Report No:	REP11-10-03
File No:	B103
Date:	21 September 2011
Decision Required	

REPORT SUMMARY

Report to: Environment & Planning Committee

Meeting Date: 6 October 2011

Report Author Lindsay Vaughan, Co-ordinator Biosecurity

Subject: **Annual Biosecurity Report**

EXECUTIVE SUMMARY

The Annual Biosecurity Report proposes a process for the Review of the Tasman-Nelson Regional Pest Management Strategy and presents the Operations Plan for the current financial year and reviews the Operations Plan for the previous financial year. The Review of the Strategy is unusually complex because of the substantive changes in the Biosecurity Amendment Bill, the delay in the introduction of this bill into Parliament, and the expiry of the existing Regional Pest Management Strategy in June 2012.

RECOMMENDATION/S

It is recommended that the Committee:

Approve the commencement of a review of the RPMS that will result in an unchange RPMS and then undertake a second (in-depth) review following promulgation of the Bill and National Policy Direction as it appears likely that the Bill will not be passed before June 2012.

Receive this Report REP11-10-03 "Annual Biosecurity Report"

Approve the Regional Pest Management Operations Plan for 2011/2012.

Accept the Review of the Operations Plan for 2010/2011.

REPORT SUMMARY

DRAFT RESOLUTION

THAT the Environment & Planning Committee:

Receives the Annual Biosecurity Report REP11-10-03

Approves the commencement of a review of the RPMS that will result in an unchanged RPMS and then undertake a second (in-depth) review following promulgation of the Bill and National Policy Direction as it appears likely that the Bill will not be passed before June 2012.

Approves the Regional Pest Management Operations Plan for 2011/2012.

Accepts the Review of the Operations Plan for 2010/2011.

Lindsay Vaughan
Co-ordinator Biosecurity

Report No:	REP11-10-03
File No:	B103
Report Date:	21 September 2011
Decision Required	

Report to: Environment & Planning Committee

Meeting Date: 6 October 2011

Report Author Lindsay Vaughan, Co-ordinator Biosecurity

Subject: **Annual Biosecurity Report**

1. Purpose

The purpose of this report is to:

- propose a process for the Review of the Tasman-Nelson Regional Pest Management Strategy 2007-2012.
- present the Operations Plan for the 2011/2012 Financial Year
- summarise the achievements contained in the Review of the 2010/2011 Regional Pest Management Operations Plan

2. Background

2.1 The Biosecurity Act 1993 Council to review its Regional Pest Management Strategy at five-yearly intervals. It also requires Council to report on its Operations Plan for the current financial year and on the Review of its Operations Plan for the previous financial year.

3. Present Situation/Matters to be Considered

3.1 The Tasman-Nelson Regional Pest Management Strategy is due for review by June 2012. It has been expected that the reviewed Biosecurity Act would have been passed before the November elections. It now appears that this will not occur before June 2012. This delay has important implications for the Review of our Strategy. Legal advice is that:

- a RPMS which is in force when the Bill becomes law will remain in effect
- a RPMS which reaches its expiry date before the Bill is enacted will expire, **unless a review is commenced prior to the expiry date**
- a review that commences before the Bill becomes law must be conducted and completed under the current (unamended) Act
- a RPMS that is due for review, but has not reached its expiry date when the Bill become law, may be able to defer a review until commencement of the new statute

It is likely that this Council will need to commence a review of its Strategy by publicly notifying a proposal and calling for submissions to ensure that its rules remain in place. It is also likely that it will be required to undertake a review within 18 months of the legislation being passed to ensure that the new Strategy is aligned with the National Policy Direction.

3.2 The 2011/2012 Biosecurity Operations Plan covers the fifth year of the Tasman-Nelson Regional Pest Management Strategy. It is similar to previous plans and reflects a consistent approach to management of the 60 pests in the Strategy. It covers the 13 Total Control pests where the long-term goal is eradication, the 17 Progressive Control pests where the goal is a reduction in their density and distribution, the 14 Containment pests where the goal is to prevent their spread, the 12 Boundary Control pests, and the 4 Regional Surveillance pests. A copy of this plan is attached.

3.3 The Review of the 2010/201 Biosecurity Operations Plan covers the fourth year of the Regional Pest Management Strategy. It is also similar to previous plans and outlines the Plan's achievements. A copy of this Review is attached.

4. Financial/Budgetary Considerations

4.1 Under the existing legislation, a full review of the Strategy is expected to cost between $25,000 and $35,000, depending on the depth of the analysis to be under Section 72 of the Biosecurity Act. It is difficult to estimate what the costs are likely to be under the proposed legislation with the substantial amendments proposed for the Strategy and the National Policy Content still to be written, but the costs are likely to be substantially higher.

4.2 The total estimated cost of the Biosecurity Operations Plan for 2011-12 is $531,600.

5. Options

There are four options.

Option 1: Do nothing.

Option 2: Commence a review that proposes significant changes to the RPMS's scope and policy and then repeat the process after the promulgation of the Bill and National Policy Direction.

Option 3: Commence a review that results in a largely unchanged RPMS but delay completing the review (and adopting the revised RPMS) until after the promulgation of the Bill and National Policy Direction.

Option 4: Undertake a review that results in an unchanged RPMS and then undertake a second (in-depth) review following promulgation of the Bill and National Policy Direction.

6. Pros and Cons of Options

Option 1: Do nothing. This means the RPMS expires and there is a *hiatus* in the enforcement of pest management

Option 2: Commence a review that proposes significant changes to the RPMS's scope and policy and then repeat the process after the promulgation of the Bill and National Policy Direction. This option will require significant staff time.

Option 3: Commence a review that results in a largely unchanged RPMS but delay completing the review (and adopting the revised RPMS) until after the promulgation of the Bill and National Policy Direction. However, a review begun under the current Act must be completed under the unamended Act. This option is not recommended as it risks poor alignment with the new legislation and the National Policy Direction

Option 4: Undertake a review that results in a largely unchanged RPMS and then undertake a second (in-depth) review within 18 months of the promulgation of the Bill and National Policy Direction.

Option 4 is the recommended option for this council. It represents a *de minimis* approach that will:

- ensure the current RPMS and its rules will continue to have effect
- minimise resourcing requirements in terms of preparing and processing the initial review. Note that no changes should be made to the RPMS as part of that review. This ensures there is no requirement to carry out a new section 72 analysis.
- ensure that a comprehensive review can be delayed until the Bill and National Policy Direction have been promulgated and the future 'pest scape' is clarified. This council will then be better placed to determine its biosecurity priorities and the requirements and expectations of central government policy.

7. Evaluation of Options

There is little point in going through the review process twice. The decision to undertake an initial review involving a largely unchanged RPMS will need to have an effective media campaign to explain the reasons for this course of action.

8. Significance

This is not a significant decision according to the Council's Significance Policy because it is unlikely to have significant financial, social, economic environmental or cultural impacts, providing the announcement of the review is made prior to the Strategy's expiry in June 2012.

9. Recommendation/s

THAT the Environment & Planning Committee:

Receives the Annual Biosecurity Report REP11-10-03

Approves the commencement of a review of the RPMS that will result in an unchanged RPMS and then undertake a second (in-depth) review following promulgation of the Bill and National Policy Direction as it appears likely that the Bill will not be passed before June 2012.

Approves the Regional Pest Management Operations Plan for 2011/2012.

Accepts the Review of the Operations Plan for 2010/2011.

10. Timeline/Next Steps

10.1 The E&P Manager will review the legislative situation in April 2012 and consult with the Biosecurity Coordinator before deciding on the timing of the review.

11. Draft Resolution

THAT the Environment & Planning Committee:

Receives the Annual Biosecurity Report REP11-10-03

Approves the commencement of a review of the RPMS that will result in an unchanged RPMS and then undertake a second (in-depth) review following promulgation of the Bill and National Policy Direction if it appears likely that the Bill will not be passed before June 2012.

Approves the Regional Pest Management Operations Plan for 2005/2006.

Accepts the Review of the Operations Plan for 2009/2010.

Lindsay Vaughan
Co-ordinator Biosecurity

Appendices:

1. Biosecurity Operations Plan 2011/2012
2. Review of the Biosecurity Operations Plan 2010/2011

Tasman-Nelson
Regional Pest
Management Strategy

2011/2012

TABLE OF CONTENTS

LIST OF TABLES

1. INTRODUCTION

Under the Biosecurity Act 1993, the Tasman District Council and Nelson City Council first prepared the joint Tasman-Nelson Regional Pest Management Strategy in 1996. The Strategy was reviewed in 2001 and again in 2007.

The Strategy covers 60 pests that can cause significant damage to the natural environment and to the region's primary industries. Under the Strategy, the responsibility for control lies primarily with the land occupier. Tasman District Council is the Management Agency for implementation of the Strategy and has the responsibility to ensure that land occupiers are meeting their obligations for pest management on their properties.

Tasman District Council will continue to work with land occupiers, provide education and advice on methods of controlling animal and plant pests, and undertake surveillance to document pest spread and distribution. Where possible, biological control methods are will be used to control widespread pests.

This Operational Plan has been prepared in accordance with Section 85 of the Biosecurity Act 1993. This Operational Plan identifies and outlines the nature and scope of activities to be undertaken by the two councils in the implementation of the Strategy for the year 2011/2012. The Operational Plan will continue to be reviewed annually for the duration of the Strategy. Performance targets and other measures by which performance may be judged are identified and will continue to be refined as more information becomes available.

2. PURPOSE

The purpose of the Operational Plan is to document how the Strategy is to be implemented by Tasman District Council. This enables stakeholders to annually examine the performance of the Council as the Management Agency for the Strategy.

3. LINKAGES

The Operational Plan is integrated, as far as possible, with the Tasman District Council's 2011/12 Annual Plan and the 2011/12 Long Term Plan. Both plans provide overviews of the Tasman District Council functions and these include its pest management activities. They should be read in conjunction with the Tasman-Nelson Regional Pest Management Strategy.

Bovine tuberculosis feral vector control is another significant pest management activity in the District. It is covered by a National Pest Management Strategy and the Animal Health Board is responsible for preparing an operational plan and reporting on its implementation. Tasman District Council is a significant funder of this programme and issues resource consents for this work.

4. MANAGEMENT REGIMES – DECLARED PESTS

The Regional Pest Management Strategy contains 58 pests ("declared" pests) which cause, or are capable of causing, significant damage to the Tasman-Nelson region's environment or its primary industries.

The Strategy groups the individual pests into five categories, with varying levels of intervention. In most situations, the land occupier is responsible for meeting the standards and rules for each pest, although Biosecurity Officers will assist with Total Control Pests.

As the Management Agency, Tasman District Council is responsible for ensuring that occupiers comply with their obligations, that surveillance is carried out to determine new infestations of pests, and land occupiers are advised of the most appropriate methods of control for each pest.

All declared pests are banned from sale, propagation, breeding, distribution and commercial display.

4.1 TOTAL CONTROL PESTS

These pests are limited in their distribution, but could cause significant adverse effects on primary industries in the Tasman-Nelson region and/or indigenous biodiversity. The ultimate goal is eradication. Land occupiers are required to destroy all live material to reduce their distribution and prevent propagation. Often it is effective and efficient for Biosecurity Officers to work with occupiers to achieve this. On sites close to reserves managed by the Department of Conservation, this work may be undertaken by their staff.

Table 1: Total Control Pests

Pests	
African Feather Grass	Bathurst Bur
Boxthorn	Cathedral Bells
Climbing Spindleberry	Egeria
Entire Marshwort	Hornwort
Madeira Vine	Phragmites
Saffron Thistle	Senegal Tea
Spartina	

Total Estimated Cost 2011/2012	**$34,000**

Strategy Objective

1. Eradication of these pests from all areas under the jurisdiction of Tasman District Council and Nelson City Council by 2020.

2010/2011 Objectives

1. Investigate all reports of new infestations to confirm identification and undertake surveillance of adjoining areas

2. Inspect all sites that are classified as New, Active or Monitoring, on an annual basis and work with the occupier to destroy all live material.

3. Inspect all sites regularly that are classified as Historic to confirm their status. This will vary from annual to five-yearly inspections.

4. Record all sites containing Total Control pests on the pest database and the actions taken.

5. Update the classification of all properties using the modified Holloran classification

2011/2012 Performance Indicators

1. All reports of new infestations of Total Control pests will be investigated within twenty working days of being reported

2. All sites that are classified as, New, Active or Monitoring will be inspected annually

3. Biosecurity officers will work with landowners to destroy all live material on sites classified as New, Active and Monitoring

4. All sites classified as Historic will be inspected to check their status. Inspection intervals are dependent on biological characteristics of individual pests and will vary from one to five years.

5. All inspections on sites containing Total Control pests will be recorded on the pest database, along with the actions taken.

6. The classification of all properties using the modified Holloran classification will be updated by 31 July.

7. The Department of Conservation will provide a report on their work with Total Control pests by 15 August using the modified Holloran classification.

4.2 PROGRESSIVE CONTROL PESTS

These pest plants are reasonably widespread in the Tasman-Nelson region and have specific biological characteristics (such as long seed viability) that make eradication difficult, but it is considered feasible to reduce their distribution and density. Land occupiers are required to destroy and manage infestations to prevent their spread and to progressively reduce the distribution and density of plants at known infested sites, with some exceptions.

Table 2: Progressive Control Pests

Pests	
Banana Passion Vine (Golden Bay)	Boneseed (outside the Port Hills)
Chinese Pennisetum	Gambusia
Koi Carp	Nassella Tussock
Old Man's Beard (Golden Bay to Kaiteriteri, Upper Buller Catchment)	Perch
Purple Loosestrife	Reed Canary Grass
Reed Sweet Grass	Rooks
Rudd	Tench
Variegated Thistle	White-edged Nightshade
Wild Ginger (Golden Bay to Kaiteriteri)	

Although control of Progressive Control pests is primarily the responsibility of the occupier, there are some exceptions.

- Rook control remains the responsibility of Biosecurity officers.
- Control of the five species of pest fish is undertaken by the Department of Conservation, as set out in Memorandum of Understanding with the Management Agency
- On sites close to reserves managed by the Department of Conservation, work on Progressive Control pests may be undertaken by their staff.

Total Estimated Cost 2011/2012	**$110,000**

Strategy Objective

1. Reduce the distribution and density of Progressive Control Pests in the Tasman-Nelson region over the term of the Strategy.

2011/2012 Objectives

1. Investigate all reports of new infestations to confirm identification and undertake surveillance of adjoining land

2. Inspect all sites that are classified as New, Active or Monitoring on an annual basis and advise the occupier of any action that is required

3. Record all sites on the pest database including the action to be taken.

4. Update the classification of all properties using the modified Holloran classification??

2011/2012 Performance Indicators

1. All reports of new infestations of Progressive Control pests will be investigated within forty working days of being reported

2. All sites that are classified as New, Active or Monitoring will be inspected annually

3. All inspections on sites containing Progressive Control pests will be recorded on the pest database, along with any actions taken.

4. The classification of all properties using the modified Holloran classification will be updated annually

5. The Department of Conservation will inspect all properties with known or suspected infestations of pest fish, undertake control, and provide an annual report to the Council by 15 August on the results.

4.3 CONTAINMENT PESTS

Containment Pests refer to pests that are abundant in parts of the Tasman-Nelson region. The long-term goal is to prevent the spread of these pests to adjoining properties, or to parts that are not currently infested.

Table 3: Containment Pests

Pests	
Argentine Ants	Australian Magpies
Broom (Howard-St Arnaud)	Brushtail Possum
Darwin's Ants	Feral Cats
Feral Rabbits and Hares	Gorse (Howard-St Arnaud)
Lagarosiphon	Mustelids (Stoats, Weasels and Ferrets)
Purple Pampas	

Total Estimated Cost 2011/2012	**$141,000**

Strategy Objective

1. Prevent the spread of Containment Pests to adjoining properties or other parts of Tasman and Nelson that are not currently infested.

2011/2012 Objectives

1. Destroy isolated infestations and reduce incidence in other sites.

2. Provide information and advice to occupiers on methods to control these pests.

3. Lend traps on a short-term basis to control Magpies, Possums, Mustelids, and Feral Cats, and provide advice on the control of Feral Rabbits and Hares.
4. Encourage the development of new tools and techniques to control Argentine and Darwin's Ants to slow their rate of spread.

2011/2012 Performance Indicators

1. Undertake surveillance for new infestations of Pampas and Lagarosiphon, and ensure occupiers comply with Strategy rules.

2. Encourage the development of new tools, co-fund an independent assessment of their effectiveness, monitor changes in their distribution and encourage the adoption of promising new products and techniques for controlling Argentine and Darwin's ants by occupiers.

3. Respond to requests for help with animal/bird pest control within five working days.

4.4 BOUNDARY CONTROL PESTS

The benefit from controlling pest plants generally falls to the individual land occupier. An occupier whose land is clear, or being cleared, of the pest, can reasonably expect to be protected from pest invasion from a neighbour's property. Council will require occupiers to maintain their boundaries clear of pests to the nominated distance from the boundary, except for fireblight when control will be undertaken by the pipfruit industry.

Table 4: Boundary Control Pests

Pest	Distance from boundary
Australian Sedge	20 metres
Blackberry	10 metres
Black Spot, Codling Moth, Powdery Mildew	500 metres from pipfruit orchard
Broom (outside Howard-St Arnaud)	10 metres
Buddleia	50 metres
Fireblight	500 metres from pipfruit orchard
Giant Buttercup	5 metres
Gorse (outside Howard-St Arnaud)	10 metres
Nodding Thistle	20 metres
Ragwort	20 metres

Total Estimated Cost 2011/2012	**$50,000**

Strategy Objective

1. Control the spread of Boundary Control Pests from adjacent properties or road reserve to land that is clear, or being cleared, of these pests.

2011/2012 Objectives

1. Intervene in response to any reasonable complaint of non-compliance by an adjoining land occupier.

2011/2012 Performance Indicators

1. Follow up all complaints regarding a nominated boundary pest/s within ten working days.

2. Following the inspection, advise the complainant if the complaint meets the requirements of the strategy and action to be taken

4.5 General Surveillance and Regional Surveillance Pests

Regional Surveillance Pests are pests for which there are no rules requiring occupiers to undertake control, but they are still banned from sale, propagation, breeding, distribution or commercial display. General surveillance involves work that is undertaken to identify new pests and changes in the distribution of existing pests.

Table 5: General Surveillance and Regional Surveillance Pests

Pests	
Parrot's Feather	Undaria
Pinus contorta (Lodgepole Pine)	Yellow Flag

Total Estimated Cost 2011/2012	**$10,000**

Strategy Objective

1. Assess the distribution and monitor the spread and impact of Regional Surveillance Pests.

2011/2012 Performance Indicators

1. Map the distribution of Regional Surveillance Pests and review the literature to allow an assessment of the level of risk posed by these pests and the methods and costs of treatment.

4.6 National Pest Plant Accord

The National Pest Plant Accord was developed in 2001 as a co-operative agreement between the Nursery and Garden Industry Association, regional councils and government departments with biosecurity responsibilities. The Accord lists plants that could escape from gardens and become naturalised weeds, adversely affecting productive land or areas of mature or regenerating native bush. It is intended to minimise the number of "weedy" plants being sold to gardeners. Council staff visit nurseries and retail outlets to ensure that they are meeting the Accord commitments.

There are currently **122** plants listed in the Accord. All these plants are classified as Unwanted Organisms under the Biosecurity Act 1993; they are banned from propagation, sale and distribution in New Zealand. Twenty of these are included in the Tasman-Nelson Regional Pest Management Strategy and have rules for their control.

Accord Objective

To prevent the sale, propagation, breeding, distribution or commercial display within New Zealand of any pest plant that is determined to be an unwanted organism under the Biosecurity Act 1993.

2011/2012 Performance Indicators

1. Ensure all plant outlets have a current copy of the New Zealand Pest Plant Manual of National Surveillance Plants, which lists the plants that are banned from sale, propagation and distribution.

2. Inspect nurseries and other plant outlets during the term of this Strategy for plants identified on the National Pest Plant Accord. Outlets with NPPA plants and outlets which raise the concern of biosecurity officers will be inspected annually until these concerns are satisfied.

4.7 PEST CONTROL IN SITES OF HIGH PUBLIC VALUE

The public see widespread pests, such as Old Man's Beard and Possums, as having the greatest impact on the Tasman-Nelson region. However, controlling these pests across the whole of the region is prohibitively expensive in the absence of suitable biocontrol agents. The most reasonable and practical approach is to target these pests at sites of high public value where they are having the greatest impact. These sites have been selected by Biosecurity staff using a combination of values (ecological, amenity, cultural, recreational, public access), the feasibility and cost of effective control, and their history of pest control.

All pests at defined high-value sites will be controlled where practical. The objective is the protection of the values of the site, and is not specific to particular designated pests. As this pest control work benefits the whole community, it is funded from the general rate. There are no requirements on land occupiers to carry out control on these sites, but land occupiers and communities in close proximity will be encouraged to carry out pest control. There is no point just removing Old Man's Beard from a site if Banana Passion Vine or some other climber will simply replace it. The focus will be on achieving the greatest benefit from the available resources, with consideration given to the ongoing pest control work that will be required if benefits are to be achieved long-term.

Tasman District Council and Nelson City Council will be responsible for selecting their own sites where nominated pests will be controlled.

Total Estimated Cost 2011/2012	**$63,000**

Strategy Objective

1. Control nominated pests on land designated as high public value sites.

2011/2012 Objectives

1. Undertake pest control programmes at following sites in Tasman District:
   - Dart/Wangapeka (with DOC staff)
   - Lee Valley Reserve
   - Torrent Bay;
   - Upper Baton

2. Undertake pest control programmes at sites in Nelson City selected by NCC's Parks and Reserves staff.

2011/2012 Performance Indicators

1. Management plans will be developed for each site by 30 June 2012.

4.8 BIOLOGICAL CONTROL

When pests have become widespread, the benefits of control generally accrue to individuals. However, biological control is a notable exception. It can be cost-effective to limit the impacts of widespread pests by using biocontrol agents with the benefits will apply across the wider community. Traditional methods of pest control are increasing in cost, and may be restricted by changes in land use and by changes in public attitude, leaving biological control may be the only practicable long-term management option available.

Regional Councils have formed a Biocontrol Collective with Landcare Research and the Department of Conservation, and meet annually to determine the direction of the research programme for the following year and agree on funding contributions. The Management Agency has agreed to contribute $24,800 to the 2010/11 research programme.

Total Estimated Cost 2011/2012	**$30,000**

2011/2012 Objectives

1. Contract Landcare Research to undertake research into biological control through the Regional Councils Biocontrol Collective and provide new populations of biocontrol agents and technical advice.

2. Purchase four new biocontrol agents: green thistle beetle, broom gall mite, woolly nightshade lace bug, and a parasitic wasp for the gum leaf skeletoniser.

3. Monitor the sites where biocontrol agents have been previously released and report on progress

4. Distribute established biocontrol agents into new pest sites and provide information and advice to land occupiers and advise Landcare Research of the location

5. Identify training needs and utilise training opportunities

6. Research biological control techniques to improve their effectiveness.

2011/2012 Performance Indicators

1. Promote the development of biological control by Landcare Research within the Regional Council's Collective programme for: Alligator Weed, Banana Passion Vine, Barberry, Boneseed, Smilax, Broom, Chilean Flame Creeper, Chilean Needle Grass, Nassella Tussock, Climbing Asparagus, Wild Ginger, Moth Plant, Old Man's Beard, Wandering Jew, and Woolly Nightshade.

2. Monitor release sites of, Broom Seed Beetle and Psyllid, Gorse Pod Moth, Thrips, Spider Mite, and Soft Shoot Moth, Nodding Thistle Gall Fly, Receptacle Weevil and Crown Weevil, Old Man's Beard Leaf Fungus, and Leaf Miner, Ragwort Flea Beetle and Cinnabar Moth, Scotch Thistle Gall Fly and Green Thistle Beetle.

3. Distribute the Buddleia weevil to new sites.

4.9 PROVISION OF EDUCATION AND ADVICE

Total Estimated Cost 2011/2012	**$38,000**

2011/2012 Objectives

1. Provide information and advice to aid identification of pests and methods for controlling them.

2. Provide pest control workshops when requested to encourage individuals and groups to carry out efficient and effective pest control.

3. Provide media releases on topical issues

2011/2012 Performance Indicators

1. Develop or update and distribute three publications to aid identification and control of pest plants and animals.

2. Provide a comprehensive biosecurity display for Ecofest.

3. Organise a field day in conjunction with other stakeholders to highlight current best practice and encourage the uptake of new tools and techniques

4. Provide Newsline with nine Pest of the month articles

5. Provide accurate advice on pest control and pest identification enquiries from the public within five working days.

Review of the **2010-2011** Operational Plan **for the Tasman-Nelson Regional Pest**

MANAGEMENT STRATEGY

TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

INTRODUCTION

Section 85(1) (b) of the Biosecurity Act 1993 requires the Management Agency for every pest management strategy to review the Operational Plan annually, and if the Management Agency thinks fit, to amend it and to report on the Operational Plan and its implementation no later than 5 months after the end of the financial year.

The Operational Plan details the main activities required by the Tasman-Nelson Regional Pest Management Strategy (the Strategy). The following report by Tasman District Council in its capacity as the Management Agency assesses each of these activities, and comments on relevant issues.

LINKAGES

This Review of the Operational Plan should be read in conjunction with the Tasman-Nelson Regional Pest Management Strategy. It is integrated, as much as possible, with the Tasman District Council's Annual Plan Report and the Ten Year Plan. The Annual Plan Report provides an overview of all Tasman District Council functions, including pest management activities, for 2010-2011.

Bovine tuberculosis feral vector control is another significant pest management activity in the District. This is subject to a National Pest Management Strategy, where the Animal Health Board is responsible for preparing an operational plan and reporting on the Strategy's implementation. Tasman District Council is a significant funder of this programme and issues resource consents for this work.

1. TOTAL CONTROL PESTS

Estimated Project Cost
$34,000

Actual Project Cost
$57,000

Total Control Pests refer to high-risk pests that are of limited distribution or density in the region for which the long-term goal is eradication.

STRATEGY OBJECTIVE

1. Eradicate Total Control Pests from the Tasman-Nelson region.

2010 -2011 PERFORMANCE INDICATORS

1. Work with land occupiers to destroy Total Control Pests at all known sites.

2. Carry out surveillance for new infestations.

3. Prevent new infestations from establishing.

4. Update the trend monitoring database.

Achievements

General

1. All active and monitoring sites of Total Control Plant Pests (African Feather Grass, Bathurst Bur, Boxthorn, Cathedral Bells, Climbing Spindleberry, Egeria, Entire Marshwort, Hornwort, Madeira Vine, Phragmites, Saffron Thistle, Senegal Tea and Spartina) were inspected during the year. Any plants found were destroyed, and/or control programmes initiated. On all sites, plant numbers were reduced. Historical sites where live plants have been absent for several years are usually inspected biennially.

2. Data is recorded on hand-held IPAQs for each site and transferred to the pest database for storage and analysis.

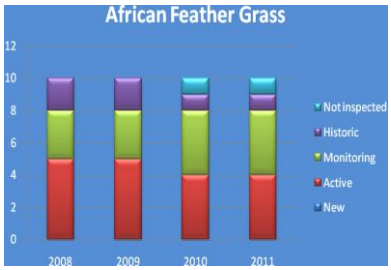
Trend Monitoring

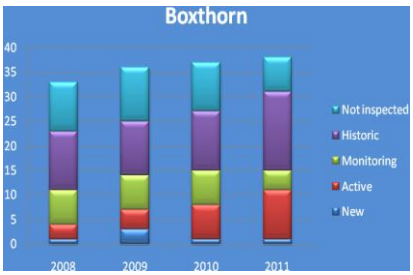
The database for recording pest distribution and abundance was developed to hold the information recorded on the IPAQs. Site locations are stored in the Council pest database, along with the site classification and any relevant information. The site classification is based on the level of activity and provides a method of trend monitoring. This was used in the pest distribution maps in the back of the current Strategy but the criteria for classifying the sites has been revised to bring them into line with that described by Holloran (Holloran P (2006), *Measuring performance of invasive plant eradication efforts in*

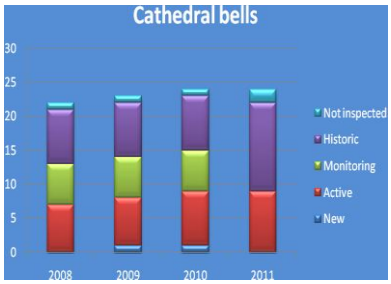
New Zealand, New Zealand Plant Protection 59: 1-7) and provides a useful picture of the long-term trends. The criteria are described below.

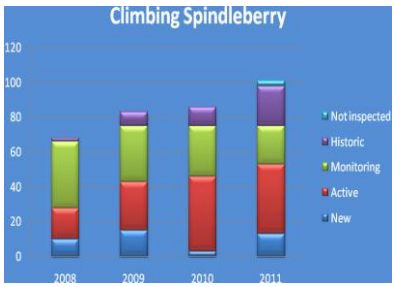
- **New sites** are those that have been reported for the first time in the financial year shown, identification has been confirmed, and live material is present.
- **Active sites** are sites with live material present that have been treated in the current financial year.
- **Monitoring sites** are previously-treated sites with no live material present for up to 3 years.
- **Historic sites** are those for which no live material has been present for more than 3 years.

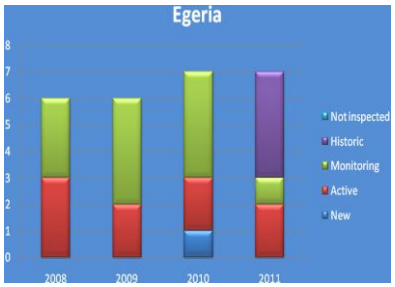
The results for individual species are illustrated below.

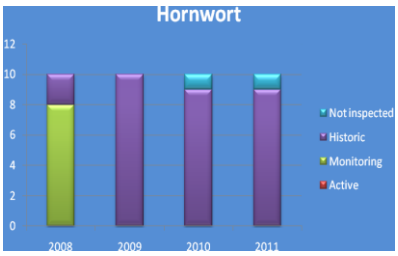


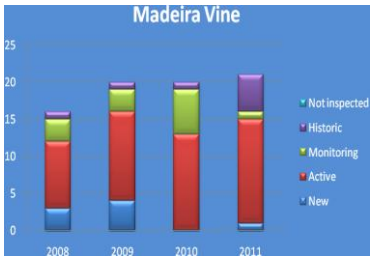


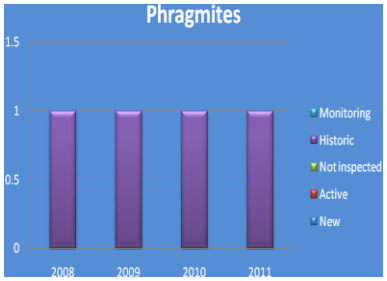


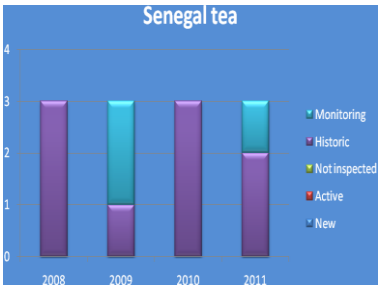












2. PROGRESSIVE CONTROL PESTS

Estimated Project Cost
$110,000

Actual Project Cost
$134,000

Progressive Control Pests are pests that are unlikely to be eradicated from a region because of their biological characteristics such as long-term seed viability.

STRATEGY OBJECTIVE

1. To reduce the distribution and density of Progressive Control Pests in the Tasman-Nelson region.

2010-2011 OBJECTIVES

1. Destroy isolated infestations and reduce the density and/or distribution of Progressive Control Pests on severely infested sites.

2. Minimise seeding at infested sites.

Performance Indicators

1. Destroy all Progressive Control Pests seen at known sites.

2. Ensure the occupiers of land with pest infestations are aware of their responsibilities.

3. Carry out surveillance for new infestations.

4. Prevent new infestations from becoming established.

5. Monitor changes in the known distribution of these pests.

Achievements

General

1. The distribution and density of Progressive Control Pests have been reduced at most sites.

2. The pest monitoring database is updated.

3. Surveillance has concentrated on recording the location of the sites of the Progressive Control Pests that were introduced into the Strategy.

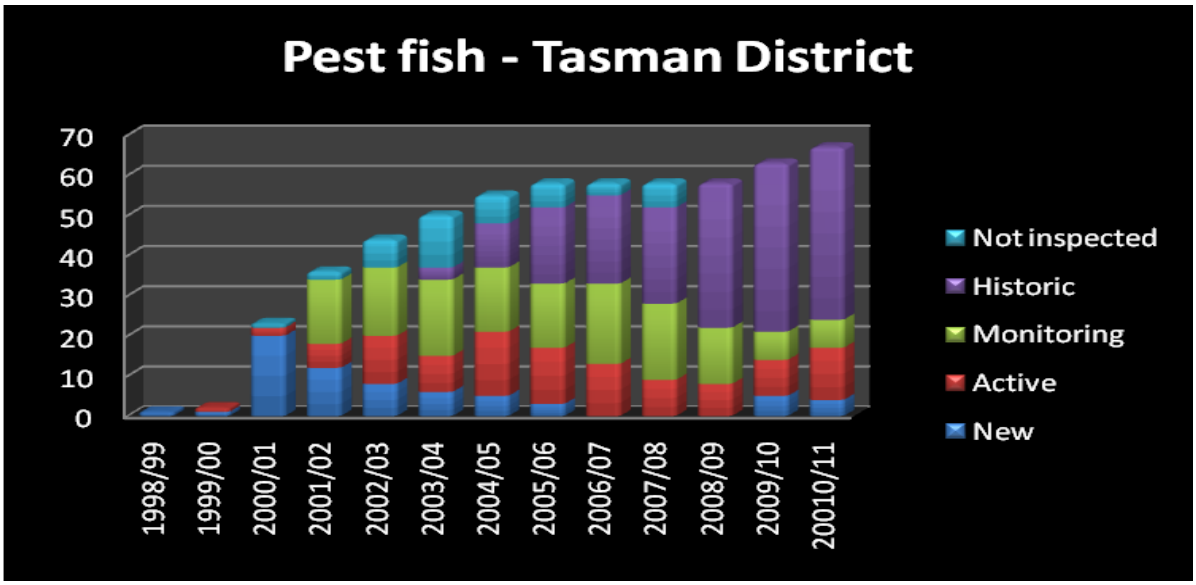
Trend Monitoring

Trend monitoring using a modified Holloran classification has been applied to five species of pest fish in waterways in eastern Tasman District. This information has been provided by the Department of Conservation since 1998, who is responsible for controlling *Gambusia*, Koi carp, Perch, Rudd and Tench.

Table 1: Pest Fish Data 2000 – 2008

Year	New	Active	Monitoring	Historic	Not inspected	Total
1998/99	1					1
1999/00	1	1				2
2000/01	20	2			1	23
2001/02	12	6	16		2	36
2002/03	8	12	17		7	44
2003/04	6	9	19	3	13	50
2004/05	5	16	16	11	7	55
2005/06	3	14	16	19	6	58
2006/07		13	20	22	3	58
2007/08		9	19	24	6	58
2008/09		8	14	36		58
2009/10	5	9	7	42		63
20010/11	4	13	7	43		67

Figure 1: Trends in Pest Fish Sites 1999 – 2011



This illustrates:

- the rapid increase in the number of sites containing pest fish over the first 8 years, following discovery of the first sites in 1998;
- the significant reduction in the number of Active and Monitoring sites over the last 5 years, following intensive surveillance and treatment.

3. CONTAINMENT PESTS

Estimated Project Cost
$141,000

Actual Project Cost
$165,000

STRATEGY OBJECTIVE

1. To prevent the spread of Containment Pests to adjoining properties or other parts of Tasman and Nelson that are not currently infested.

2010-2011 OBJECTIVES

1. To require treatment of pest plants and ants.

2. To promote and encourage control of animal pests.

PERFORMANCE INDICATORS

1. Monitor changes in the known distribution of the pests.

2. Undertake surveillance of uninfested land.

3. Where possible, prevent the establishment of new infestations.

4. Ensure the occupiers of land with pest infestations are aware of their responsibilities.

ACHIEVEMENTS

General

1. A significant effort has gone into preventing the spread of Containment Pests but the existing tools are inadequate for the task. There is no objective data to indicate what is being achieved with the management of animal pests such as Magpies, Feral Cats, Feral Rabbits and Mustelids.

2. The invasive ants are slowly spreading, as are Purple Pampas and Gorse and Broom in the Howard-St Arnaud area. A more appropriate role for future management of these widespread pests will be for Council to provide an education and support role for landowners rather than having a specific requirement on landowners.

Comments on Individual Pests

1. Argentine and Darwin's Ants

- Argentine ants were first identified in Tasman-Nelson in 2001 at Port Nelson. Darwin's ants have been here for a much longer period of time, probably since the mid-1980s.
- There are more than 1,000 urban and 12 rural properties known to be infested with Argentine Ants and more than 180 urban and 30 rural properties known to be infested with Darwin's Ants.
- Argentine Ants spread along footpaths and road edges at up to 150 metres per year. On rougher terrain (across gardens and lawns), the rate is up to 50 metres per year. Baited properties can be re-infested in less than 12 months from unbaited neighbouring properties. They cross over roads and under them using culverts and drains.
- For Darwin's Ants, the natural rate of spread is slower, up to 50 metres per year along hard surfaces. On rougher terrain, it is probably 20-30 metres per year. Baited properties can be re-infested within 24 months from unbaited neighbouring properties.
- Effective baiting of Argentine Ants usually provides sufficient control for 2 years, but reinvasion from unbaited sections may require annual baiting. For Darwin's Ants, effective baiting usually provides sufficient control for 3-4 years. Again, reinvasion from unbaited sections may require more frequent baiting.
- The Council employed an experienced science graduate to undertake surveillance of Argentine and Darwin's ants and to assess spread on the margins of known sites and around high-risk sites. The Department of Conservation undertake assessment on high-risk sites on or adjoining Conservation land throughout the region.
- The updating our data on distribution of these two species of ant, advising residents of the presence of invasive ants on their properties and of the need to bait, and providing them with information, has become a major logistical task.

2. Australian Magpie

- There is a continuing seasonal demand for traps and call birds, but at a lower level than in previous years. Some of the more committed occupiers have purchased their own traps. No magpies have been reported in Takaka Valley (17 birds removed last year) but eight (15 last year) were removed from the Riwaka Valley to reduce the risk of invasion and a similar number from around Old Coach Rd.

3. Broom and Gorse (Howard-St Arnaud)

- Harvesting commenced in *Pinus muricata* stands in Teetotal and Stations Creeks near St Arnaud in October 2009. All machinery was cleaned before starting to prevent the introduction of weed seeds. Broom and gorse sites that have been under a pine cover for more than 20 years are expected to regenerate, a function of the long period of seed viability. The

harvested areas are being replanted with radiata pine and gorse and broom will be controlled where it affects the growth of the pine seedlings.
- The Department of Conservation also undertake work on gorse and broom on crown land on behalf of LINZ.

4. Brushtail Possum/Mustelids/Cats/Rabbits/Hares

- There is a continuing demand for traps and requests for advice on control. The Biosecurity Officers provide a very good service to occupiers.
- Control operations were mounted on small populations of rabbits in coastal properties in Motueka and Kaiteriteri.

5. Lagarosiphon

- Occupiers are advised of the Strategy requirements and advice is provided on methods of containment and treatment.

6. Purple Pampas

- Plants continue to be found and destroyed around scrubland and areas disturbed by earthworks associated with roading, forest harvesting operations and subdivision.

4. BOUNDARY CONTROL PESTS

Estimated Project Cost
$50,000

Actual Project Cost
$12,000

Boundary Control Pests are a group of horticultural, agricultural or forestry pests that are widely distributed.

STRATEGY OBJECTIVE

1. To control the spread of Boundary Control Pests from adjacent properties or road reserve to land that is clear, or being cleared of these plants.

2010-2011 OBJECTIVES

1. To intervene in response to any complaint of non-compliance by an adjoining land occupier.

PERFORMANCE INDICATORS

1. Follow up complaints that satisfy the policy for enforcement in the Strategy within a 5 day working period.

Table 2: Summary of Boundary Clearance Activity

Pest	Requests for Boundary Clearance
Australian Sedge	Nil
Blackberry	Nil*
Broom (outside Howard - St Arnaud)	2*
Buddleia	Nil
Codling Moth, Black Spot and Powdery Mildew	Nil
Fireblight	Nil
Giant Buttercup	Nil
Gorse (outside Howard - St Arnaud)	6
Nodding Thistle	Nil
Ragwort	Nil

* There have been numerous requests from occupiers for detailed specifications in regard to Gorse, Broom and Blackberry and these mostly allowed landowners to resolve boundary issues. There were nine requests for Council intervention.

ACHIEVEMENTS

1. Biosecurity Officers have dealt effectively and efficiently with issues raised by requests.
2. The Department of Conservation have also undertaken boundary control work on pest plants on conservation land adjoining private property.

ENFORCEMENT

1. One landowner was served with a Notice of Direction.

5. GENERAL SURVEILLANCE AND REGIONAL SURVEILLANCE

Estimated Project Cost
$37,000

Actual Project Cost
$40,500

General surveillance is work that is undertaken to identify new pests and changes in the distribution of existing pests. Regional Surveillance Pests are four pests which may pose a future risk but there is limited information on the present distribution. These are being monitored and advice is provided to landowners to promote voluntary control.

STRATEGY OBJECTIVE

1. To assess the distribution and monitor the spread and impact of Regional Surveillance Pests.

2010-2011 OBJECTIVES

1. To continue assessment of the distribution and monitor the spread and impact of Regional Surveillance Pests.

PERFORMANCE INDICATORS

1. To map the distribution of Regional Surveillance Pests to allow an assessment of the level of risk posed by these pests.

ACHIEVEMENTS

1. Surveillance has identified sites of Yellow Flag, Parrot's Feather and *Pinus contorta.* There has been no formal surveillance of *Undaria,* but it is recorded in the port surveys undertaken for MAF and anecdotal information indicates that it is present in low densities throughout the district.

2. *Pinus contorta* wildings have been removed from the Roding Water works Reserve (Champion Creek) by Nelson City Council and from the south-eastern corner of Mr Richmond Forest Park (Beeby's Knot – Motueka Gorge) and south of Hope Saddle by the Department of Conservation. The Department of Conservation is investigating reports of *P. contorta* in Kahurangi National Park.

6. PEST CONTROL IN SITES OF HIGH PUBLIC VALUE

Estimated Project Cost
$29,000

Actual Project Cost
$49,000

STRATEGY OBJECTIVE

1. To control nominated pests on land designated as high public value sites.

2010-2011 OBJECTIVES

1. Tasman District Council will control designated pests as part of follow-up programmes at the following sites:

Table 3: Principal Pests to be controlled on Sites of High Public Value

Site	Principal Pest(s)
Dart/Wangapeka confluence	Old Man's Beard
Marahau	Old Man's Beard
Torrent Bay	Animal and Plant Pests

Upper Baton	Old Man's Beard
Lee Valley Reserve	Old Man's Beard and other pest plants
Nelson City Council reserves	Old Man's Beard and other pest plants

PERFORMANCE INDICATORS

1. To implement management programmes for each site to protect the values of each site.

2. To assist individuals and community groups to carry out pest control work on and adjacent to the high value sites.

ACHIEVEMENTS

1. Lee Valley

- Old Man's Beard, Barberry seedlings and Wandering Jew continue to be controlled by cutting and stem swapping, grubbing or hand removal.

2. Torrent Bay

- This major programme is a joint venture between the Council, local landowners and the Department of Conservation. Funding from local landowners has allowed the purchase of additional traps and the replacement of old traps. There are now 104 DOC 150 stoat traps and 124 Possum Master traps distributed over 514 hectares, which caught 146 possums, 25 stoats and 97 rats.
- As a result of the reduction in the number of animals trapped, the occupiers have commented on increased number of native birds, especially the nectar feeders.
- There is ongoing removal of pine trees from Tasman District Council land and adjoining private land as part of a Wilding Pine control programme. Abel Tasman Sea Shuttles, a local concessionaire, has been involved in wilding pine removal from foreshore areas.
- The Abel Tasman Birdsong Trust was set up in December 2007. This is funded by a small levy on day visitors travelling by boat into Abel Tasman National Park and it is funding pest control in southern end of the Park. They commissioned a report on management of wilding conifers and have now secured funding to commence control operations.

3. Upper Baton

- Old Man's Beard vines were cut and stumps were treated in the public use and fishing access areas along the true right bank of the Upper Baton River between the gorge and Stony Creek. This programme will be reviewed as a result of changes in land use and new restrictions on public access.

4. Dart and Wangapeka Confluence

- Vines of Old Man's Beard were cut and stumps treated and rambling growth was sprayed on the only known site in the Upper Wangapeka.

5. Marahau

- Regrowth and new plants of Old Man's Beard were found and treated by cutting and treating, and new infestations were found in Otuwhero Valley. *Gunnera* (Chilean rhubarb) has been found on the banks along the lower reaches of the Marahau River and will require treatment to control it.

6. Community Groups

- Pest control work is being undertaken by a substantial number of community groups in the Tasman-Nelson regions in sites with high biodiversity values and in areas close to suburbs. There are 37 groups known to be controlling predators and these include Friends of Flora, Friends of Rotoiti, Friends of Cobb, Friends of Mangarakau Swamp, Onekaka Biodiversity Group, Abel Tasman Birdsong Trust, Birdlife on the Grampians, Marsden Valley Traplines, and Native Bird Recovery Richmond.
- There are also a number of groups controlling plant pests. The Tasman/Nelson Weedbusters are controlling vines in high value indigenous forest sites around the Moutere. The Rocklands Road Weedbusters under Chris Rowse are working with a substantial number of landowners on the karst hill country between Motupipi and Port Ligar. Chris received a Tasman-Nelson environment award for his work in coordinating the project.

7. BIOLOGICAL CONTROL

Estimated Project Cost	
Total costs	$48,000
Actual Project Cost	
Landcare Research Contract	$20,000
Biocontrol agents	$5,000
Weed identification	$600
Council costs	$22,000
Total	$47,600

2010-2011 OBJECTIVES

1. To contract Landcare Research to undertake research into biological control through the Regional Councils Biocontrol Collective and provide new populations of biocontrol agents and technical advice.

2. To purchase new biological control agents, monitor release sites, and report on progress.

3. To increase the distribution of the biological agents throughout the Tasman-Nelson region and provide information and advice to land occupiers.

PERFORMANCE INDICATORS

1. Monitor the biological agents already present in the Tasman-Nelson region and collect the successful agents and release to new sites.

2. Support research into biological control techniques and their implementation.

NEW RELEASES

1. Green thistle beetle was released at four sites throughout the district - Matariki, (near Tadmor), Tantragee (2) and Upper Takaka.

2. Bridal creeper rust has been collected and released onto several sites where its impact will be monitored. This is a naturally introduced biocontrol agent that recently arrived from Australia where it was released in 2009.

COLLECTION AND RELEASES

1. Biosecurity staff continue to collect biocontrol agents from local sites where they have successfully established and released them into new sites.
   - Buddleia weevil was released into sites in Murchison, the Upper Buller, the Baton and Quail Valleys, and Golden Bay (12 sites).

2. Biosecurity staff have monitored previous releases of:
   - Broom leaf beetle. This is slowly establishing at the release sites in Rough Island
   - Broom psyllid. This has successfully established at Rough Island and further releases have been made throughout the district.
   - Broom seed beetle. This has successfully established and is now widely distributed throughout the district.
   - Gorse soft shoot moth. This has been very slow to establish, so further releases have been made with material collected from Marlborough
   - Nodding thistle crown weevil. This is reasonably well established in areas containing nodding thistle and further releases are being made
   - Portuguese gorse thrips. These are now well established throughout the region. Nelson District
   - Ragwort plume moth. This has been slow to establish at release sites near the Howard Valley, Collingwood and Maruia.

3. A number of plant samples were sent to Landcare Research to confirm identification.

4. Under its contract with the regional councils, Landcare Research continues to investigate methods to maximise the effectiveness of biological control techniques, and to develop biological controls for a range of pest plants, selected by the regional councils in the Biocontrol Collective.

8. NATIONAL PEST PLANT ACCORD

Estimated Project Cost
Total costs $20,000

Actual Project Cost
Total costs $4,000

STRATEGY OBJECTIVE

1. To prevent the sale, propagation or distribution within New Zealand of any pest plant determined as an unwanted organism under the Biosecurity Act 1993.

PERFORMANCE INDICATORS

1. To inspect nurseries, roadside stalls and other plant outlets for any plants identified on the National Pest Plant Accord and enforce the destruction of these plants if required.

ACHIEVEMENTS

1. New nurseries and plant retailers were inspected to ensure that no plants listed on the National Pest Plant Accord were being sold.

2. Cultivars of some species continue to cause difficulty in identification.

3. A small pot, infested with African Clubmoss, was removed from a nursery and destroyed in 2010. The owner has undertaken regular checks and spraying of an infested shade house. No further signs are been found on subsequent inspections by biosecurity staff.

9. PROVISION OF EDUCATION AND ADVICE

Estimated Project Cost
$62,000

Actual Project Cost
$109,000

2010-2011 OBJECTIVES

1. Raise the public awareness of pests and emphasise the environmental and production benefits from effective control programmes.

2. Respond to all requests for advice and information so as to assist the community to effectively control pests. In particular, assist groups and individuals wanting to control designated pests, including animal pests.

3. Provide land occupiers with a plant identification service and advice on appropriate methods of control.

PERFORMANCE INDICATORS

1. Distribute pamphlets identifying the pests in the Strategy and explaining its requirements.

2. Organise public awareness campaigns involving media releases and handouts on pests that feature identification, controls and occupier responsibilities.

3. Prepare and set up biosecurity displays for conferences and appropriate community events such as Ecofest.

4. Organise field days with staff from other organisations and with people who have some biosecurity involvement to broaden their knowledge and understanding, eg, local authorities, Landcare Research and Department of Conservation.

5. Organise field days for landowners to broaden their knowledge and understanding of pest control operations, in association with other biosecurity providers.

6. Provide advice and assistance to individuals and groups carrying out pest control.

7. Forward plant samples to Landcare Research (terrestrial plants) and NIWA (aquatic plants) for identification and notify occupier of pest status and the appropriate control measures.

ACHIEVEMENTS

Public Enquiries

1. The pamphlet on Argentine and Darwin's ants was updated.

2. Two brochure were produced, one on methods of controlling pest vines and one on controlling aquatic weeds.

3. Biosecurity Officers responded to a wide range of public enquiries on identification and control of animal and insect pests that included Mustelids, Rabbits, Feral Cats, Rats, Possums, Wasps, Ants and other Insects.

4. Biosecurity Officers responded to a wide range of public enquiries on identification and control of plant pests.

Public Awareness Campaigns

1. A monthly series of biosecurity articles ("Pest of the month") continues to be published in the newsletters of the two councils.

2. Officers provided advice and lent traps to residents to control Possums, Mustelids, Magpies and Rabbits.

3. Information packs on the National Pest Accord were distributed to selected wholesale and retail nurseries.

4. The Biosecurity display at Ecofest covered a number of vines and control measures, along with pamphlets on the Great White Butterfly.

Top of the South Marine Biosecurity Partnership

1. A marine biosecurity partnership was established in 2009 to publicise the importance of marine biosecurity. It is funded by the three Top of the South councils and MAFBNZ, with $20,000 from each of the councils and this is matched by a contribution of $60,000 from Central Government and an in-kind commitment from the aquaculture industry.
2. A Strategic Plan was prepared for the Partnership by Peter Lawless in 2009.

3. A two-year contract to develop operational plans and undertake a summer advocacy programme was awarded to MCL Ltd in August 2009. This contract was completed in June 2011 and has been re-tendered with the issuing of a Request for Proposal in May 2011.

4. The contract has been overseen by a management committee comprising representatives of the funding parties (the three councils, MAFBNZ and iwi) and is chaired by Paul Sheldon (NCC) with contract management by Dave Grueber (MDC).

10. OTHER PESTS

UNWANTED ORGANISMS

1. Didymo

Didymo (*Didymosphenia geminata)* in the Tasman-Nelson region was first recorded in the Upper Buller River in September 2005. Biosecurity officers worked with MAFBNZ, the Department of Conservation, and Fish & Game New Zealand to erect and maintain notices, and undertake sampling. MAFBNZ continues to provide the Council with funding of $20,000 for a summer freshwater advocacy programme and this work has been contracted to the Nelson-Marlborough Fish & Game Council. The Department of Conservation undertake a sampling programme and provide advocacy at Waikoropupu Springs, the Rotoiti boat shows and the Buller kayak festival. This has greatly

increased public awareness and encouraged the adoption of recommended Check-Clean-Dry approach when changing waterways. However, Didymo has continued to slowly spread through waterways around the district. Fortunately, the impact of Didymo has been much less than in some southern waterways where dense mats were formed.

2. Termites

Subterranean Termites *(Coptotermes acinaciformis)* were identified on two properties in Richmond in 2006 and on a property in Nelson in 2008. It is likely they had been arrived in imported Australian hardwood sleepers being used for landscaping that had been inadequately treated. MAF has undertaken a sophisticated baiting campaign and declared eradication at the two Richmond sites and are confident that this will be achieved at the Nelson site by 2012.

NOTIFIABLE ORGANISMS (PLANTS)

These high-risk plant pests were originally classified under the Noxious Plants Act 1978 as Class "A" Pest Plants. They include Cape Tulip, Johnson Grass, *Salvinia*, Water Hyacinth and Water Lettuce. . They are now included in the list of National Interest pests (see below). Notifiable Organisms are classified under the Biosecurity Act and are required to be reported if they have not previously been recorded in the region.

NATIONAL INTEREST PESTS

MAF has selected 11 high-risk pests that they will be responsible for managing. These are listed in the following table.

Table 4: National Interest Pests Managed by Biosecurity New Zealand

Common Name	Species	Goal
Salvinia*	*Salvinia molesta*	Eradication
Water Hyacinth*	*Eichhornia crassipes*	Eradication
Johnson Grass	*Sorghum halepense*	Eradication
One-leaf Cape Tulip	*Moraea flaccida*	Eradication
Pyp Grass	*Ehrharta villosa*	Eradication
Phragmites	*Phragmites australis*	Eradication
Hydrilla*	*Hydrilla verticillata*	Eradication
Hornwort*	*Ceratophyllum demersum*	Eradication in the South Island
White Bryony	*Bryonia cretica subsp dioica*	Eradication
Rainbow Lorikeet	*Trichoglossus haematodus*	Control to zero density
Manchurian Wild Rice	*Zizania latifolia*	Eradication of outlier populations

* Aquatic plants

Five of these pests have been present in Tasman District in recent times. Johnson Grass, Water Hyacinth, Salvinia, Hornwort and Phragmites have been eradicated

from known sites. The Council will continue to undertake surveillance of these sites and adjoining areas.

OTHER PESTS

1. Great White Butterfly

The first known New Zealand incursion of the Great White Butterfly, a European relative of the smaller common white butterfly, occurred in Nelson in May 2009 when six caterpillars were found on a Nasturtium plant on private property about 2 kilometres from Port Nelson. It has subsequently been identified on 12 properties within 6 kilometres of the Port. MAFBNZ have hand sprayed all properties. Further sightings have been reported on a number of new properties within the existing zone, suggesting that there is a small established population, There has been evidence of parasitism on some of the caterpillars sent in for sampling and this may slow further development but is unlikely to eradicate the population. Entomologists believe that there will be a gradual expansion of this population.

2. Gum leaf skeletoniser

Gum leaf skeletoniser, an Australian moth with larval stages that feed on some species of eucalypts and on silver birch was identified on a Tahuna hillside property in February 2010. No visual signs were found during an intensive survey but substantial numbers of male moths were caught using pheromone traps within 3 km of the Port. It has been present in Auckland for several years and was recently identified in Hawkes Bay. It has the potential to defoliate eucalypts if present in large numbers. The main impact is from the urticating hairs on the caterpillars that are filled with venom and can produce a nasty rash on those who touch them. It is not feasible to eradicate the population but we have hoping to be able to acquire and release parasitic wasps that will slow their development and spread.

3. Blackgrass rush

Blackgrass rush *(Juncus gerardii),* a potential estuary pest, was identified in November 2009 in the Moutere estuary. A native of North America, it is a new pest to our region. An initial spraying in 2010 has been followed up with a further two sprayings in 2011 and any regrowth will be sprayed in 2012. A separate infestation in the Waimea estuary near the Richmond A&P show grounds was sprayed by the Department of Conservation in 2011.