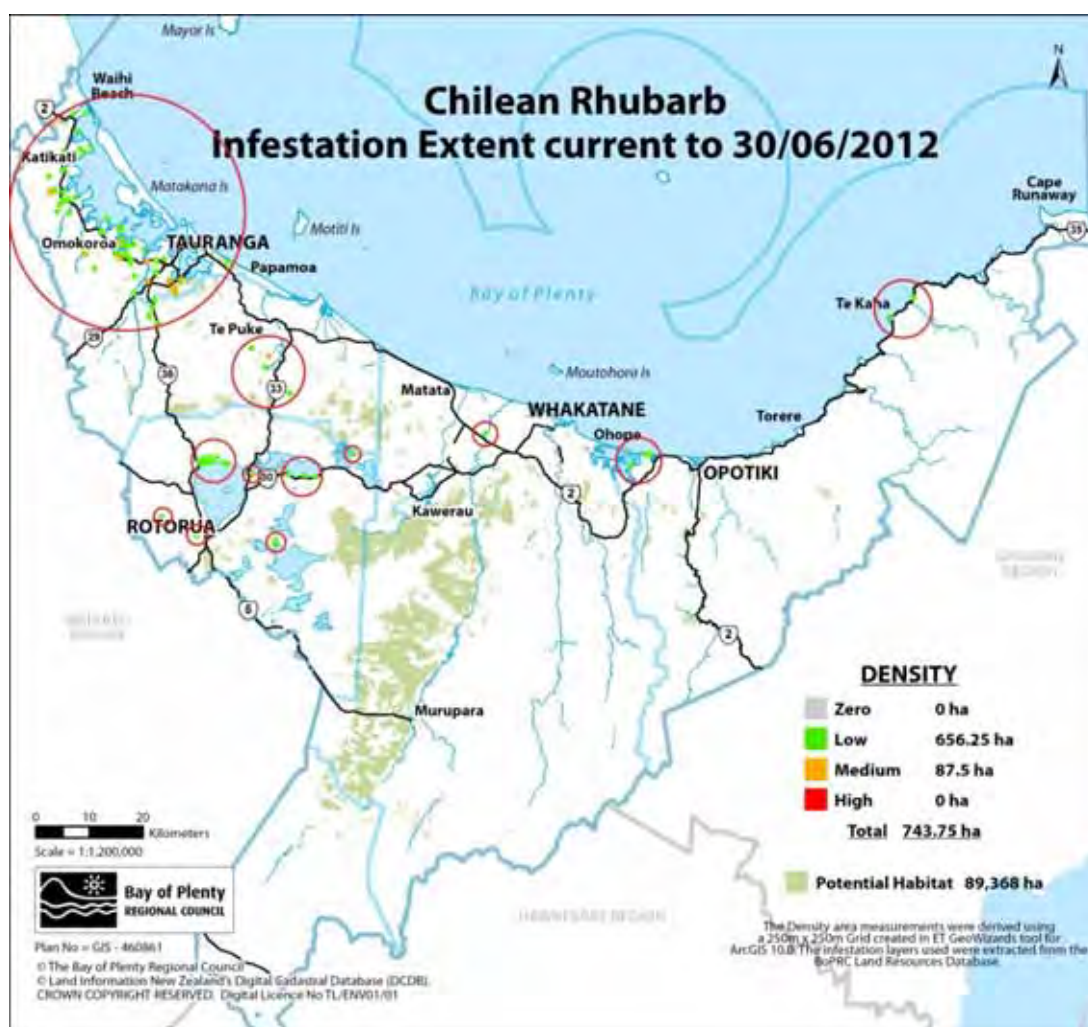
#### 4.7.6 Chilean rhubarb

**Current programme status:** On-track



**Comments:** Advice provided to enquiries.

Chilean rhubarb		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		69	88	19	88	69
Low density active sites (ha)		588	656	69	656	588
Zero density active sites (ha)		0	0	0	0	88
<b>Total area of active sites infested (ha)</b>		<b>656</b>	<b>744</b>	<b>88</b>	<b>744</b>	<b>744</b>
Percentage of potential habitat infested		0.73%	0.83%	0.10%	0.83%	0.83%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	89,368					
Budget allocated for 2011/12	\$8,500					
Budget spent in 2011/12	\$0					
Variance	\$8,500					



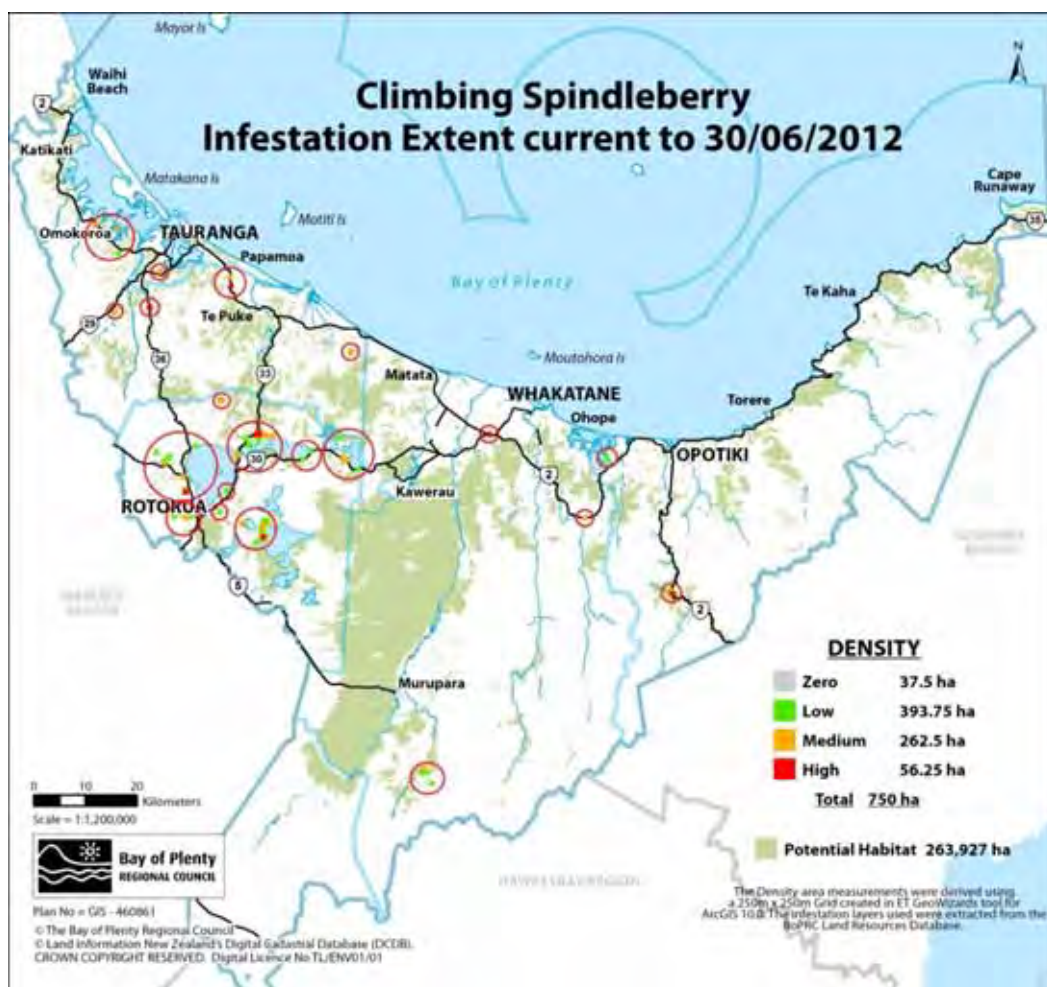
#### 4.7.7 Climbing spindle berry

**Current programme status:** Behind schedule



**Comments:** Lack of skilled contractors and difficulties with site access inhibited progress in the Ōpōtiki area. Surveillance in the Lake Tarawera area has revealed some expansion in infested area.

Climbing spindle berry		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		50	56	6	56	0
Medium density active sites (ha)		263	263	0	131	56
Low density active sites (ha)		363	394	31	525	656
Zero density active sites (ha)		38	38	0	38	38
<b>Total area of active sites infested (ha)</b>		<b>713</b>	<b>750</b>	<b>38</b>	<b>750</b>	<b>750</b>
Percentage of potential habitat infested		0.27%	0.28%	0.01%	0.28%	0.28%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	263,927					
<b>Budget allocated for 2011/12</b>	\$15,000					
<b>Budget spent in 2011/12</b>	\$8,180					
<b>Variance</b>	\$6,820					





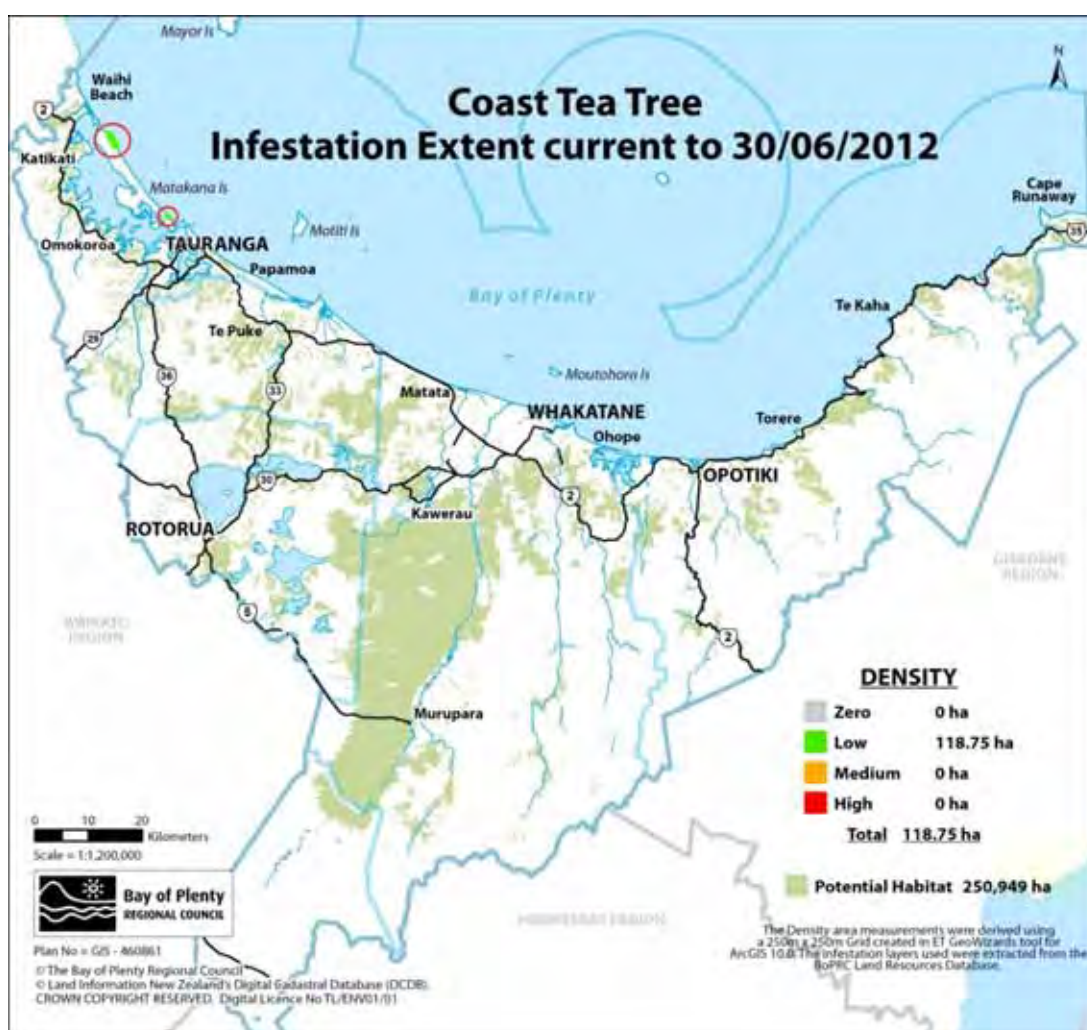
#### 4.7.8 Coast tea tree

Current programme status: On-track



Comments: Work schedule for 2014.

Coast tea tree		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		0	0	0		0
Low density active sites (ha)		119	119	0	119	119
Zero density active sites (ha)		0	0	0	0	0
<b>Total area of active sites infested (ha)</b>		<b>119</b>	<b>119</b>	<b>0</b>	<b>119</b>	<b>119</b>
Percentage of potential habitat infested		0.05%	0.05%	0.00%	0.05%	0.05%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	250,949					
Budget allocated for 2011/12	\$3,500					
Budget spent in 2011/12	\$0					
Variance	\$3,500					



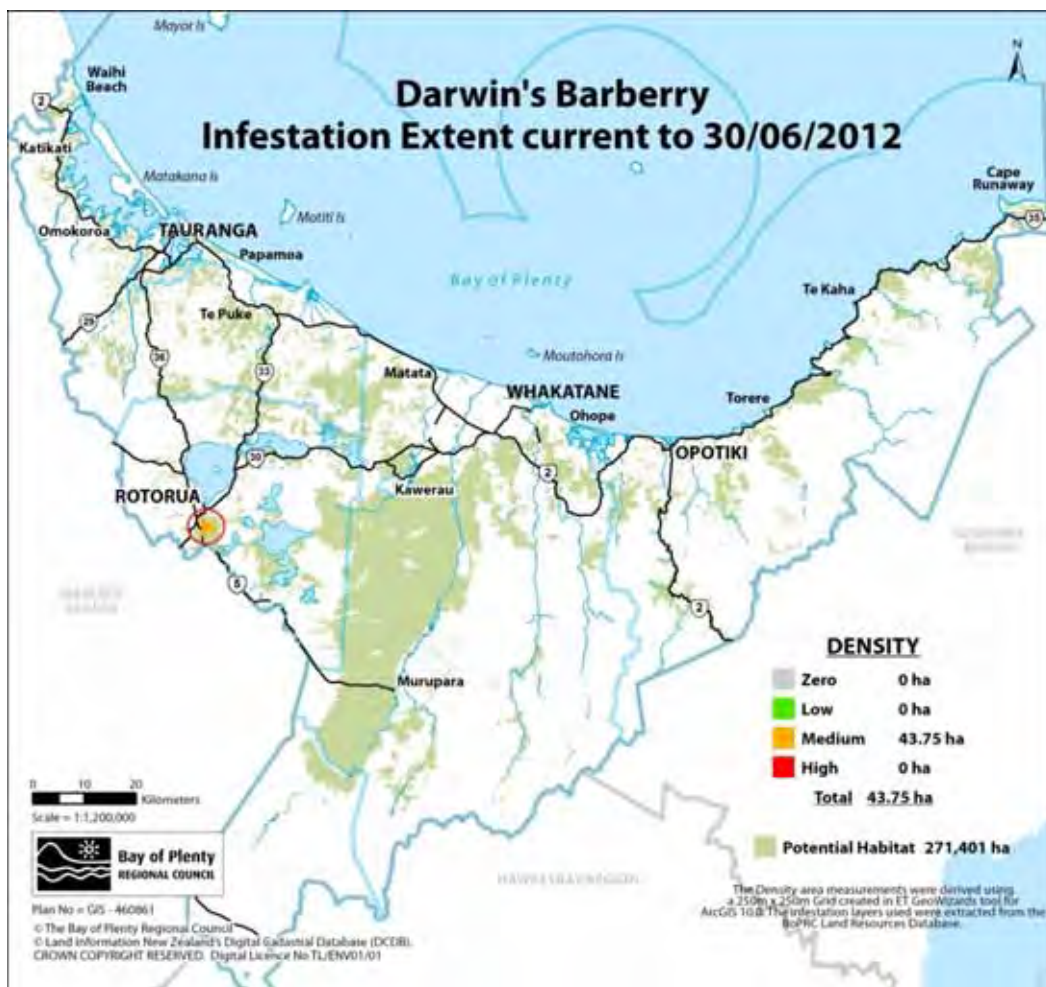
#### 4.7.9 Darwin's barberry

**Current programme status:** On-track



**Comments:** Programme on-track. Support has been provided into biocontrol research.

Darwin's barberry		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		44	44	0	44	0
Low density active sites (ha)		0	0	0		44
Zero density active sites (ha)		0	0	0	0	0
<b>Total area of active sites infested (ha)</b>		<b>44</b>	<b>44</b>	<b>0</b>	<b>44</b>	<b>44</b>
Percentage of potential habitat infested		0.02%	0.02%	0.00%	0.02%	0.02%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	271,401					
Budget allocated for 2011/12	\$9,900					
Budget spent in 2011/12	\$85					
Variance	\$9,815					



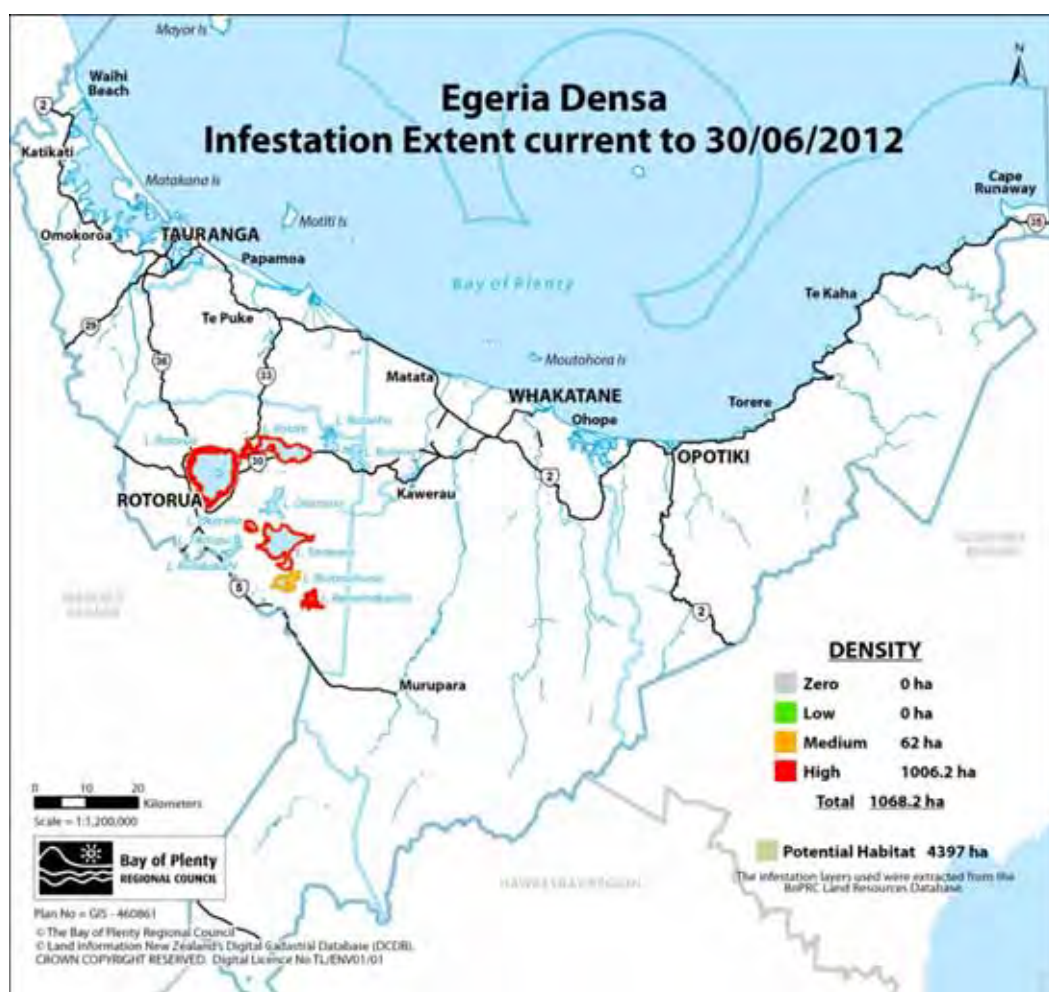
#### 4.7.10 *Egeria densa*

**Current programme status:** On-track



**Comments:** Programme on-track. Monitoring carried out to support Land Information New Zealand (LINZ) spray programmes.

<i>Egeria densa</i>		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		1006	1006	0	1006	1006
Medium density active sites (ha)		62	62	0	62	62
Low density active sites (ha)		0	0	0	0	0
Zero density active sites (ha)		0	0	0	0	0
<b>Total area of active sites infested (ha)</b>		<b>1068</b>	<b>1068</b>	<b>0</b>	<b>1068</b>	<b>1068</b>
Percentage of potential habitat infested		24.29%	24.29%	0.00%	24.29%	24.29%
Hectares classed historical		0	0	0	0	0
Area of Potential habitat (ha)	4,397					
Budget allocated for 2011/12	\$100,000					
Budget spent in 2011/12	\$49,730					
Variance	\$50,270					



#### 4.7.11 Gorse

**Current programme status:** On-track



**Comments:** Multiple complaints and enquires received which were resolved without needing formal enforcement.

Gorse		2011/12 Operational Year				Target	
		Nov 2011	June 2012	Difference		2014	2016
High density active sites (ha)		Widespread				Widespread	
Medium density active sites (ha)							
Low density active sites (ha)							
Zero density active sites (ha)							
<b>Total area of active sites infested (ha)</b>		<b>Present in available habitat</b>				<b>All available habitat</b>	
Percentage of potential habitat infested		100.00%	100.00%	100.00%		100.00%	100.00%
Hectares classed historical		0	0	0		0	0
Area of potential habitat (ha)	628,556						
Budget allocated for 2011/12	\$6,700						
Budget spent in 2011/12	\$4,831						
Variance	\$1,869						

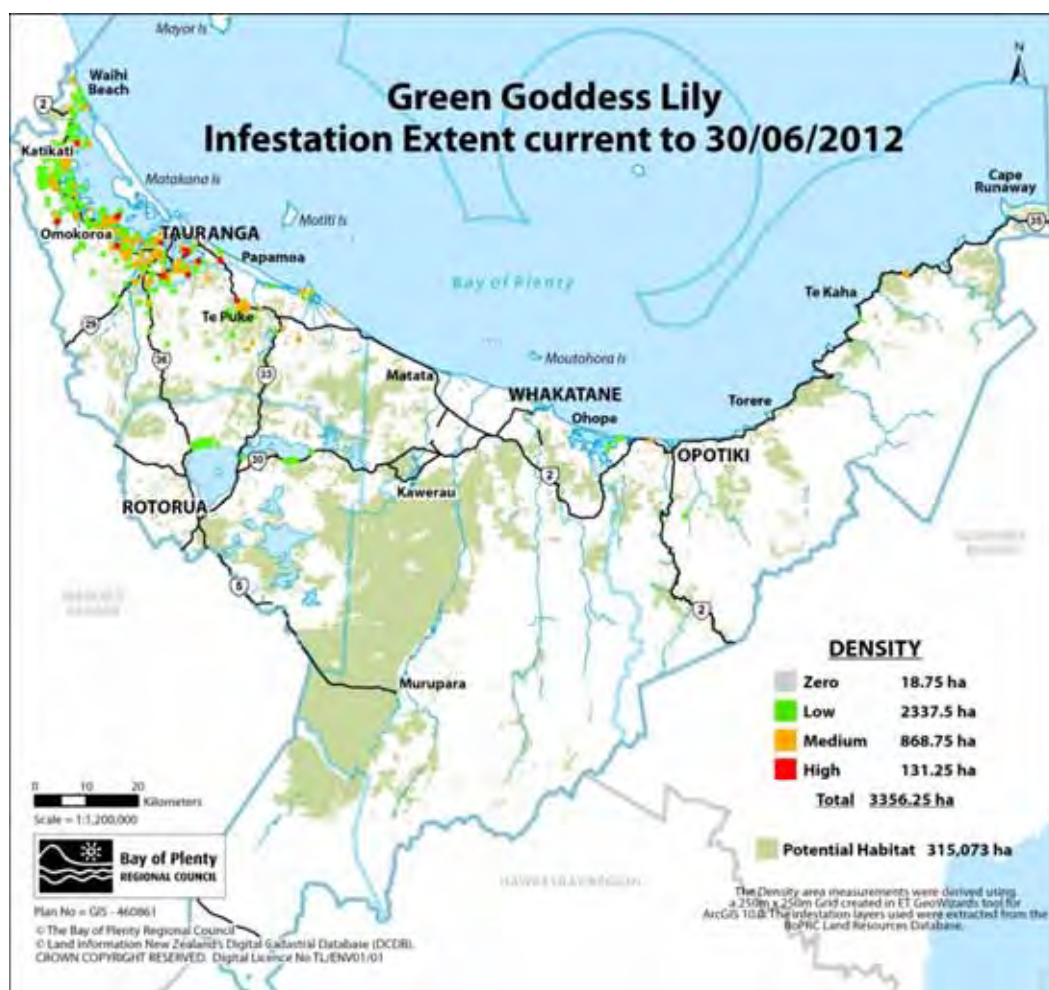


#### 4.7.12 Green goddess lily

**Current programme status:** Behind schedule 

**Comments:** Advice provided to enquiries. Surveillance included with general biosecurity work. Current infestation records held by Council significantly underestimate the true extent of this pest.

Green goddess lily		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		113	131	19	131	131
Medium density active sites (ha)		763	869	106	869	869
Low density active sites (ha)		2063	2338	275	2338	2338
Zero density active sites (ha)		19	19	0	19	19
<b>Total area of active sites infested (ha)</b>		<b>2956</b>	<b>3356</b>	<b>400</b>	<b>3356</b>	<b>3356</b>
Percentage of potential habitat infested		0.94%	1.07%	0.13%	1.07%	1.07%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	315,073					
Budget allocated for 2011/12	\$20,000					
Budget spent in 2011/12	\$0					
Variance	\$20,000					





#### 4.7.13 Hornwort

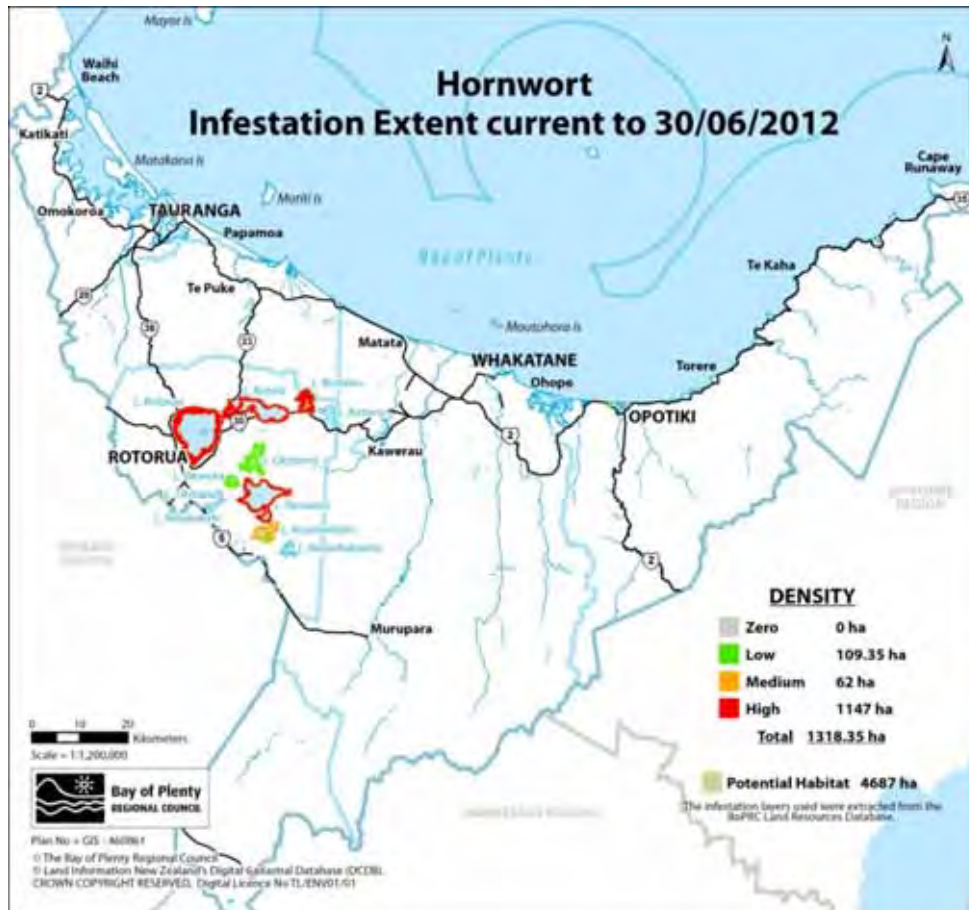
**Current programme status:** Behind schedule



**Comments:** Good progress is being made in managing the Hornwort incursion into Lake Ōkātina. However another Hornwort incursion was confirmed in Lake Ōkāreka in April 2012 following the discovery of a fragment by a tourist operator.

Prior to this discovery a weed cordon was established at the Acacia Bay boat ramp.

Hornwort		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		1147	1147	0	1147	1147
Medium density active sites (ha)		62	62	0	62	158
Low density active sites (ha)		109.35	109.35	0	109	10
Zero density active sites (ha)		0	0	0	0	3
<b>Total area of active sites infested (ha)</b>		<b>1318.35</b>	<b>1318.35</b>	<b>0</b>	<b>1318</b>	<b>1318</b>
Percentage of potential habitat infested		28.13%	28.13%	0.00%	28.13%	28.13%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	4,687					
Budget allocated for 2011/12	\$100,000					
Budget spent in 2011/12	\$162,347					
Variance	-\$62,347					



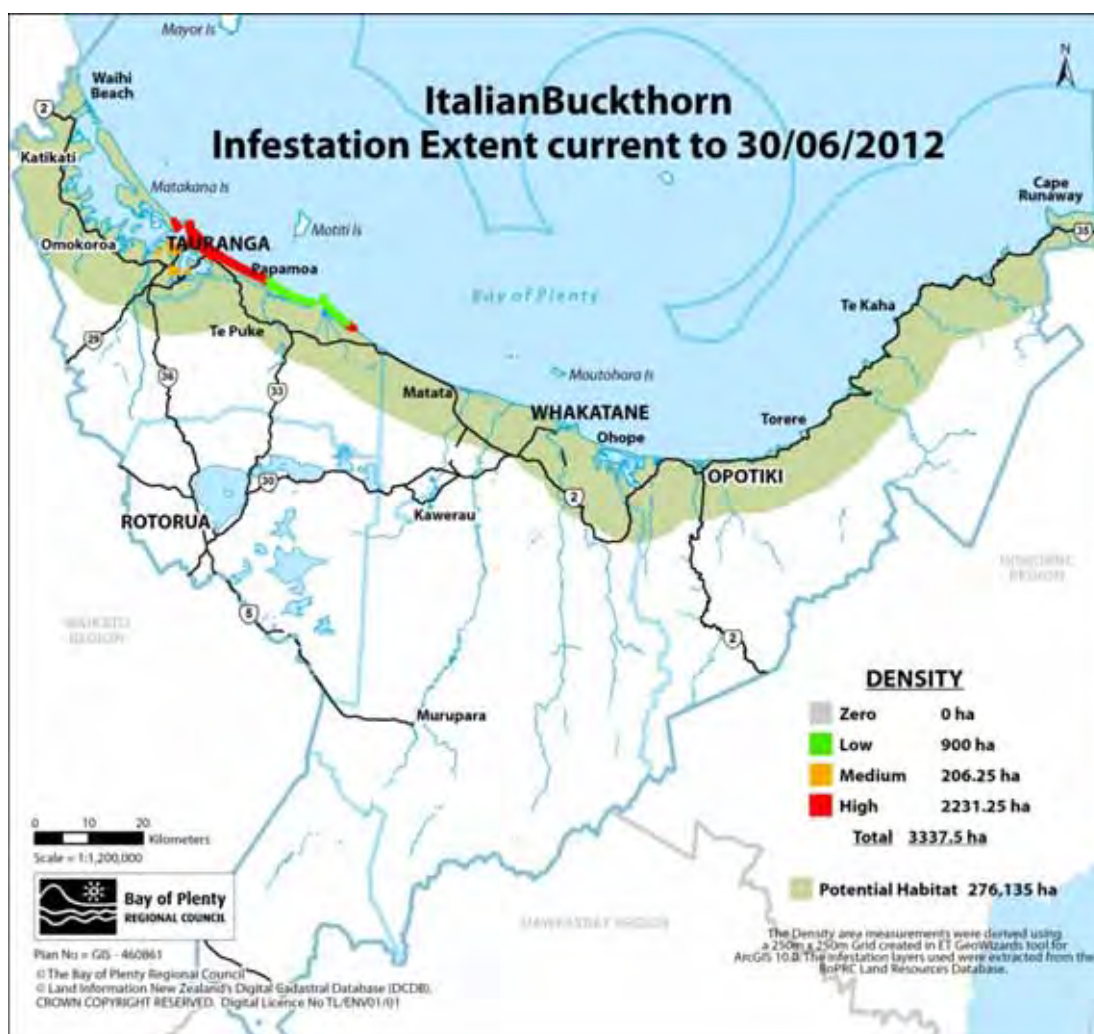
#### 4.7.14 Italian buckthorn

**Current programme status:** On-track



**Comments:** Advice provided to enquiries. Control work carried out in conjunction with coast care programmes.

Italian buckthorn		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		2231.25	2231.25	0	1785	1785
Medium density active sites (ha)		206.25	206.25	0	522	522
Low density active sites (ha)		900	900	0	1030.5	1030.5
Zero density active sites (ha)		0	0	0	0	0
<b>Total area of active sites infested (ha)</b>		<b>3337.5</b>	<b>3337.5</b>	<b>0</b>	<b>3337.5</b>	<b>3337.5</b>
Percentage of potential habitat infested		2.34%	2.34%	0.00%	2.34%	2.34%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	142,406					
Budget allocated for 2011/12	\$25,000					
Budget spent in 2011/12	\$7,711					
Variance	\$17,289					



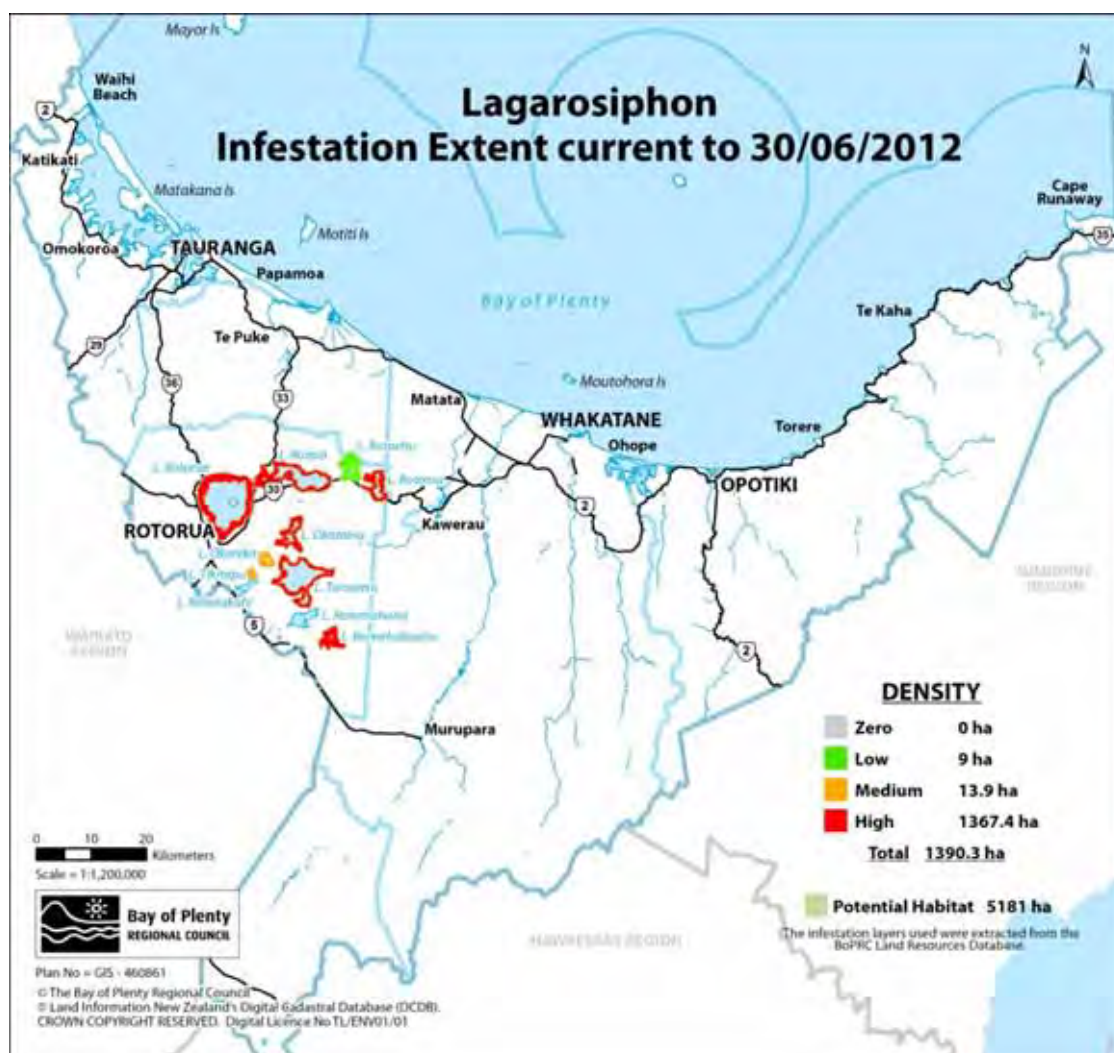
#### 4.7.15 Lagarosiphon

**Current programme status:** On-track



**Comments:** Programme is on-track. Monitoring carried out to support LINZ spray programme.

Lagarosiphon	2011/12 Operational Year			Target	
	Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)	1367	1367	0	1367	1367
Medium density active sites (ha)	14	14	0	14	14
Low density active sites (ha)	9	9	0	9	9
Zero density active sites (ha)	0	0	0	0	0
<b>Total area of active sites infested (ha)</b>	<b>1390</b>	<b>1390</b>	<b>0</b>	<b>1390</b>	<b>1390</b>
Percentage of potential habitat infested	26.83%	26.83%	0.00%	26.83%	26.83%
Hectares classed historical e)	0	0	0	0	0
Area of potential habitat (ha)	5,181				
Budget allocated for 2011/12	\$50,000				
Budget spent in 2011/12	\$49,956				
Variance	\$44				



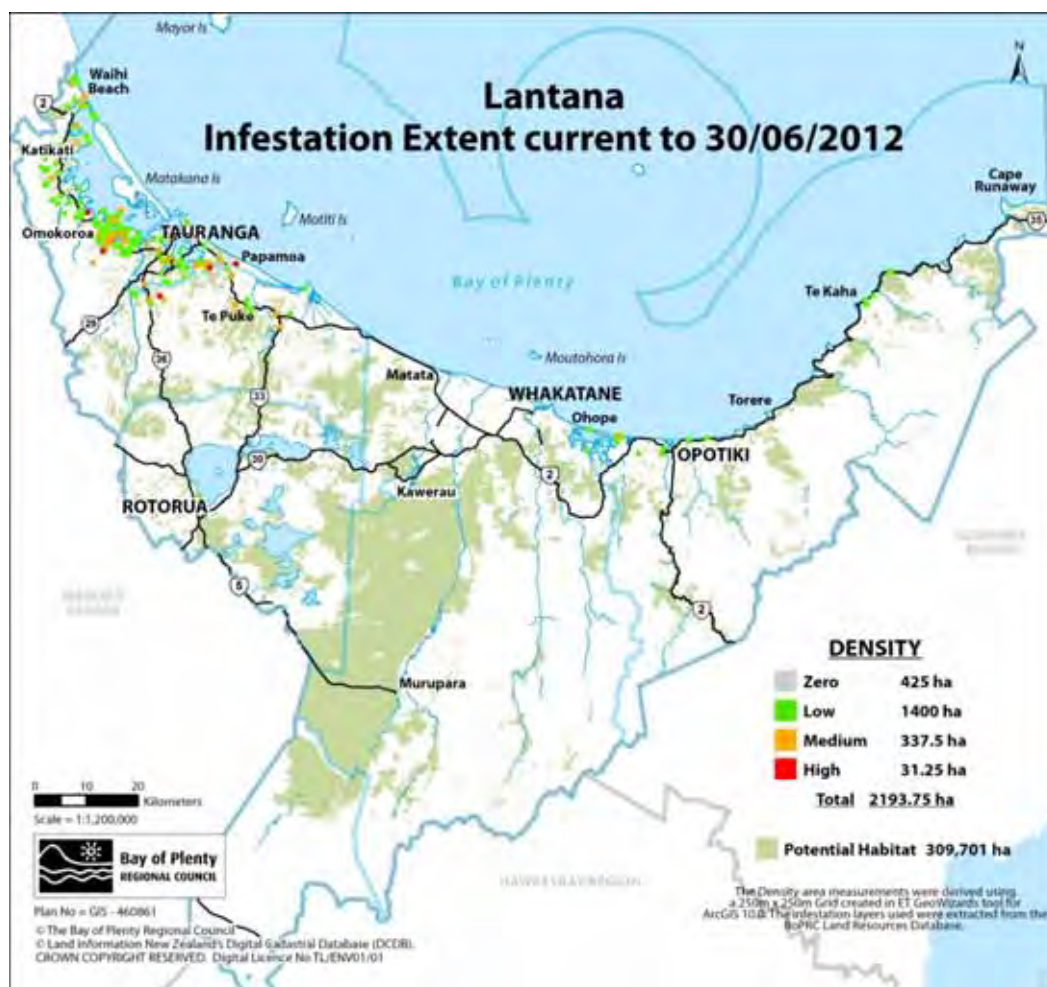


#### 4.7.16 Lantana

**Current programme status:** Behind schedule 

**Comments:** Surveillance has revealed an expansion in infestations. 2013 work will focus on controlling satellite infestations. Application for biocontrol agents supported.

Lantana		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		25	31	6	22	22
Medium density active sites (ha)		325	338	13	242	242
Low density active sites (ha)		1350	1400	50	1505	1505
Zero density active sites (ha)		425	425	0	425	425
<b>Total area of active sites infested (ha)</b>		<b>2125</b>	<b>2194</b>	<b>69</b>	<b>2194</b>	<b>2194</b>
Percentage of potential habitat infested		0.69%	0.71%	0.02%	0.71%	0.71%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	309,701					
Budget allocated for 2011/12	\$20,000					
Budget spent in 2011/12	\$2,042					
Variance	\$17,958					



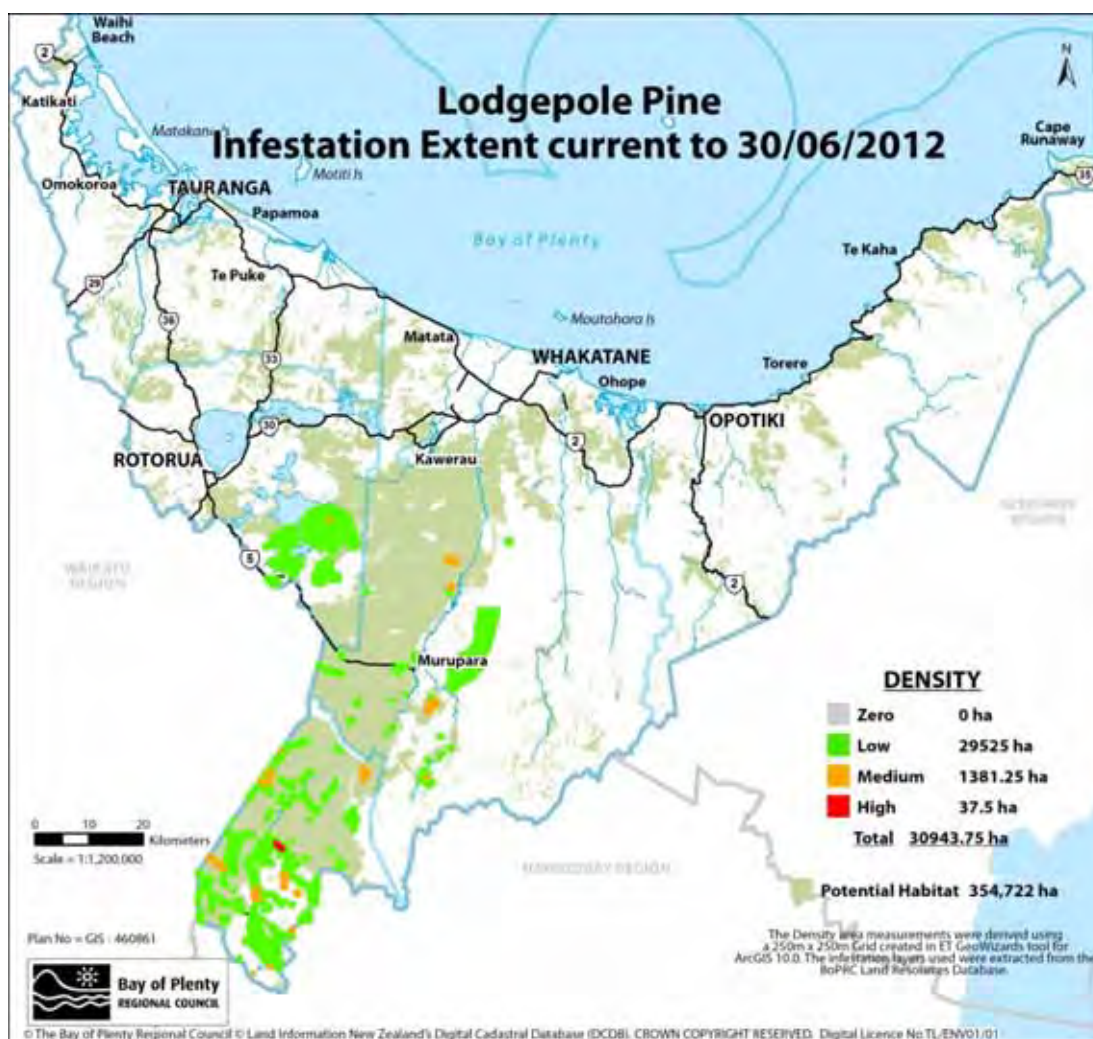
#### 4.7.17 Lodgepole pine

**Current programme status:** On-track



**Comments:** Support provided for control work on Mt Tarawera and currently progressing inter-agency approaches to control in the east Taupō area.

Lodgepole pine		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		38	38	0	34	31
Medium density active sites (ha)		1381	1381	0	1252	1207
Low density active sites (ha)		29525	29525	0	29658	29706
Zero density active sites (ha)		0	0	0	0	0
<b>Total area of active sites infested (ha)</b>		<b>30944</b>	<b>30944</b>	<b>0</b>	<b>30944</b>	<b>30944</b>
Percentage of potential habitat infested		8.72%	8.72%	0.00%	8.72%	8.72%
Hectares classed historical		0	0	0		
Area of potential habitat (ha)	354,722					
Budget allocated for 2011/12	\$50,000					
Budget spent in 2011/12	\$9,341					
Variance	\$40,659					



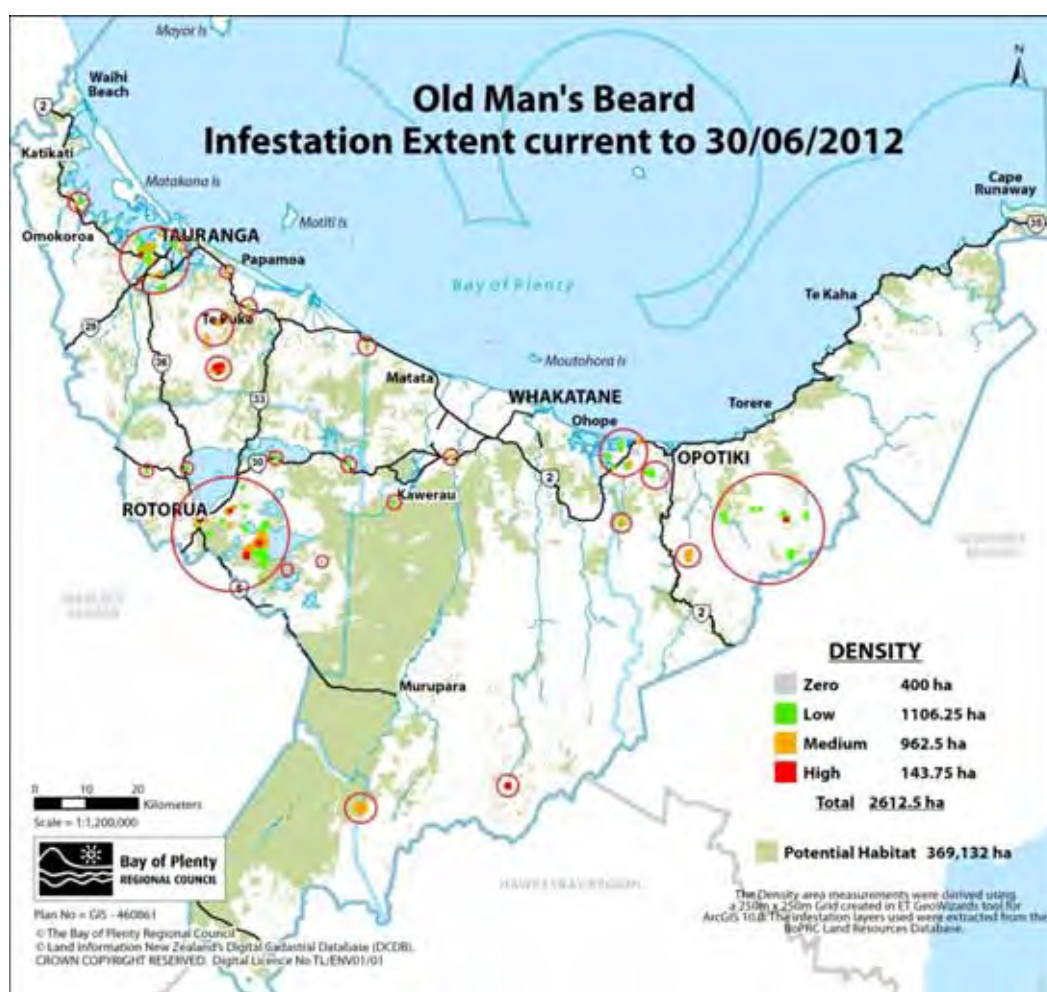
#### 4.7.18 Old man's beard

**Current programme status:** On-track



**Comments:** Surveillance has revealed small increases in medium and low density area, however programme is considered to be on-track. Support has also been provided into biocontrol research.

Old Man's Beard		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		144	144	0	131	0
Medium density active sites (ha)		956	963	6	888	927
Low density active sites (ha)		1056	1106	50	1194	1286
Zero density active sites (ha)		400	400	0	400	400
<b>Total area of active sites infested (ha)</b>		<b>2556</b>	<b>2613</b>	<b>56</b>	<b>2613</b>	<b>2613</b>
Percentage of potential habitat infested		0.69%	0.71%	0.02%	0.71%	0.71%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	369,132					
Budget allocated for 2011/12	\$25,000					
Budget spent in 2011/12	\$14,403					
Variance	\$10,597					



#### 4.7.19 Ragwort

**Current programme status:** On-track



**Comments:** Multiple complaints and enquires received which were resolved without needing formal enforcement.

Ragwort		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		Widespread			Widespread	
Medium density active sites (ha)						
Low density active sites (ha)						
Zero density active sites (ha)						
<b>Total area of active sites infested (ha)</b>		<b>Present in available habitat</b>			<b>All available habitat</b>	
Percentage of potential habitat infested		100.00%	100.00%	100.00%	100.00%	100.00%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	628,556					
<b>Budget allocated for 2011/12</b>	\$6,700					
<b>Budget spent in 2011/12</b>	\$2,431					
<b>Variance</b>	\$4,269					



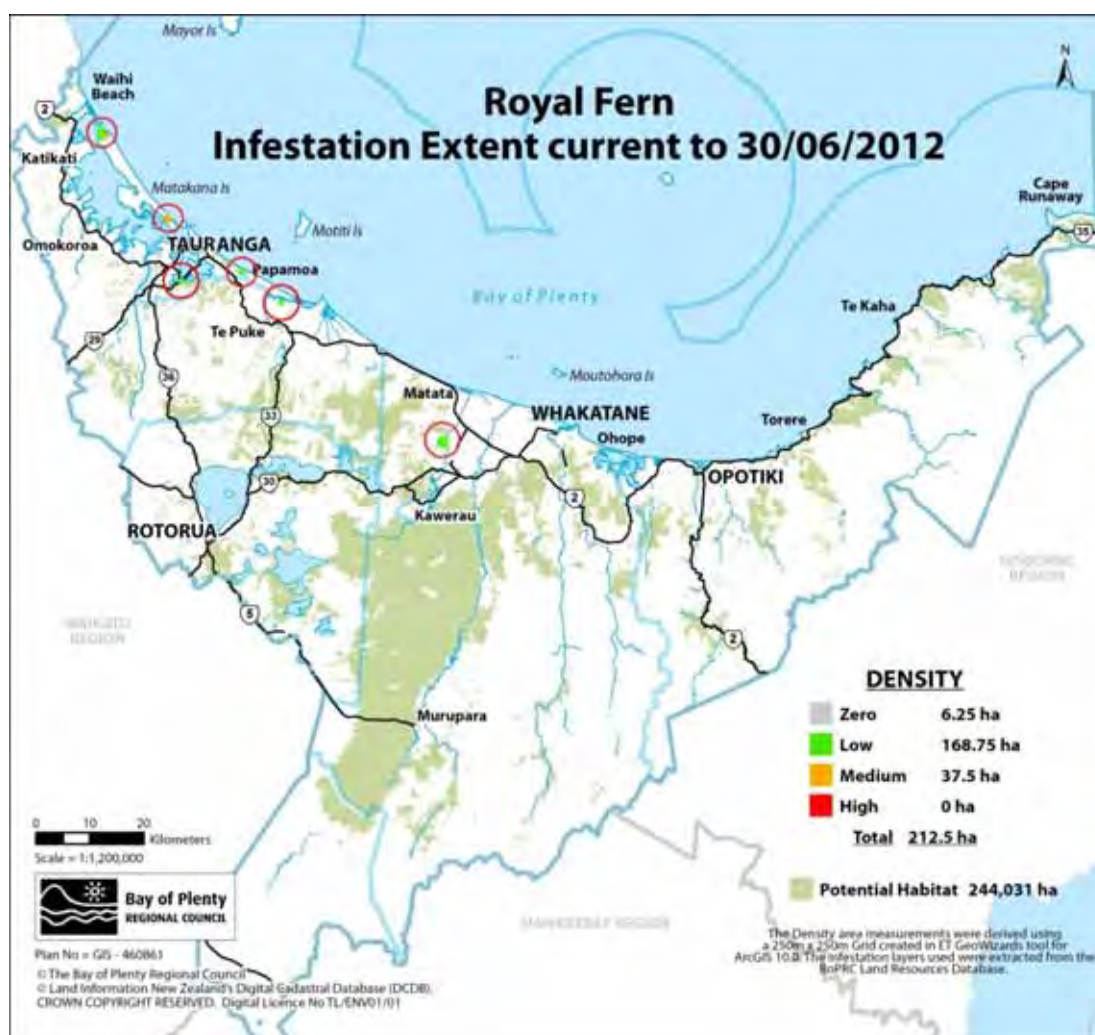
#### 4.7.20 Royal fern

**Current programme status:** On-track



**Comments:** Programme is on-track.

Royal fern		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		38	38	0	38	38
Low density active sites (ha)		163	169	6	169	163
Zero density active sites (ha)		6	6	0	6	13
<b>Total area of active sites infested (ha)</b>		<b>206</b>	<b>213</b>	<b>6</b>	<b>213</b>	<b>213</b>
Percentage of potential habitat infested		0.08%	0.09%	0.00%	0.09%	0.09%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	244,031					
<b>Budget allocated for 2011/12</b>	\$30,000					
<b>Budget spent in 2011/12</b>	\$18,632					
<b>Variance</b>	\$11,368					



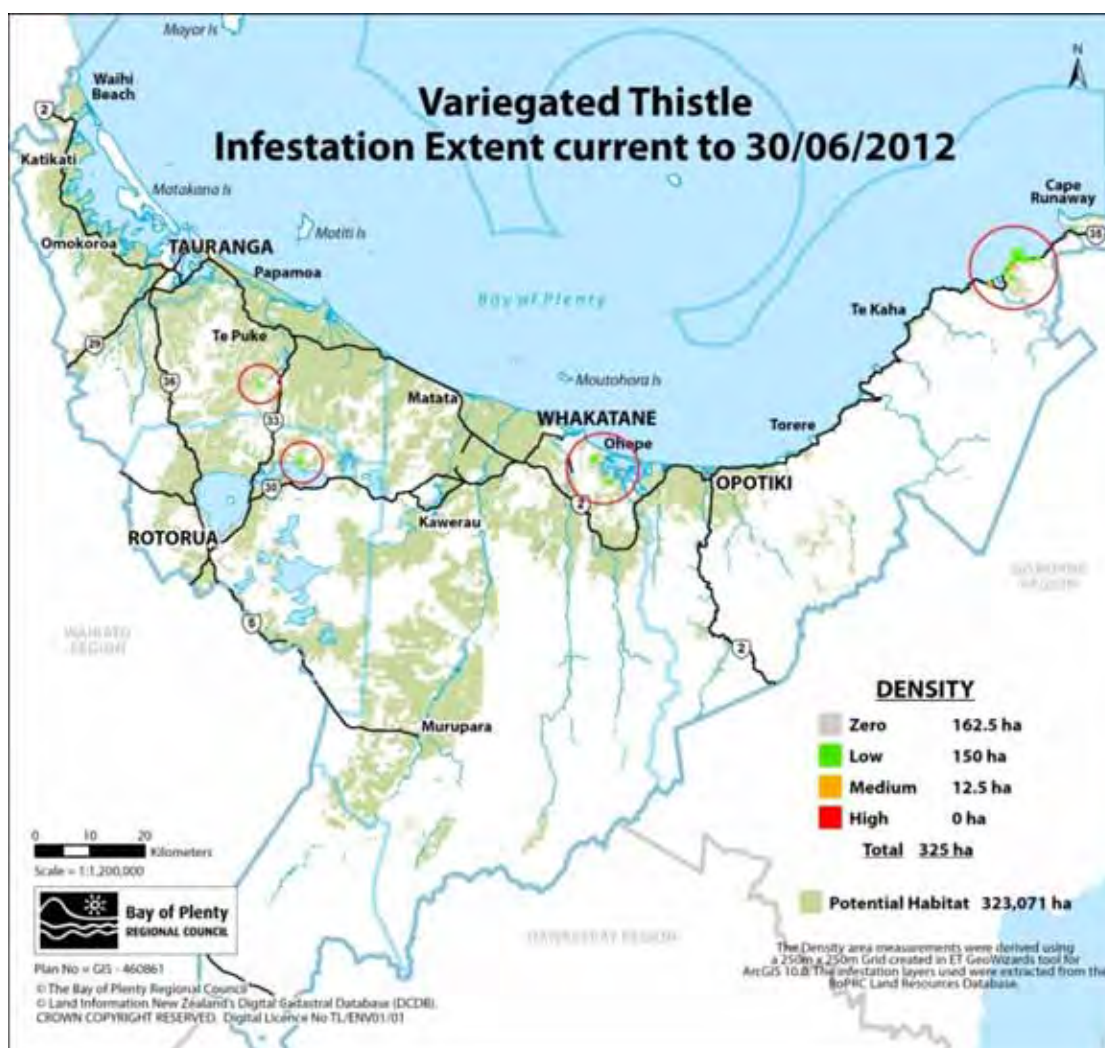
#### 4.7.21 Variegated thistle

Current programme status: On-track



Comments: Programme is on-track.

Variegated thistle	2011/12 Operational Year			Target	
	Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)	0	0	0	0	
Medium density active sites (ha)	13	13	0	13	13
Low density active sites (ha)	150	150	0	150	144
Zero density active sites (ha)	163	163	0	163	168
<b>Total area of active sites infested (ha)</b>	<b>325</b>	<b>325</b>	<b>0</b>	<b>325</b>	<b>325</b>
Percentage of potential habitat infested	0.10%	0.10%	0.00%	0.10%	0.10%
Hectares classed historical	0	0	0	0	0
Area of potential habitat (ha)	323,071				
<b>Budget allocated for 2011/12</b>	\$5,000				
<b>Budget spent in 2011/12</b>	\$1,359				
<b>Variance</b>	\$3,641				

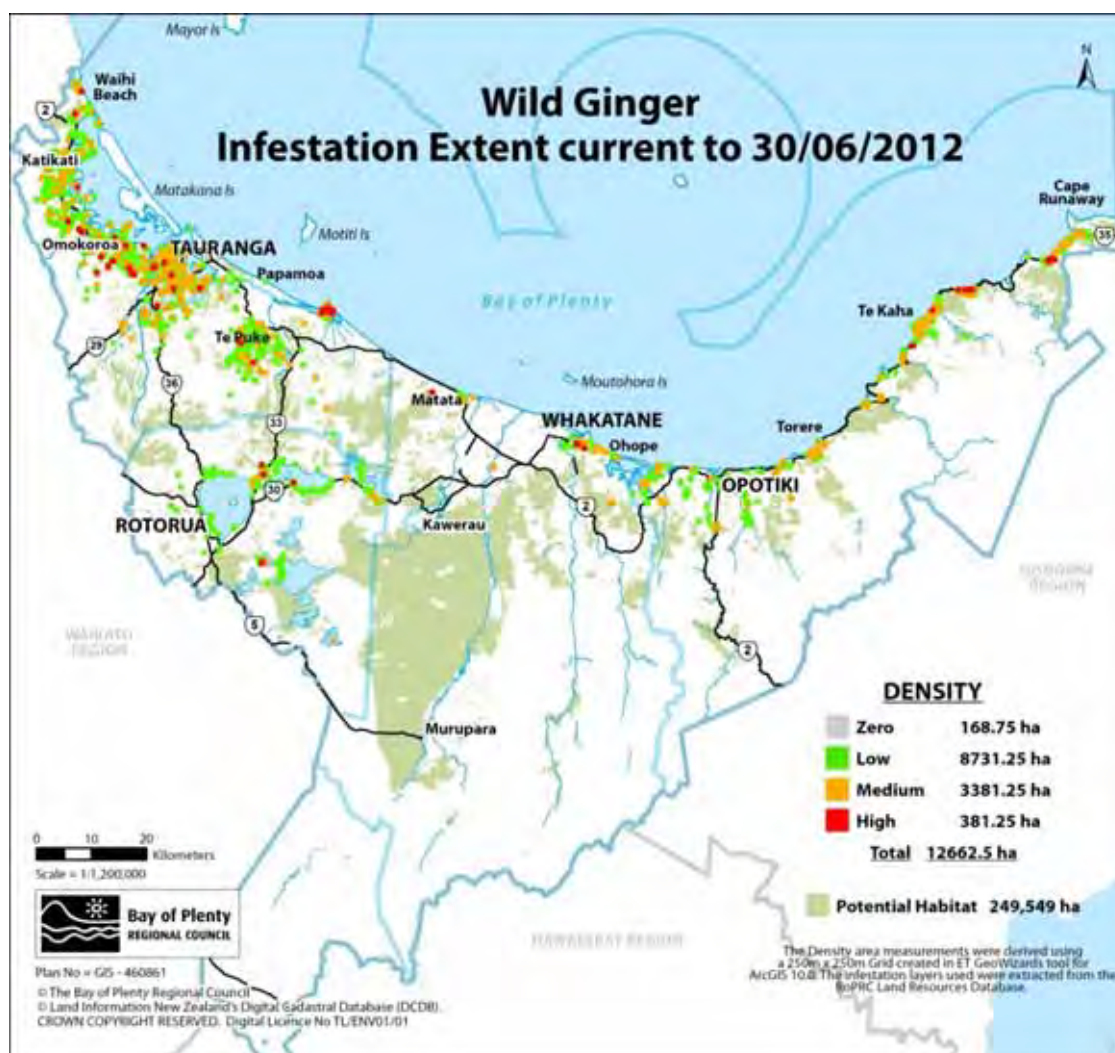


#### 4.7.22 Wild ginger

**Current programme status:** Behind schedule 

**Comments:** Surveillance has shown continued range expansion. Good control achieved in targeted sites. Support has also been provided into biocontrol research.

Wild Ginger		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		369	381	13	347	274
Medium density active sites (ha)		3344	3381	38	3108	2513
Low density active sites (ha)		8438	8731	294	9039	9707
Zero density active sites (ha)		169	169	0	169	169
<b>Total area of active sites infested (ha)</b>		<b>12319</b>	<b>12663</b>	<b>344</b>	<b>12663</b>	<b>12663</b>
Percentage of potential habitat infested		4.94%	5.07%	0.14%	5.07%	5.07%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	249,549					
<b>Budget allocated for 2011/12</b>	\$74,900					
<b>Budget spent in 2011/12</b>	\$39,915					
<b>Variance</b>	\$34,985					





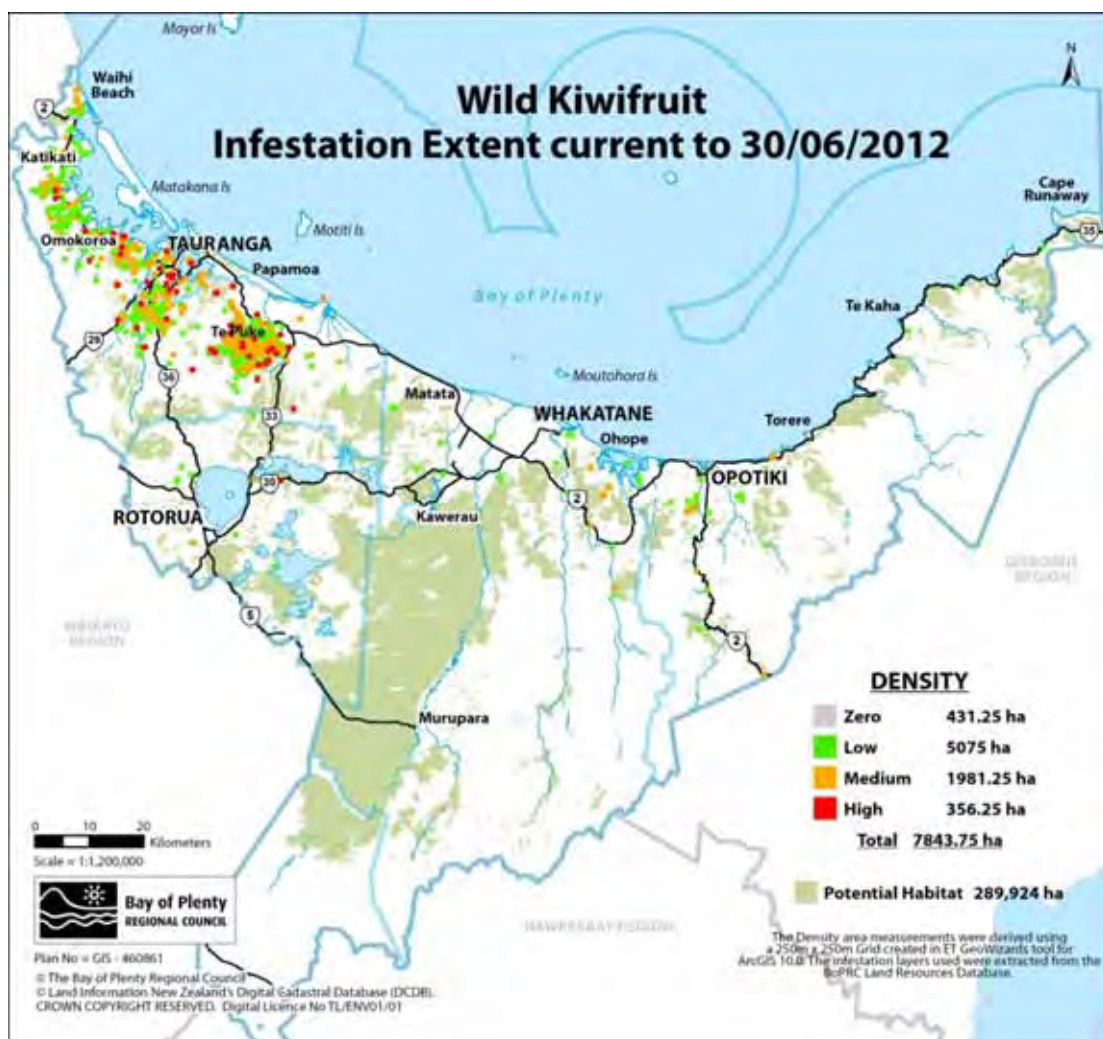
#### 4.7.23 Wild kiwifruit

**Current programme status:** Behind schedule



**Comments:** Psa has raised awareness of wild kiwifruit resulting in increased reports of infestations and subsequently revealed previously unknown sites. Good control achieved in targeted sites.

Wild kiwifruit		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		263	356	94	356	324
Medium density active sites (ha)		1744	1981	238	1981	1832
Low density active sites (ha)		4825	5075	250	5075	5231
Zero density active sites (ha)		400	431	31	431	457
<b>Total area of active sites infested (ha)</b>		<b>7231</b>	<b>7844</b>	<b>613</b>	<b>7844</b>	<b>7844</b>
Percentage of potential habitat infested		2.49%	2.71%	0.21%	2.71%	2.71%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	289,924					
<b>Budget allocated for 2011/12</b>	\$110,000					
<b>Budget spent in 2011/12</b>	\$55,620					
<b>Variance</b>	\$54,380					



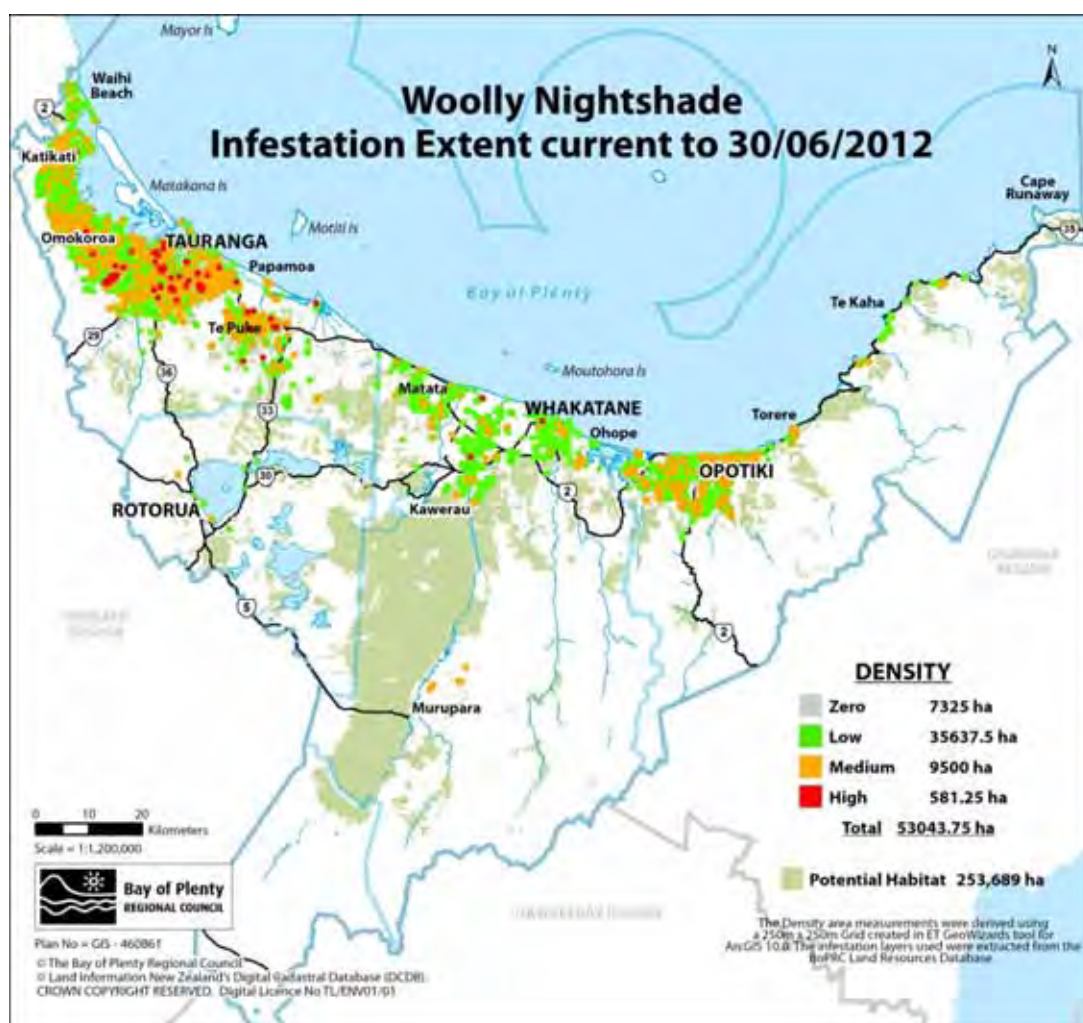
#### 4.7.24 Woolly nightshade

**Current programme status:** Behind schedule



**Comments:** Surveillance has shown continued range expansion, however progress is being made at high density and targeted sites. Further releases of biocontrol agents have been carried out.

Woolly nightshade		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		588	581	-6	535	486
Medium density active sites (ha)		9,363	9,500	138	8,693	7,955
Low density active sites (ha)		35,125	35,638	513	36,491	37,263
Zero density active sites (ha)		7,306	7,325	19	7,325	7,340
<b>Total area of active sites infested (ha)</b>		<b>52,381</b>	<b>53,044</b>	663	<b>53,044</b>	<b>53,044</b>
Percentage of potential habitat infested		20.65%	20.91%	0.26%	20.91%	20.91%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	253,689					
<b>Budget allocated for 2011/12</b>	\$154,900					
<b>Budget spent in 2011/12</b>	\$219,564					
<b>Variance</b>	<b>-\$64,664</b>					



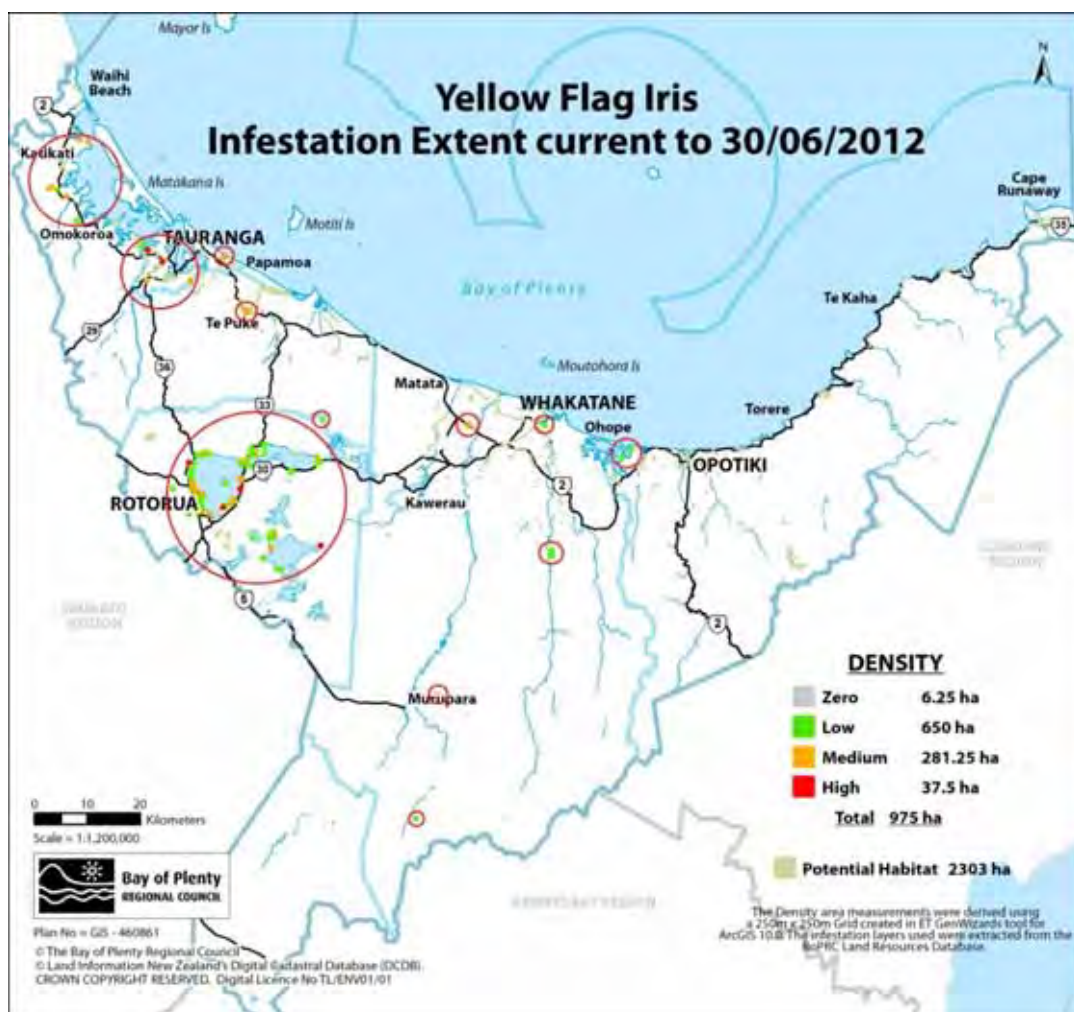
#### 4.7.25 Yellow flag iris

Current programme status: On-track



**Comments:** While a new site has been detected in the Minginui area, this programme is still considered to be on-track.

Yellow flag iris		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		38	38	0	38	38
Medium density active sites (ha)		281	281	0	281	281
Low density active sites (ha)		588	650	63	650	650
Zero density active sites (ha)		6	6	0	6	6
<b>Total area of active sites infested (ha)</b>		<b>912.5</b>	<b>975.0</b>	<b>63</b>	<b>975</b>	<b>975</b>
Percentage of potential habitat infested		39.62%	42.34%	2.71%	42.34%	42.34%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	2,303					
<b>Budget allocated for 2011/12</b>	\$12,500					
<b>Budget spent in 2011/12</b>	\$8,105					
<b>Variance</b>	\$4,395					





## 4.8 Containment pest animal reporting

Goats and wallabies are well established in the region and will require significant resourcing to limit their distribution. Sustained control is also required to build on the gains made during previous years. Both these species are managed through approved joint agency programmes.

Rudd and Tench are believed to be present in Lake McLaren through historical reports though their current status is yet to be confirmed.

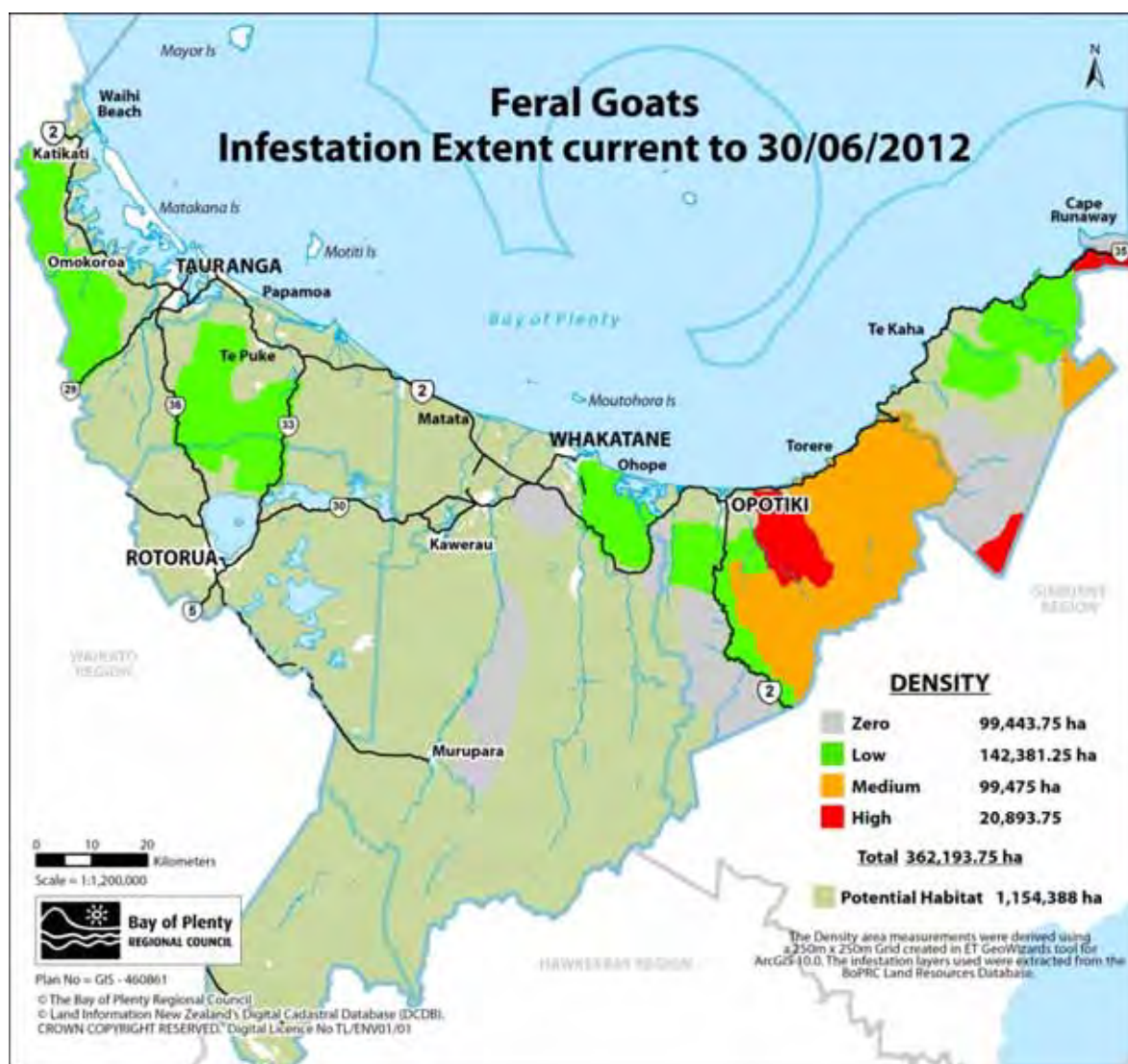
### 4.8.1 Feral Goats

**Current programme status:** On-track



**Comments:** This programme is currently tracking ahead of schedule with excellent progress being made in the Kereu and Raukokere River areas.

Feral goats		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		20,894	20,894	0	20,894	20,894
Medium density active sites (ha)		99,475	99,475	0	99,475	99,475
Low density active sites (ha)		142,381	142,381	0	126,626	126,626
Zero density active sites (ha)		99,444	99,444	0	115,199	115,199
<b>Total area of active sites infested (ha)</b>		<b>362,194</b>	<b>362,194</b>	<b>0</b>	<b>362,194</b>	<b>362,194</b>
Percentage of potential habitat infested		31.38%	31.38%	0.00%	31.38%	31.38%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	1,154,388					
<b>Budget allocated for 2011/12</b>	\$155,000					
<b>Budget spent in 2011/12</b>	\$160,870					
<b>Variance</b>	<b>-\$5,870</b>					



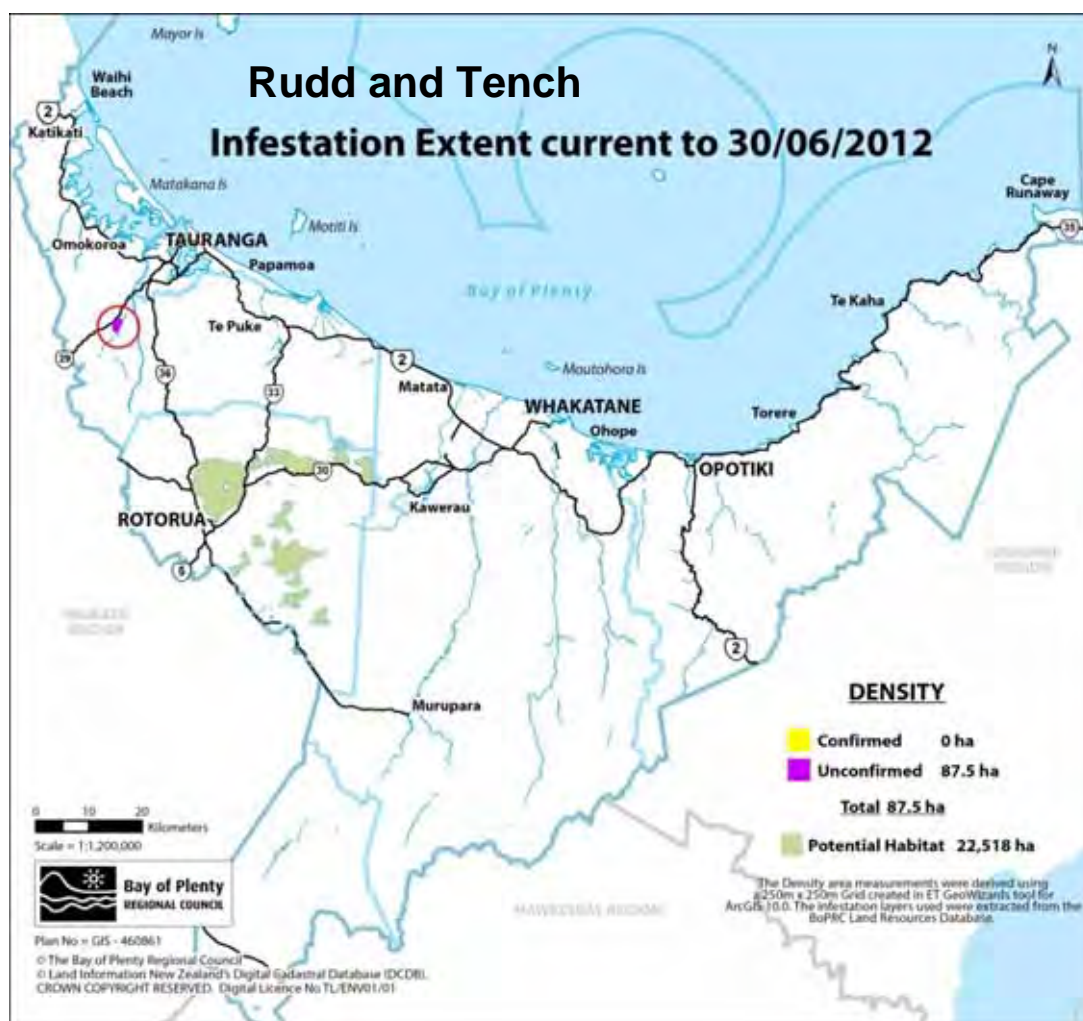
#### 4.8.2 Rudd and Tench

**Current programme status:** On-track



**Comments:** Rudd and Tench are believed to present in Lake McLaren.

Rudd and tench		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		0	0	0	0	0
Medium density active sites (ha)		0	0	0	0	0
Low density active sites (ha)		88	88	0	88	88
Zero density active sites (ha)		0	0	0	0	0
<b>Total area of active sites infested (ha)</b>		<b>88</b>	<b>88</b>	<b>0</b>	<b>88</b>	<b>88</b>
Percentage of potential habitat infested		0.39%	0.39%	0.00%	0.39%	0.39%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	22,518					
<b>Budget allocated for 2011/12</b>	\$10,000					
<b>Budget spent in 2011/12</b>	\$84					
<b>Variance</b>	\$9,916					



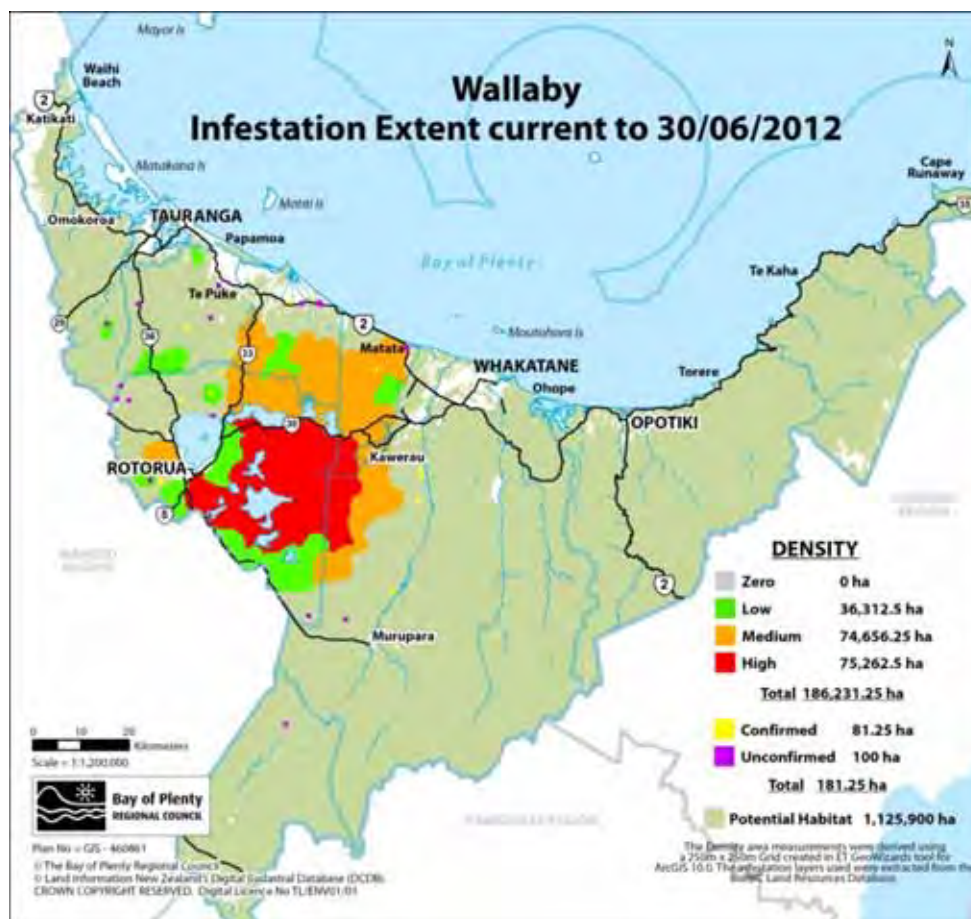
### 4.8.3 Wallaby

**Current programme status:** Behind schedule



**Comments:** Improvements in the use of surveillance dogs and trail cameras and the use of DNA techniques to confirm wallaby presence have been positive steps forwards this year, however controlling low infestations and itinerant animals is still presenting significant challenges.

Wallabies		2011/12 Operational Year			Target	
		Nov 2011	June 2012	Difference	2014	2016
High density active sites (ha)		75263	75263	0	75263	75263
Medium density active sites (ha)		74656	74656	0	74656	74656
Low density active sites (ha)		35556	35556	0	35556	35320
Zero density active sites (ha)		0	0	0	0	236
<b>Total area of active sites infested (ha)</b>		<b>185475</b>	<b>185475</b>	<b>0</b>	<b>185475</b>	<b>185475</b>
Percentage of potential habitat infested		16.47%	16.47%	0.00%	16.47%	16.47%
Hectares classed historical		0	0	0	0	0
Area of potential habitat (ha)	1,125,900					
<b>Budget allocated for 2011/12</b>	\$80,000					
<b>Budget spent in 2011/12</b>	\$50,102					
<b>Variance</b>	\$29,898					



## 4.9 Restricted pests

**Current programme status:** On-track



**Comments:** Restricted pests are pests Council wants to reduce the further spread of and will support community and occupier efforts to control them in places where communities and occupiers believe they are a problem. These pests are often widespread and / or have minor adverse effects and the responsibility for their control primarily belongs to the occupier of the land. Council encourages voluntary compliance and support community initiatives through approved programmes.

Most of the enquiries responded to by Council are regarding restricted pests. While considerably more was spent in supporting these enquires and requests than budgeted, this work is seen as high priority. Through continued engagement and support, it is envisaged the community will become more informed regarding the impact and effective control of pests.

Support has also been provided for research into biocontrol for eight restricted pest species.

<b>Operational Plan Budget (2011/12)</b>	\$129,400.00
<b>Expenditure (2011/12)</b>	
<b>TOTAL</b>	\$357,454.62
Variance	\$-228.054.62





## Part 5: Monitoring performance and reporting progress

### 5.1 Progress against RPMP indicators:

Intermediate plan outcome	Indicators	2011/12 Results
No new pests are established in the region	• Number of emerging pest threats identified.	No new emerging pest threats identified.
	• Number of new pests detected in the region.	2 – Delta arrow head, Climbing gloxinia.
	• Number of new pests with management plans in place.	1 – Delta arrow head Management plans for Climbing gloxinia are currently being developed.
Identified pest impacts are excluded, reduced or contained	• Number of new occurrences eradicated and monitoring plans in place.	2 – All sites have had control undertaken and will be monitored for re-emergence. Formal management plans are currently being developed for remaining sites
	• Percent of eradication and containment pest species that have had their densities reduced.	5% - Apple of sodom and woolly nightshade.
	• Percent of eradication and containment pest species that have had their distributions reduced.	0%
Our regional communities are experienced and effective pest managers	• Number of sites where community work is underway to control pests.	104
	• Number of reports and requests for advice made by the community.	1,126 enquiries received and responded to.
	• Percent of restricted pests that have had their spread reduced.	0% <sup>2</sup>

### 5.2 Current overall status of RPMP progress: On-track



**Comments:** With 78% of species programmes “on-track”, 22% “behind schedule” and none “significantly behind schedule” the overall RPMP progress is considered to be on-track. Of the species considered to be “behind schedule” Woolly nightshade and wallabies continue to pose significant issues as they currently occupy a considerable proportion of their “potential habitat” and have challenges associated with their control.

Other concerns include the continuing range expansion of Climbing spindleberry and Lantana. Future work on these species will strongly focus on satellite populations. Also the recent discovery of Hornwort in Lake Ōkāreka has been particularly disappointing, and while the incursion is yet to be investigated, any management is likely to prove very challenging.

<sup>2</sup> Currently no resources to monitor progress

However, several key programmes are making strong progress. Council's increasing emphasis on surveillance has detected two new pest incursions (and several new infestations of pests already present) and initial control programmes on these incursions are progressing well. The Lake Ōkātina Hornwort incursion response is also currently tracking well with the number of infested sites being reduced. Excellent progress is also being made with the inter-agency Eastern Bay of Plenty Feral Goat Programme with the eradication attempts in the Kereu and lower Raukokere River areas tracking ahead of schedule. With no goat detections during the last year, both these sites will now move into a surveillance phase.