



# **Biosecurity**

## **Operational Plan Report 2018/2019**

**August 2019**

**Biosecurity  
Operational Plan Report  
2018/2019**

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August 2019

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## Introduction

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This Operational Plan Report (the Report) has been developed to serve dual purposes. That is, to meet the requirements of an annual report on the Operational Plan in accordance with section 100B of the Biosecurity Act 1993 and also report on various other work functions of the Biosecurity Section at Council, as detailed in Part Two of the Biosecurity Operational Plan 2018-2028.

**Part One** will report on each programme within the Regional Pest Management Plan 2018 (RPMP) that became operative on 1 October 2018. There are 34 programmes within the RPMP, of which 30 are for invasive plant species, two for invasive animals, one for an invasive bird and one for a marine pest.



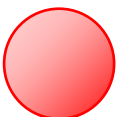

**Part Two** will report on various other biosecurity services and/or initiatives that Council has decided to implement or support.

**Part Three** details a summary of performance against targets for the 2018/2019 year and also over time.

**Part Four** details the annual review of the Operational Plan 2018-2028 in accordance with section 100B(1)(b), including any changes to the operational plans as a result of the review.



## Performance Scoring System

The Operational Plan outlined a number of targets for both RPMP programmes and other initiatives. Measures against these targets will be used to assess performance of implementation. A coloured 'traffic-light' system – outlined below – will be used to indicate the 2018/2019 performance against the respective target.

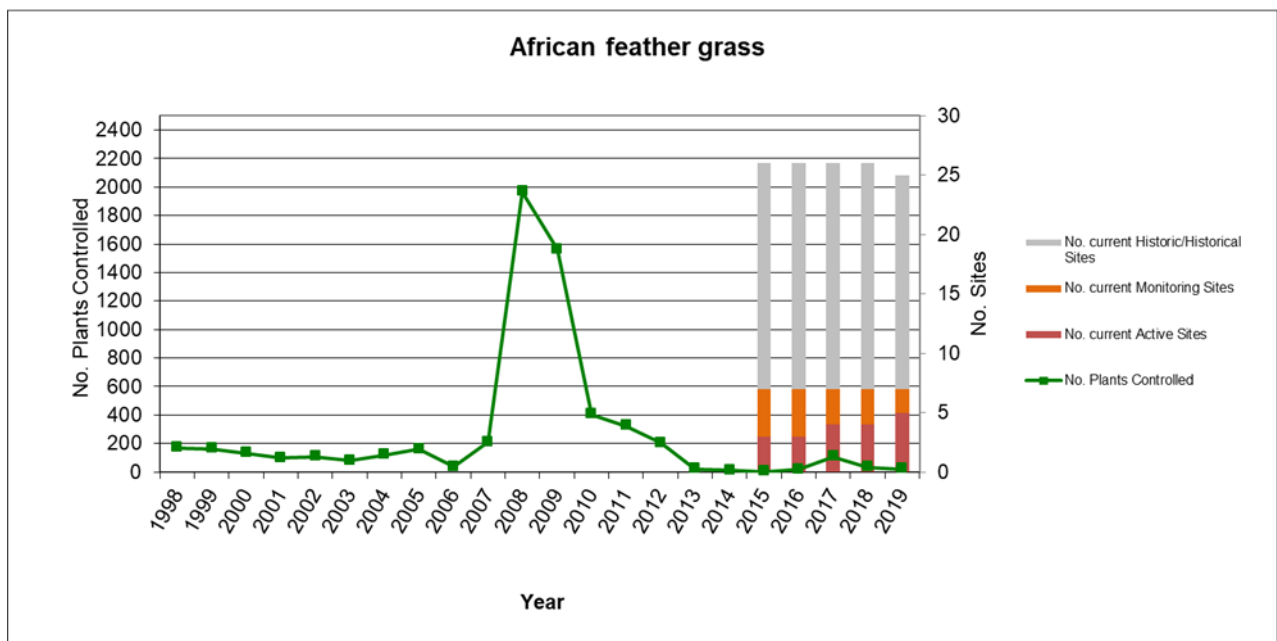
Symbol	Definition
	Achieved. All actions have been taken with the measure achieved.
	Almost Achieved. Actions have been undertaken but the measure has not been fully achieved for reported reasons.
	Not Achieved. Actions have not been undertaken to the level required or not been undertaken at all and the measure has not been achieved.
	Not applicable. No actions were required to measure against the target.

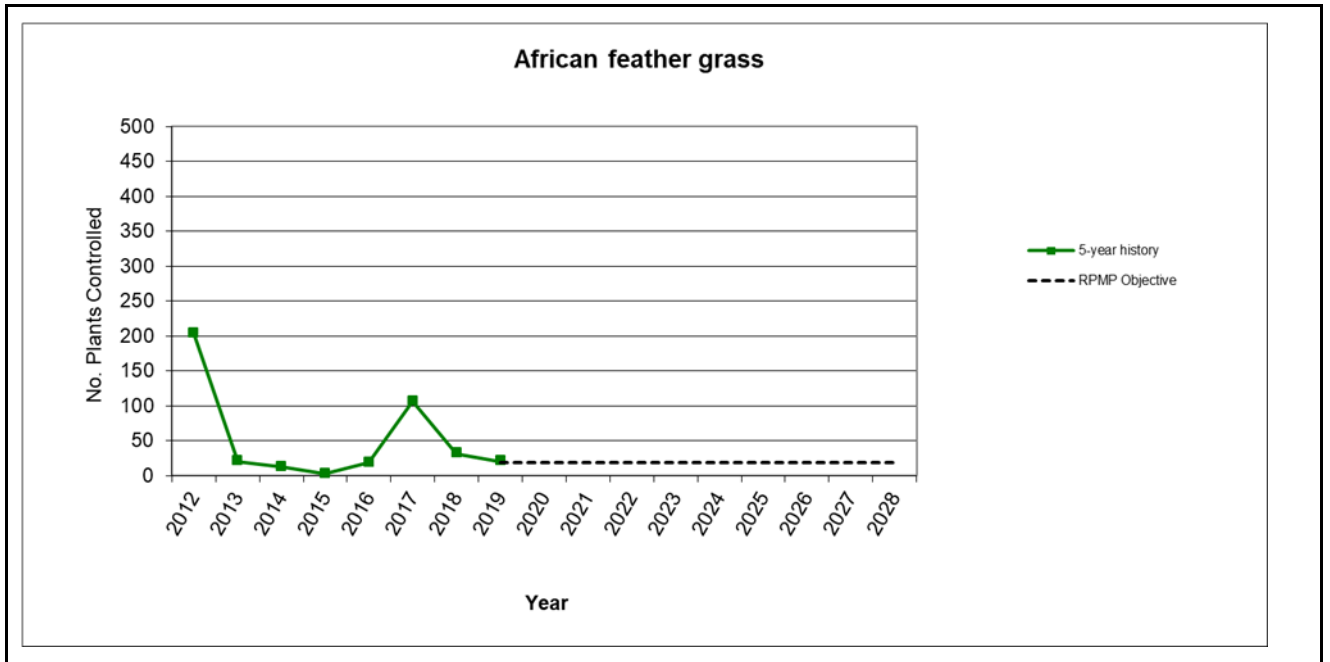
## Part One – Regional Pest Management Plan Programmes

### 1. African feather grass (*Pennisetum macrourus*)



Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, control African feather grass ( <i>Cenchrus macrourus</i> ) in the Marlborough district to less than or equal to 2016 levels to minimise adverse effects on economic wellbeing, the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	Council staff and/or contractors will carry out all operational activities.			
<b>Target 1.1</b>	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
<b>2018/2019</b>		All 7 high priority sites were visited. A total of 20 plants were destroyed over from 5 of those sites.		
<b>Target 1.2</b>	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
<b>2018/2019</b>		Of 18 historical sites, 8 were visited for surveillance for the 2018/2019 season. No re-occurrence of African feather grass was found.		

**Programme trend:**

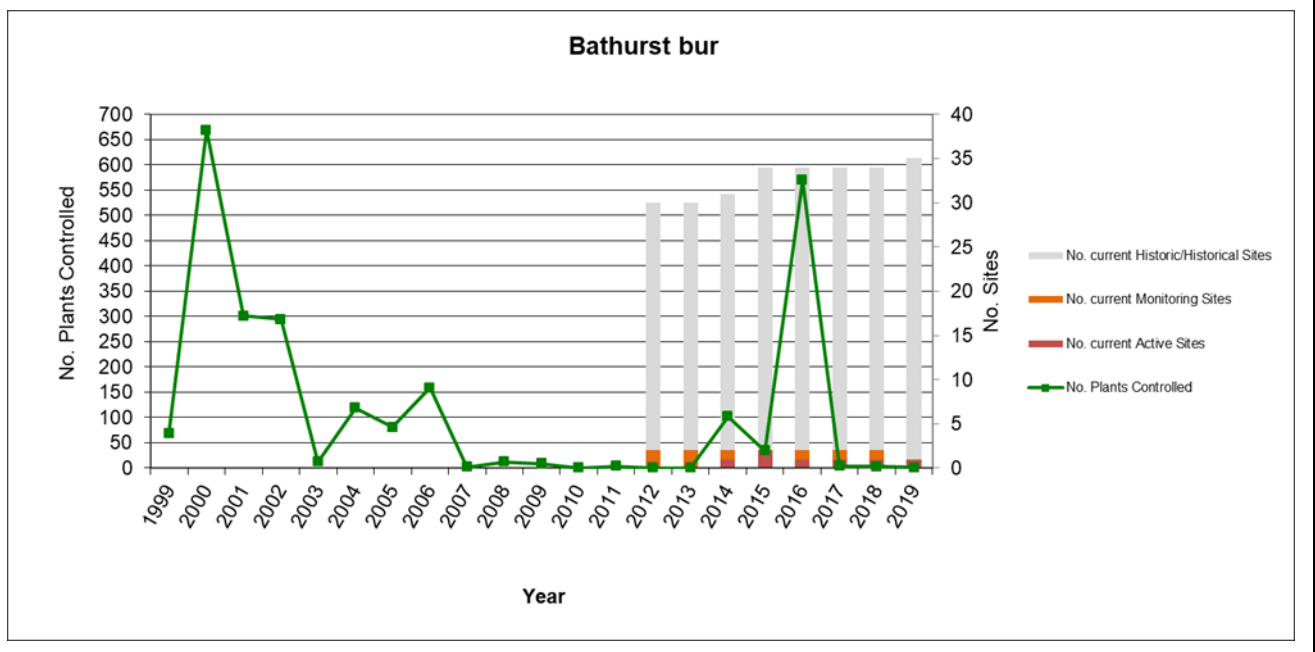




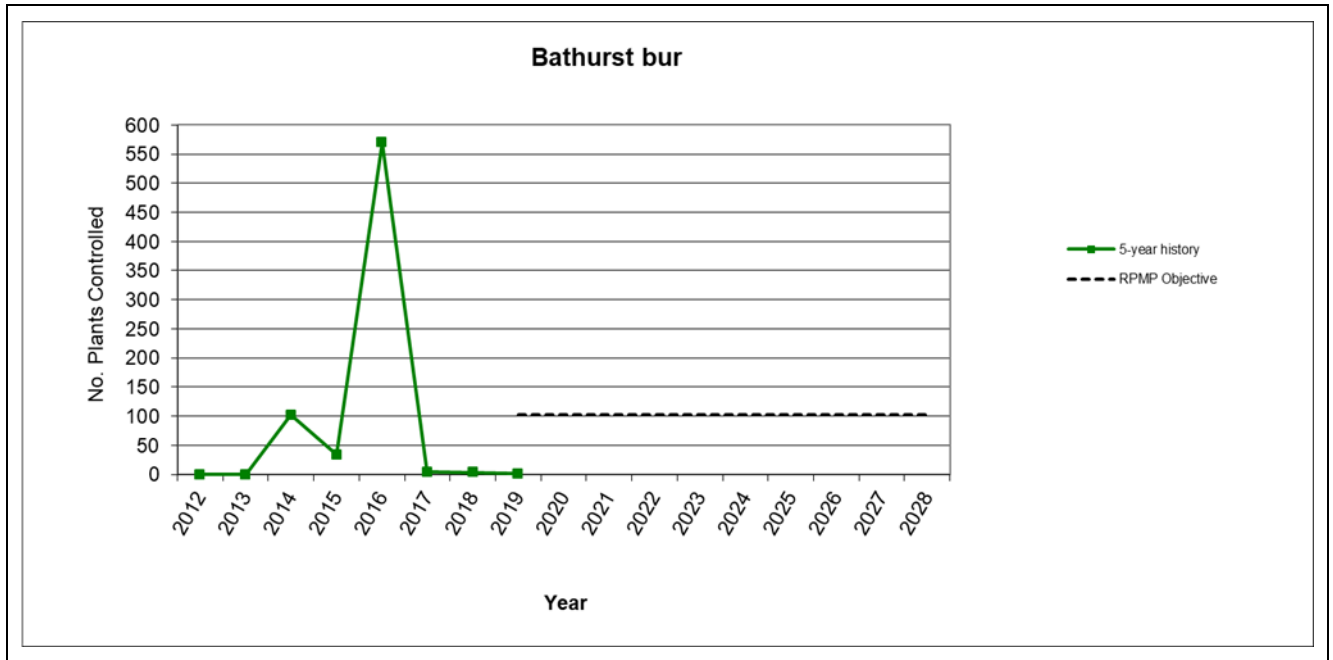
## 2. Bathurst bur (*Xanthium spinosum*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, control bathurst bur ( <i>Xanthium spinosum</i> ) in the Marlborough district to less than or equal to 2014 levels to minimise adverse effects on economic wellbeing, the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	Council staff and/or contractors will carry out all operational activities.			
<b>Target 2.1</b>	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
<b>2018/2019</b>		<p>The single high priority site was visited. One plant was found and destroyed.</p> <p>The active status of bathurst bur at this particular site was attributed to earth moving associated with a change of land use (pasture to vineyard).</p>		
<b>Target 2.2</b>	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
<b>2018/2019</b>		<p>Of 34 historical sites, 10 were visited for surveillance. No re-occurrence of bathurst bur was found.</p> <p>It is recommended to take a strategic approach in the future management of historical sites, by targeting specific sites in response to any changes in land use which may trigger a re-occurrence of bathurst bur.</p>		



**Programme trend:**



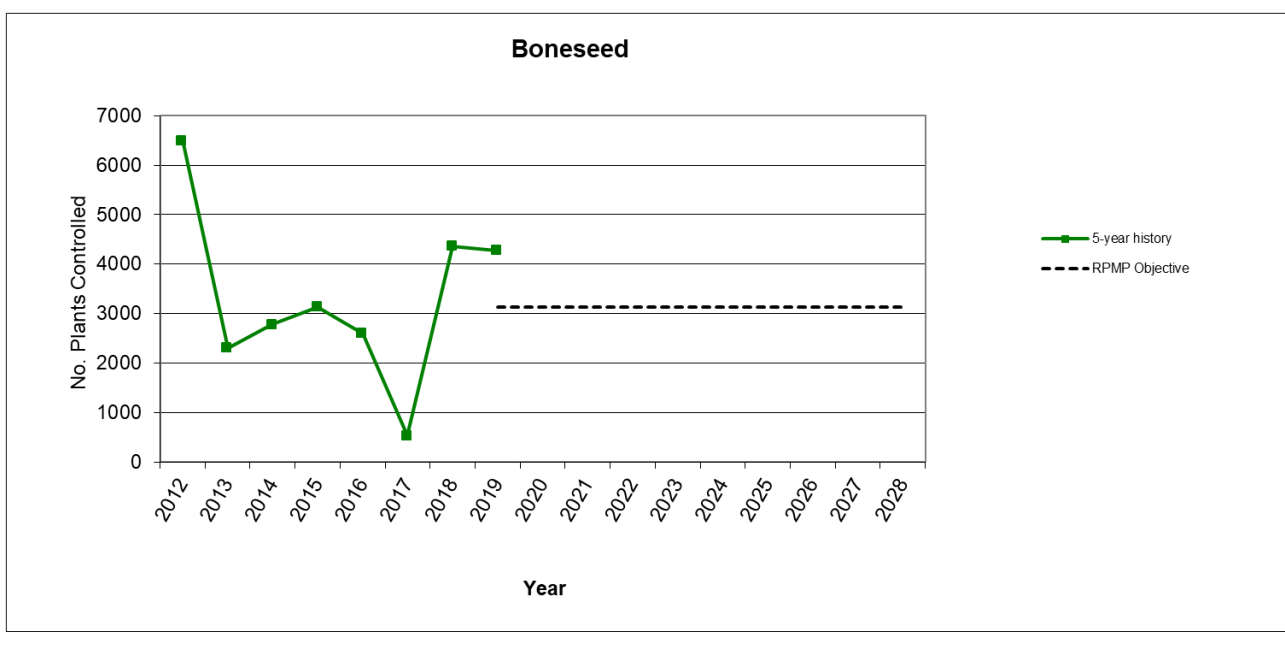
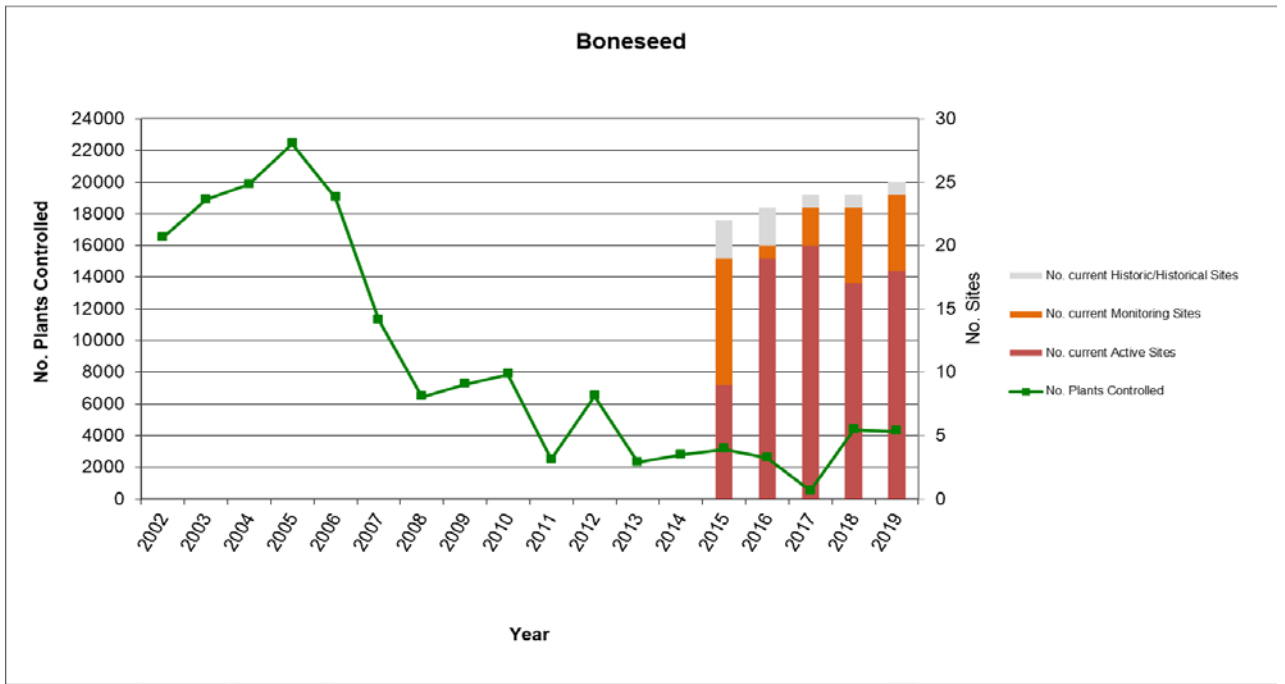






### 3. Boneseed (*Chrysanthemoides monilifera*)


Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, control boneseed ( <i>Chrysanthemoides monilifera</i> ) in the Marlborough district to less than or equal to 2015 levels to minimise adverse effects on the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	<p>A Memorandum of Understanding has been agreed to by the Department of Conservation (DOC) and Council that includes the management of boneseed.</p> <p>Operational activities are pre-planned each year and are delivered by either:</p> <ul style="list-style-type: none"> <li>a) Council staff and/or contractors, or;</li> <li>b) Joint operations between DOC and Council staff and/or contractors (predominantly Queen Charlotte Sound/Tory Channel sites), or;</li> <li>c) DOC staff (Kenepuru Sound, Ocean Bay sites).</li> </ul>			
<b>Target 3.1</b>	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
<b>2018/2019</b>		<p>100% of sites with a status of active or monitoring were visited. Increased plant numbers since 2017 are attributed to land clearance at one site, resulting in the recruitment of boneseed seedlings.</p> <p>The number of boneseed seedlings found at this site is expected to reduce, as the surrounding native vegetation regenerates.</p>		
<b>Target 3.2</b>	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
<b>2018/2019</b>		<p>All historical boneseed sites were able to be inspected in 2018/2019. No re-occurrence of boneseed was found.</p> <p>Through other activities, one plant was found by DOC staff at Moenui. The plant was within a cultured garden setting and was destroyed.</p>		

Programme trend:




## 4. Broom (*Cytisus scoparius*)


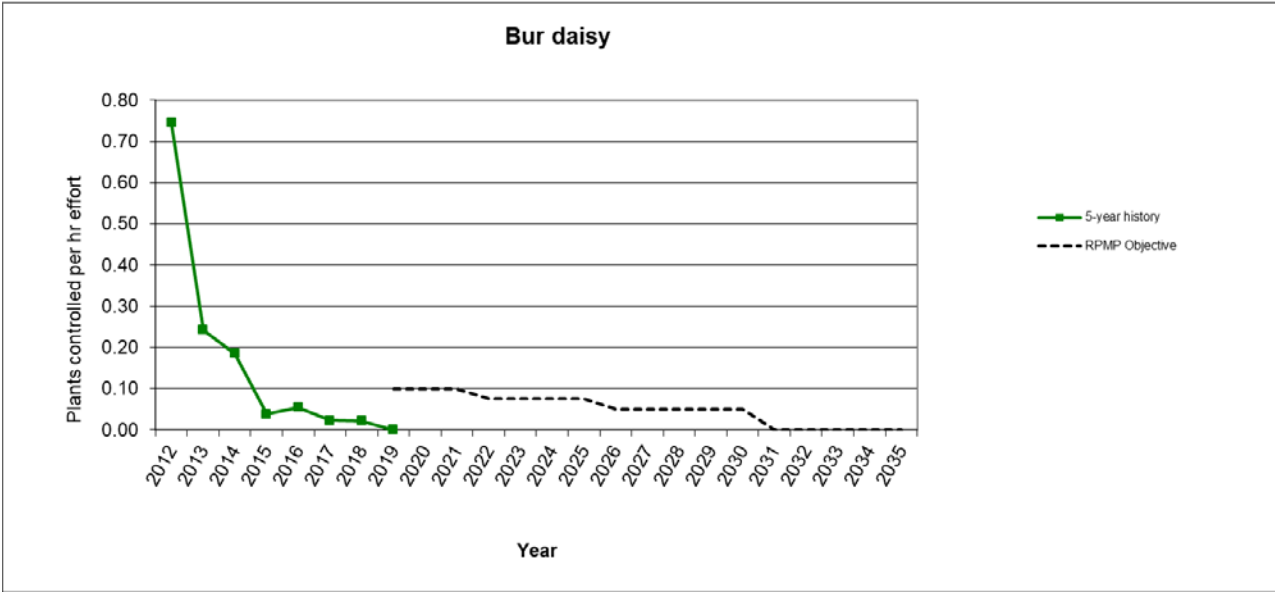
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective 1</b>	Over the duration of the Plan, control broom ( <i>Cytisus scoparius</i> ) in the Upper Awatere Broom Control Zone (excluding the Middlehurst Gorge Containment Area), Upper Wairau and Waima/Ure Broom and Gorse Control Zones to minimise adverse effects on economic wellbeing, the environment and enjoyment of the natural environment.  *A baseline assessment will be made either prior to or immediately after the Plan commences.			
<b>Objective 2</b>	Over the duration of the Plan, control broom ( <i>Cytisus scoparius</i> ) across the remainder of the district, in situations where the presence of broom on boundaries threatens adjoining land clear of or being managed for broom, to minimise adverse effects on economic wellbeing, the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	Council staff will actively deliver communication, compliance and surveillance activities within the respective RPMP programme Zones. This will be to ensure occupiers are aware of the RPMP obligations and follow through with an adequate level of control to meet RPMP programme objectives. Surveillance will also assist to form accurate datasets of infestations that can also assist occupiers target control efforts.  Council staff will also follow-up and investigate situations that come to their attention where broom is against a boundary and potentially threatening adjoining land.			
<b>Target 4.1</b>	By 30 June 2020, a baseline population assessment has been made, and metrics set, for the purposes of setting longer term programme trend monitoring for broom within the control zones.			
<b>2018/2019</b>		N/A  Work in this area is continuing given a balanced (cost/benefit) monitoring metric for such a programme is proving difficult to establish.		
<b>Target 4.2</b>	Each year, undertake inspection and/or surveillance activities in all three zones.			
<b>2018/2019</b>		<p><u>Waima/Ure</u></p> <p>This Zone was the focus for activities given it is a new programme. Contact and visits were made with all land occupiers. Information from these discussions as well as aerial surveillance has started to build a picture for the catchment. As initially though, there is very little broom within the catchment.</p> <p><u>Upper Wairau</u></p> <p>Inspections of land within this Zone were carried out. A small number of issues relating to a lack of control were identified and are being worked through with the occupiers. A major milestone has been the development of a Management Plan for broom and gorse for Rainbow Station Farms. It is awaiting final sign-off by the occupier.</p> <p><u>Upper Awatere</u></p> <p>Given all occupiers within the Zone have very active management programmes, the nature of Councils operations are more surveillance and information gathering. This of often done in conjunction with property inspections assessing rabbit population abundance. There were no instances of follow-up needed in 2018/2019.</p>		

<p><b>Target 4.3</b></p>	<p>Each year, any situation that comes to Council's attention with regard to broom is against a boundary and potentially threatening adjoining land is investigated, and compliance with the Rule determined, within 5 working days.</p>	
<p><b>2018/2019</b></p>		<p>During the 2018/2019 year, Council received 5 complaints regarding broom/gorse on property boundaries. In those cases (where appropriate) the neighbouring occupier was notified of their obligation to destroy plants growing on their property, as per the RPMP Good Neighbour Rule (5.4.2.7). All cases were responded to within 3 working days.</p>
<p><b>Programme trend:</b>  <i>Baseline assessments and metrics are yet to be set.</i></p>		

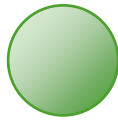
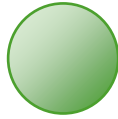
## 5. Brushtail possum (*Trichosurus vulpecula*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, prevent the establishment of brushtail possums ( <i>Trichosurus vulpecula</i> ) on islands currently known to be possum-free in the Marlborough Sounds (see Appendix 4 and Map 4 of the RPMP) to prevent future impacts on the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	<p>A Memorandum of Understanding has been agreed to by DOC and Council that covers the process for investigation/response regarding a detection of a brushtail possum on a 'free' island.</p> <p>In all instances, joint decision-making is to occur.</p> <p>Surveillance activities on the islands include both active activities (on predominantly 'pest-free' islands wholly occupied by DOC), and passive where there is a reliance of reports.</p> <p>Education activities will occur within the community ensure the brushtail-possum free status of the islands, especially the large islands of Rangitoto ki te Tonga/D'Urville and Arapaoa where there is a mix of public and private land, is well understood and to report suspected sightings.</p>			
<b>Target 5.1</b>	Each year, any situation that comes to DOC and/or Council's attention with regard to a report of a brushtail possum on any of the islands listed in the RPMP Programme, has an investigation started within 24 hours.			
<b>2018/2019</b>		No reports were received in 2018/2019.		
<p><b>Status of brushtail possums on designated islands:</b></p> <p>Have been historical detections</p> <p>Not established</p>				

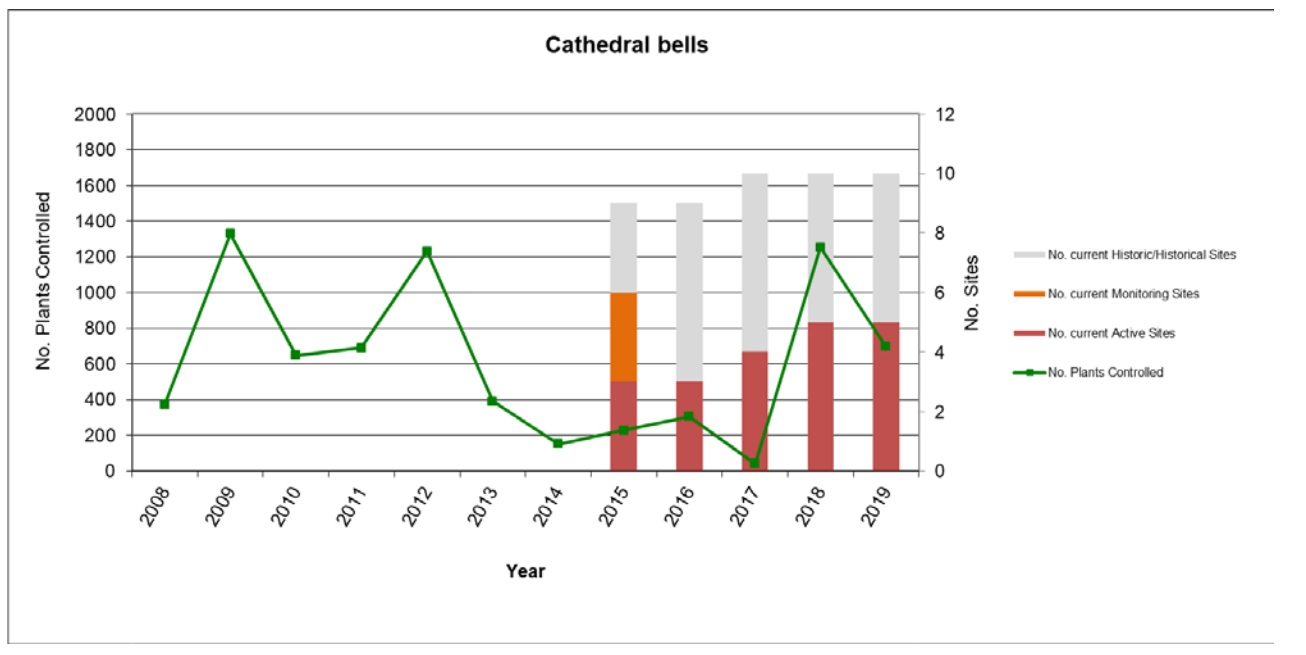
## 6. Bur daisy (*Calotis lappulacea*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective 1</b>	By 2035, bur daisy ( <i>Calotis lappulacea</i> ) will be controlled to zero density, where no plants are found in the preceding 5 years, in the Marlborough district to prevent adverse effects on the economy.			
<b>Objective 2</b>	By the end of the term of this Plan, bur daisy ( <i>Calotis lappulacea</i> ) will only be found at densities less than or equal to 0.1 plants per man hour effort in the Marlborough district to prevent adverse effects on the economy.			
<b>Operations overview</b>	Council staff and/or contractors will carry out all operational activities.			
<b>Target 6.1</b>	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
<b>2018/2019</b>		The single bur daisy site was visited. 68 man-hours resulted in the destruction of one mature plant. Flowers and burs were present on the plant.		
<b>Programme trend:</b>				
				

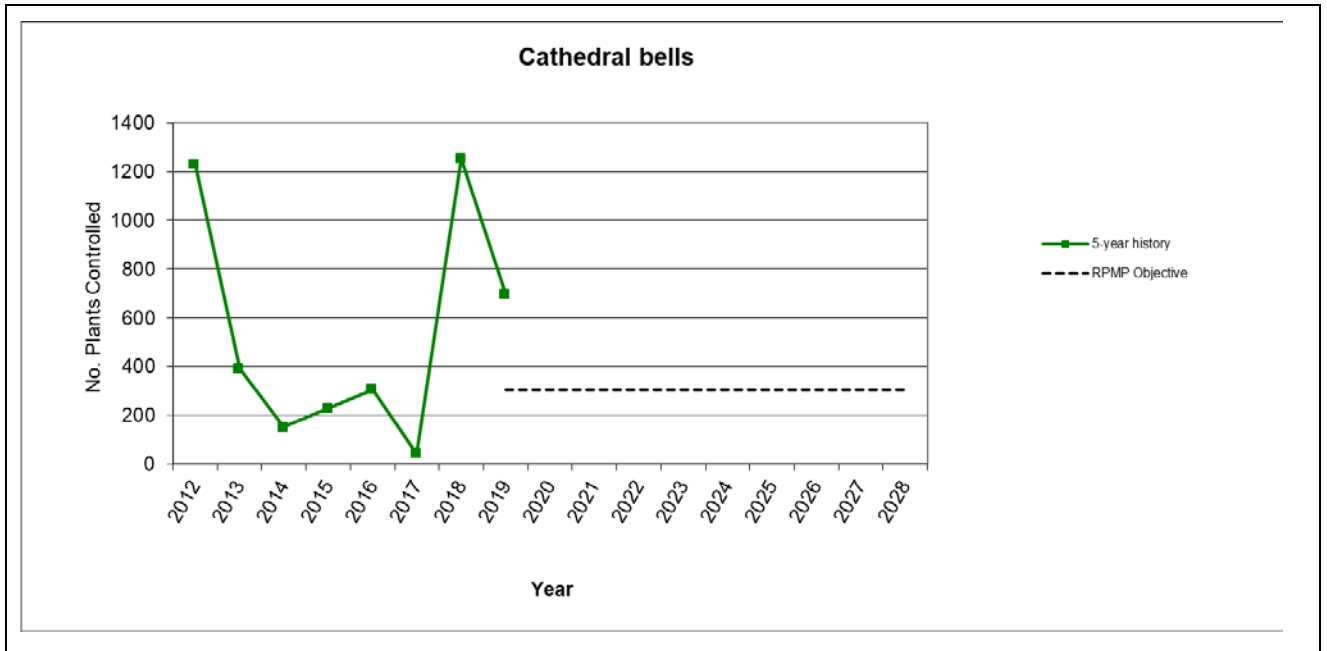
## 7. Cathedral bells (*Cobaea scandens*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, control cathedral bells ( <i>Cobaea scandens</i> ) in the Marlborough district to less than or equal to 2016 levels to minimise adverse effects on the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	<p>A Memorandum of Understanding has been agreed to by DOC and Council that includes the management of cathedral bells.</p> <p>DOC staff will undertake all operational activities. This is due to the current sites being aligned geographically with existing DOC operations and an acknowledgement by DOC as being a key beneficiary of intervening at these small numbers of sites.</p>			
<b>Target 7.1</b>	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
<b>2018/2019</b>		All five sites with the status of 'active or 'monitoring' were visited in 2018/2019. High plant numbers have persisted at one site found in 2017/2018 which has attributed to plant numbers exceeding the threshold of the RPMP objective.		
<b>Target 7.2</b>	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
<b>2018/2019</b>		Of five historical sites, three were visited for surveillance activities to determine any re-occurrence of cathedral bells. No plants were found.		




**Programme trend:**










## 8. Chilean needle grass (*Nassella neesiana*)

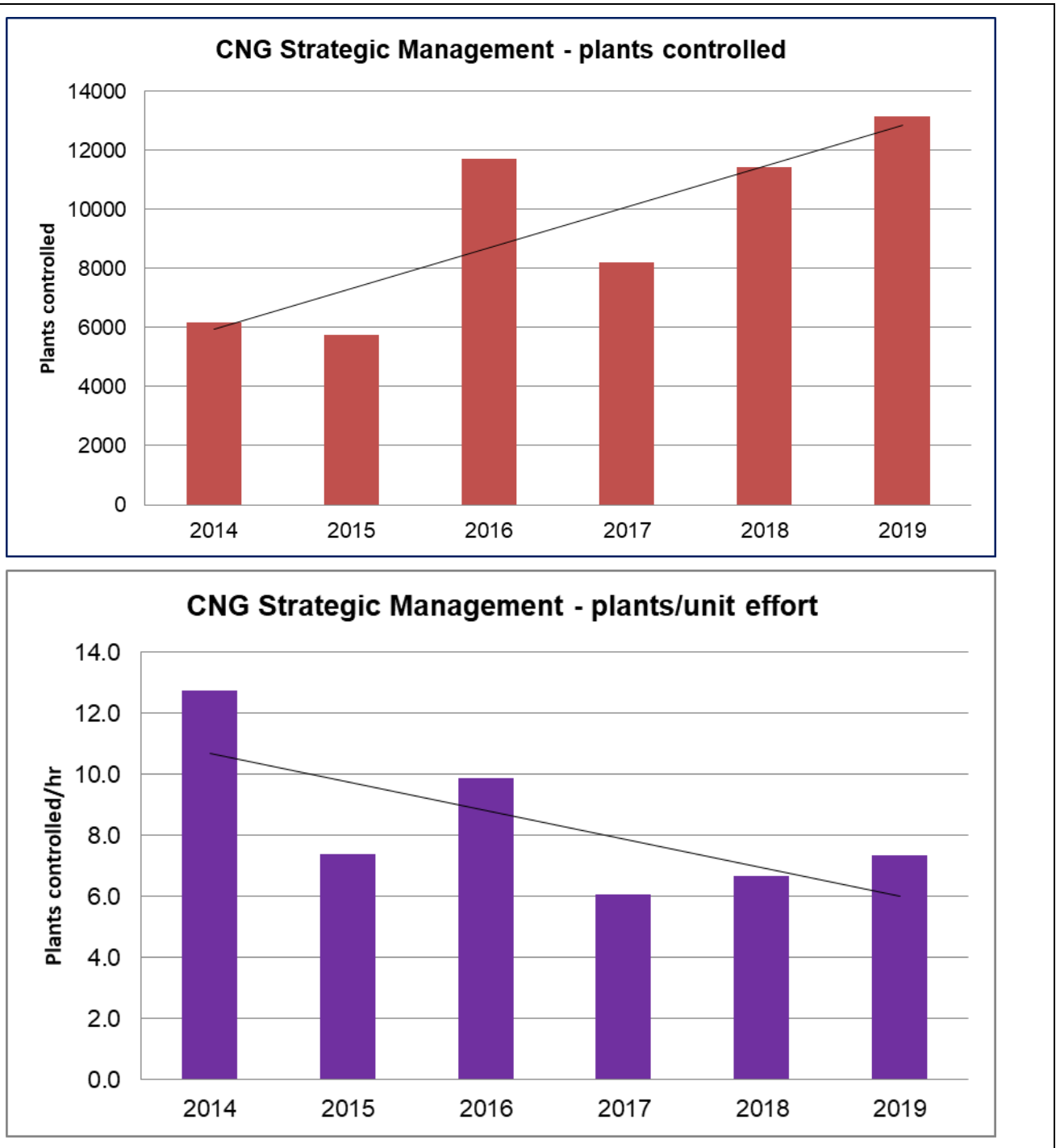
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, control Chilean needle grass ( <i>Nassella neesiana</i> ) in the Marlborough district to less than or equal to baseline levels* to minimise adverse effects on economic wellbeing, the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	<p>*A baseline assessment will be made either prior to or immediately after the Plan commences</p> <p>There are multiple facets to the Chilean needle grass programme delivered by Council. These are:</p> <ul style="list-style-type: none"> <li>• Staff and/or contractors will undertake strategic management of Chilean needle grass on the majority of sites. These are commonly the newer or smaller, scattered infestations.</li> <li>• Active facilitation to develop management plans, and undertake compliance function where necessary, on the more heavy infested sites.</li> <li>• Agree upon, and then where identified, provide cost sharing on the implementation of management plans.</li> <li>• Work alongside the Chilean Needle Grass Action Group and any other related projects to ensure work programmes are aligned and work in together as far as practicable.</li> <li>• Continue to deliver ongoing communication, education and awareness initiatives.</li> </ul> <p>Note: there are other work programmes Council delivers outside of the RPMP that can have an influence on the Chilean needle grass programme. See Part Two.</p>			
<b>Target 8.1</b>	By 30 June 2020, a baseline population assessment has been made for the purposes of monitoring the longer term programme objective for Chilean needle grass.			
<b>2018/2019</b>		Work is progressing to establish such a baseline monitoring method applicable to Chilean needle grass.		
<b>Target 8.2</b>	Each year, an inspection is undertaken, or contact is made with the occupier, on 100% of sites that have an infestation of Chilean needle grass, where the occupier has a control obligation.			
<b>2018/2019</b>		Active facilitation and/or inspection occurred for 100% of sites.		
<b>Target 8.3</b>	Each year, carry out required management work, on 100% of sites that have an infestation of Chilean needle grass where Council undertakes strategic management.			
<b>2018/2019</b>		Control work visits by staff and/or contractors occurred on 100% of sites.		

<b>Target 8.4</b>	Each year, any report of potential Chilean needle grass received by Council is investigated within 2 working days.	
<b>2018/2019</b>		Council received 11 reports of suspected Chilean needle grass in 2018/2019. All reports had an investigation started within 24 hours of receiving the report.
<b>Target 8.5</b>	Each year, a minimum of 200 hours of surveillance is carried out on land not previously known to have an infestation of Chilean needle grass.	
<b>2018/2019</b>		A total of 602 hours of staff and contractor time was spent on surveillance activities.
<b>Target 8.6</b>	Provide support to the Chilean Needle Grass Action Group or any other related project where there are shared outcomes.	
<b>2018/2019</b>		As also noted in Part Two – Section 4, Council managed a specific budget managed on behalf of the Chilean Needle Grass Action Group. This was used to contract NZ Landcare Trust to deliver facilitation services for the group and fund other group-initiated expenses.



**Programme trend:**

The following datasets are gathered from the sites where Council undertakes strategic management (Target 8.3).

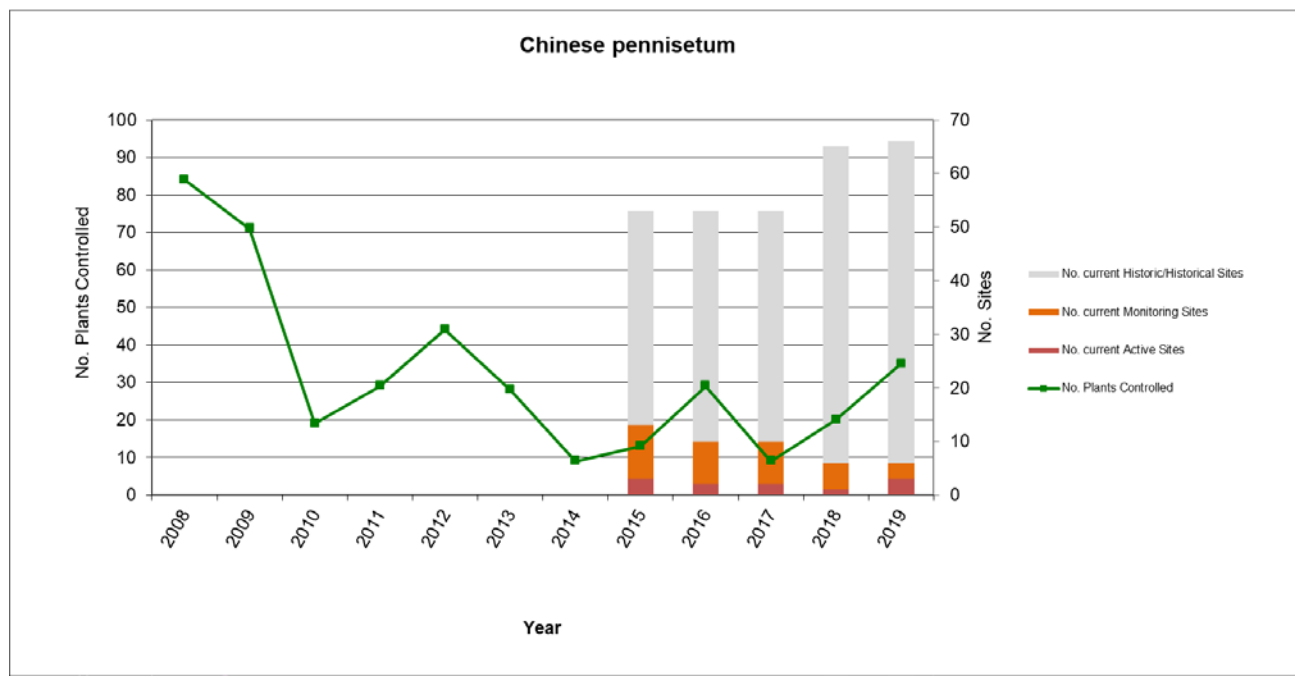


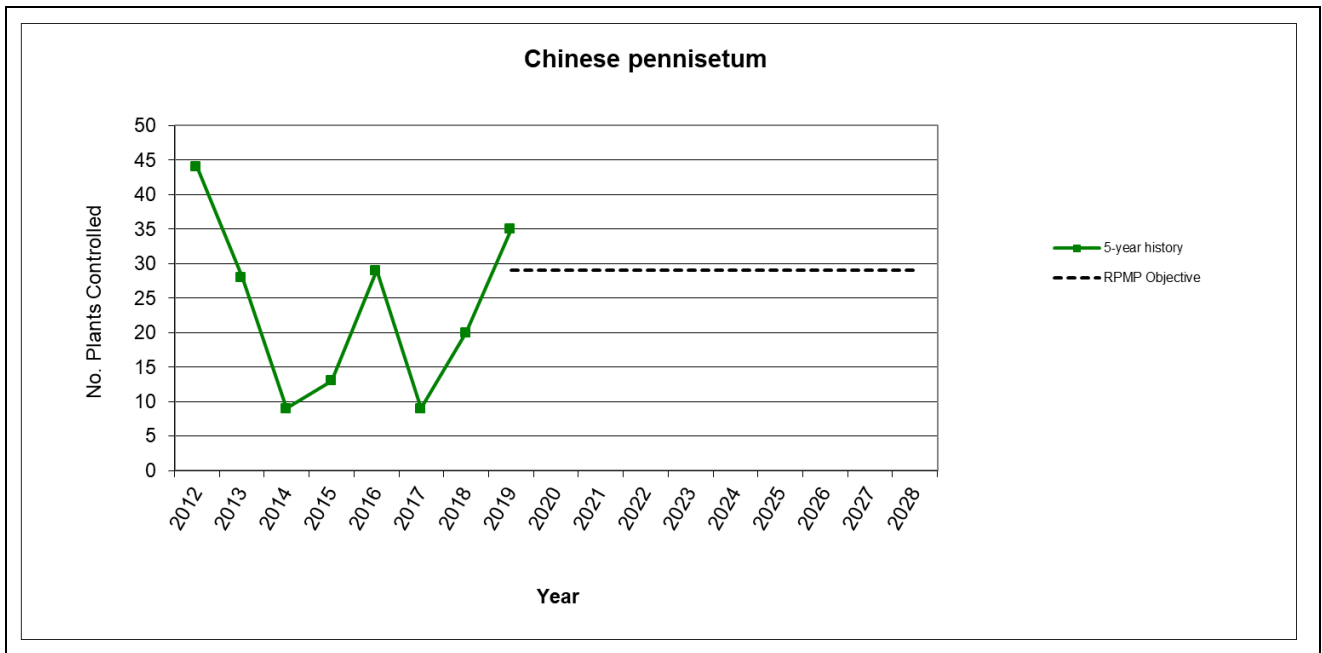


## 9. Chinese pennisetum (*Pennisetum alpecuroides*)



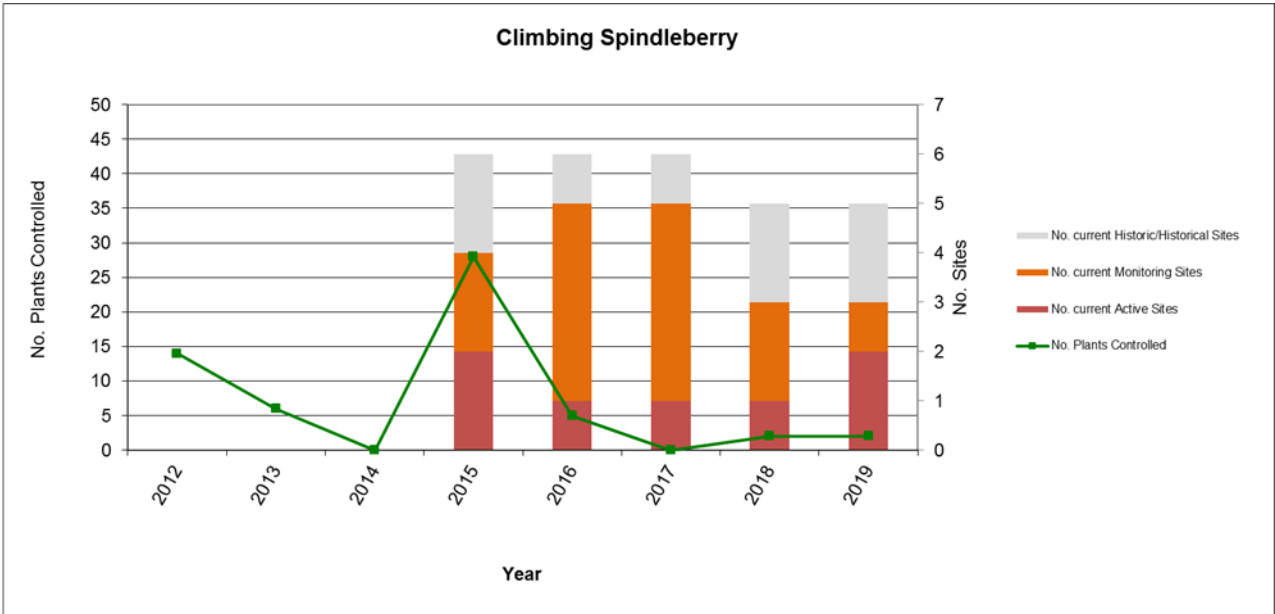
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, control Chinese pennisetum ( <i>Pennisetum alpecuroides</i> ) in the Marlborough district to less than or equal to 2016 levels to minimise adverse effects on economic wellbeing, the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	Council staff and/or contractors will carry out all operational activities.			
<b>Target 9.1</b>	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
<b>2018/2019</b>		All Chinese pennisetum sites with a status of 'active' or 'monitoring' prioritised for inspections, and site visits were carried out accordingly. 35 plants were destroyed in 2018/2019, slightly exceeding the threshold of the RPMP objective to keep plants at or below 29.		
<b>Target 9.2</b>	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
<b>2018/2019</b>		More than one third of all historical sites were visited in 2018/2019. Plants were found at two sites and the classification of those sites has been amended accordingly to re-enter active management.		

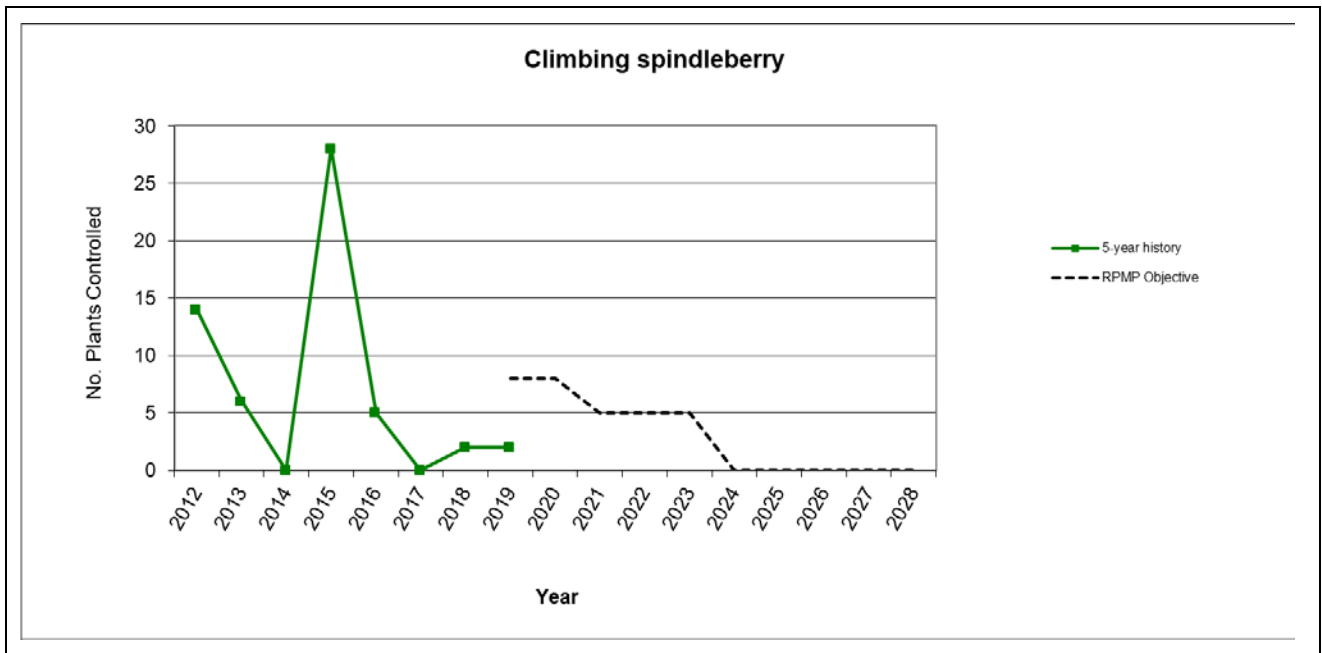
**Programme trend:**








## 10. Climbing spindleberry (*Celastrus orbiculatus*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led																																													
<b>Objective</b>	By the end of the term of this Plan, climbing spindleberry ( <i>Celastrus orbiculatus</i> ) on all known sites in the Marlborough district will have been controlled to zero density to prevent adverse effects on the environment, and enjoyment of the natural environment.																																																
<b>Operations overview</b>	<p>A Memorandum of Understanding has been agreed to by DOC and Council that includes the management of climbing spindleberry.</p> <p>DOC staff will undertake all operational activities. This is due to the current sites being aligned geographically with existing DOC operations and an acknowledgement by DOC as being a key beneficiary of intervening at these small numbers of sites.</p>																																																
<b>Target 10.1</b>	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.																																																
<b>2018/2019</b>		All 'active' and 'monitoring' sites were visited for 2018/2019. Plant numbers remain low and are on track to eradicate this plant from the region.																																															
<b>Target 10.2</b>	Each year, 33% of sites that have a status of historical are visited for surveillance activities.																																																
<b>2018/2019</b>		Both of the two historical sites were visited and no plants were found.																																															
<b>Programme trend:</b>																																																	
 <p><b>Climbing Spindleberry</b></p> <table border="1"> <caption>Estimated data from Climbing Spindleberry chart</caption> <thead> <tr> <th>Year</th> <th>No. current Active Sites</th> <th>No. current Monitoring Sites</th> <th>No. current Historic/Historical Sites</th> <th>No. Plants Controlled</th> </tr> </thead> <tbody> <tr> <td>2012</td> <td>0</td> <td>0</td> <td>0</td> <td>14</td> </tr> <tr> <td>2013</td> <td>0</td> <td>0</td> <td>0</td> <td>6</td> </tr> <tr> <td>2014</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>2015</td> <td>14</td> <td>14</td> <td>14</td> <td>28</td> </tr> <tr> <td>2016</td> <td>7</td> <td>28</td> <td>10</td> <td>5</td> </tr> <tr> <td>2017</td> <td>7</td> <td>28</td> <td>10</td> <td>0</td> </tr> <tr> <td>2018</td> <td>7</td> <td>14</td> <td>14</td> <td>2</td> </tr> <tr> <td>2019</td> <td>14</td> <td>7</td> <td>14</td> <td>2</td> </tr> </tbody> </table>					Year	No. current Active Sites	No. current Monitoring Sites	No. current Historic/Historical Sites	No. Plants Controlled	2012	0	0	0	14	2013	0	0	0	6	2014	0	0	0	0	2015	14	14	14	28	2016	7	28	10	5	2017	7	28	10	0	2018	7	14	14	2	2019	14	7	14	2
Year	No. current Active Sites	No. current Monitoring Sites	No. current Historic/Historical Sites	No. Plants Controlled																																													
2012	0	0	0	14																																													
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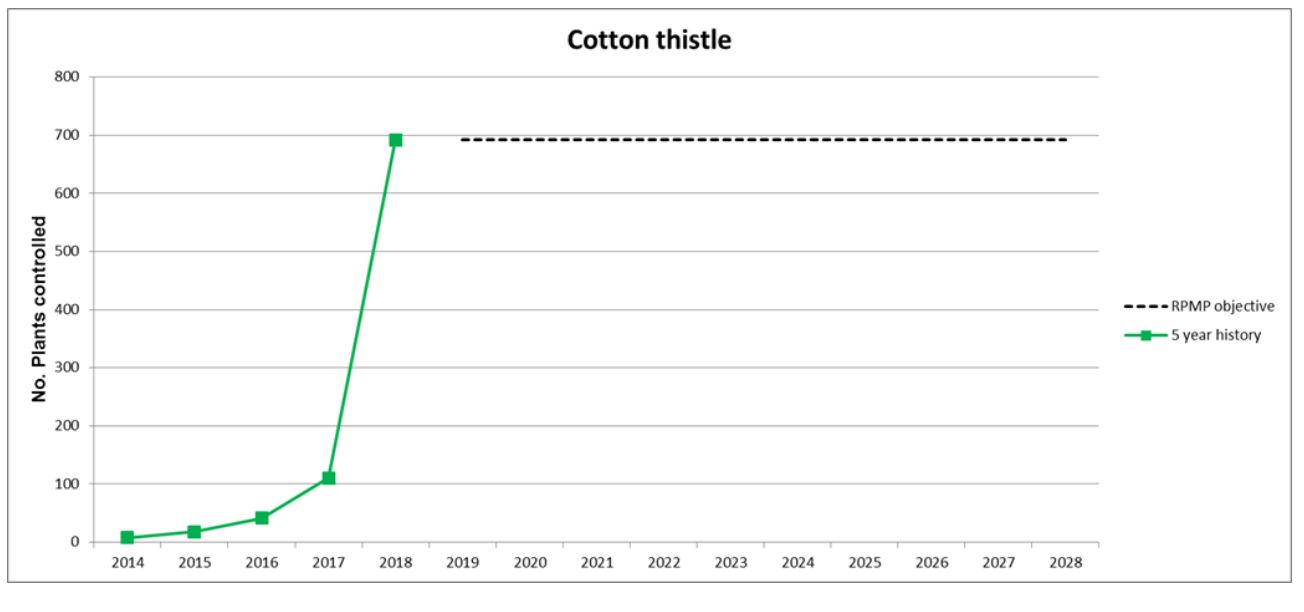
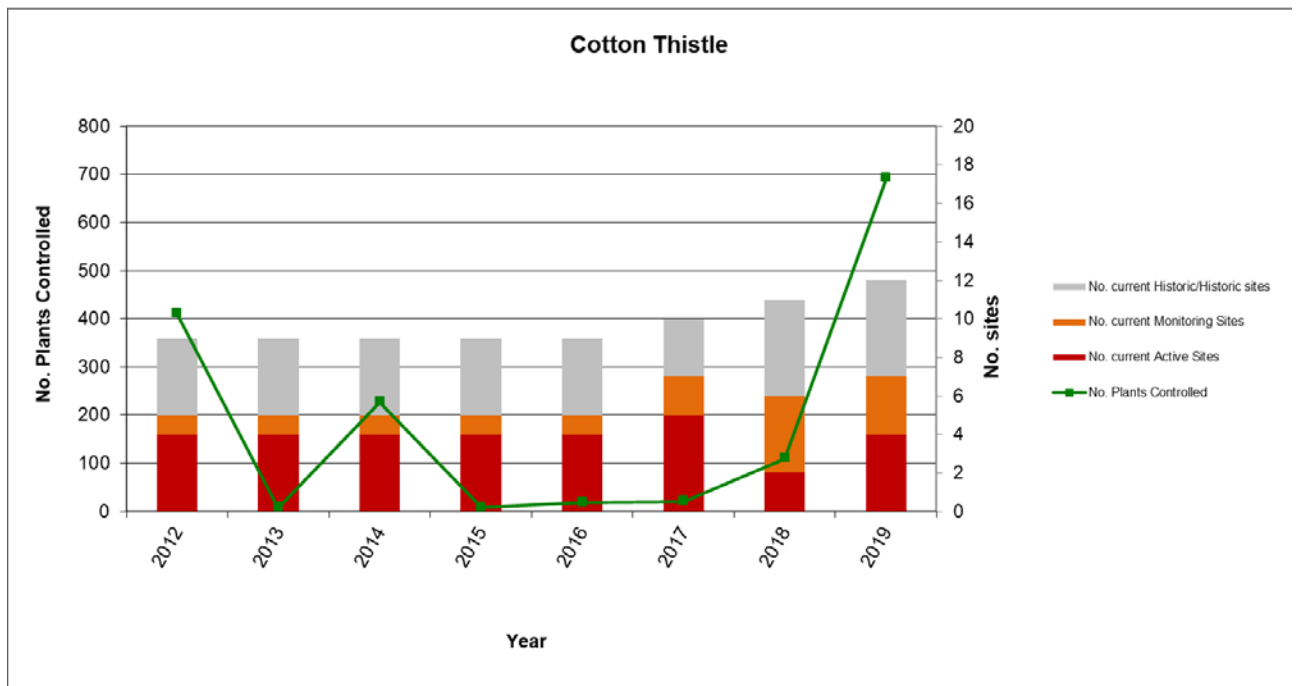






## 11. Cotton thistle (*Onopordum acanthium*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, control cotton thistle ( <i>Onopordum acanthium</i> ) in the Marlborough district to less than or equal to baseline levels* to minimise adverse effects on economic wellbeing, the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	*A baseline level assessment will be made either prior to or immediately after the Plan commences. Council staff and/or contractors will carry out all operational activities.			
<b>Target 11.1</b>	By 30 June 2019, a baseline population assessment has been made for the purposes of setting the longer term programme objective for cotton thistle.			
<b>2018/2019</b>		A baseline population assessment has been made using historical data up to 2018/2019. The long term RPMP objective is to maintain cotton thistle numbers below 2018/2019 levels (692 plants).		
<b>Target 11.2</b>	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
<b>2018/2019</b>		100% of all sites with a status of active or monitoring were visited in 2018/2019.		
<b>Target 11.3</b>	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
<b>2018/2019</b>		Four out of five historical sites were visited for surveillance activities in 2018/2019. No reoccurrence of cotton thistle was found at those sites. A new site was reported in 2018/2019. Over 400 thistles were destroyed at this site. This site will now be entered under active management.		

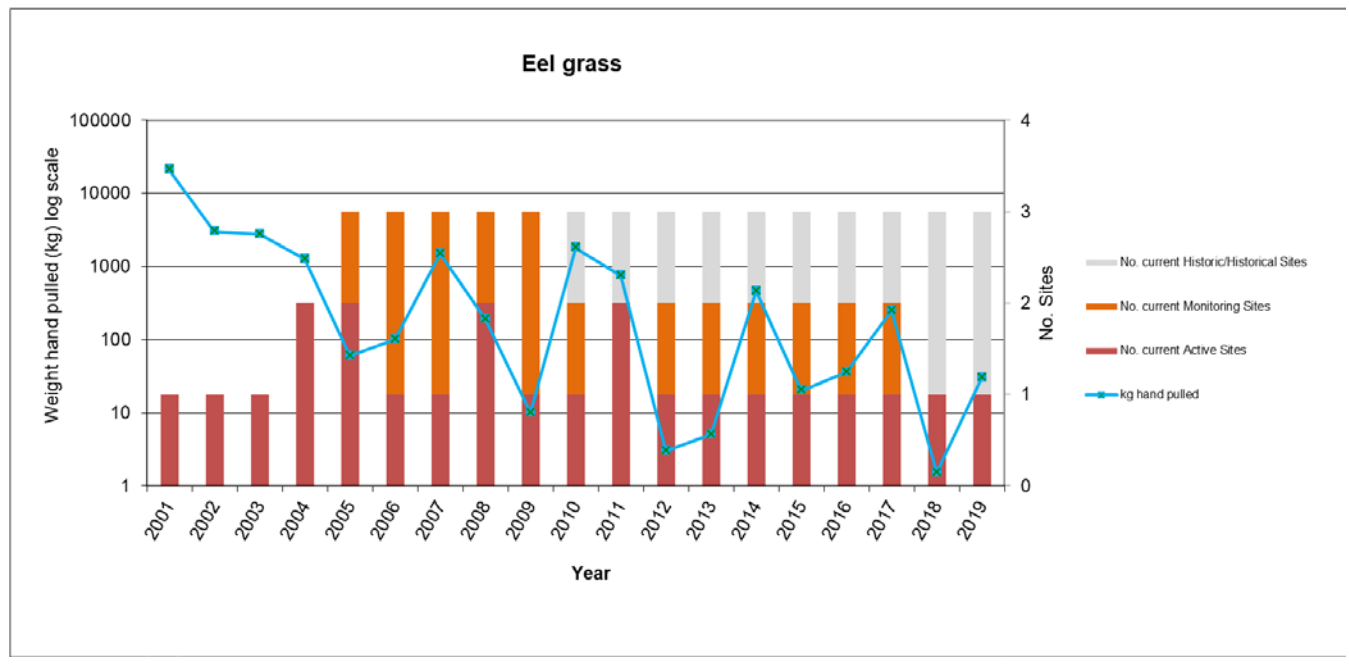
Programme trend:

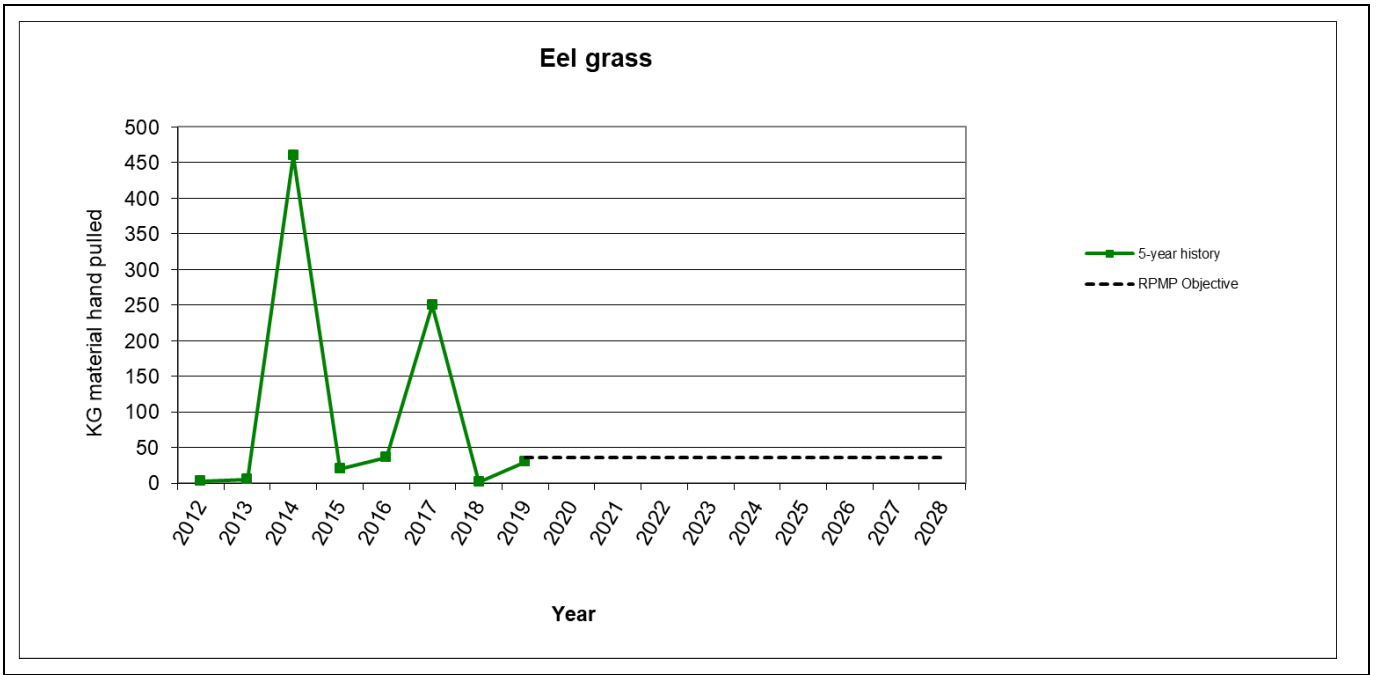


## 12. Eel grass (*Vallisneria australis*)



Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, control eel grass ( <i>Vallisneria australis</i> ) in the Marlborough district to less than or equal to 2016 levels to minimise adverse effects on the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	Council staff and/or contractors will carry out all operational activities.			
<b>Target 12.1</b>	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
<b>2018/2019</b>		All known eel grass sites were visited in 2018/2019. Around 30 kilos of silt contaminated with eel grass rhizomes was removed from Waterlea Creek.		
<b>Target 12.2</b>	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
<b>2018/2019</b>		All historical sites were visited with no eel grass detected.		

### Programme trend:

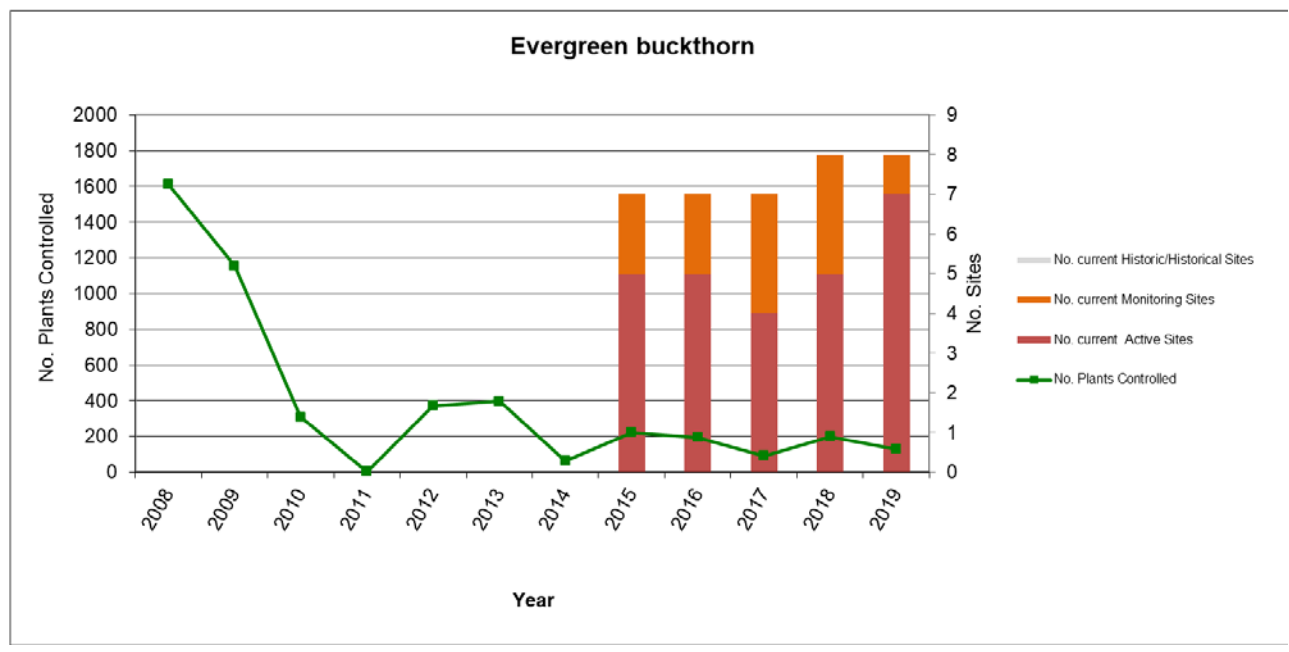


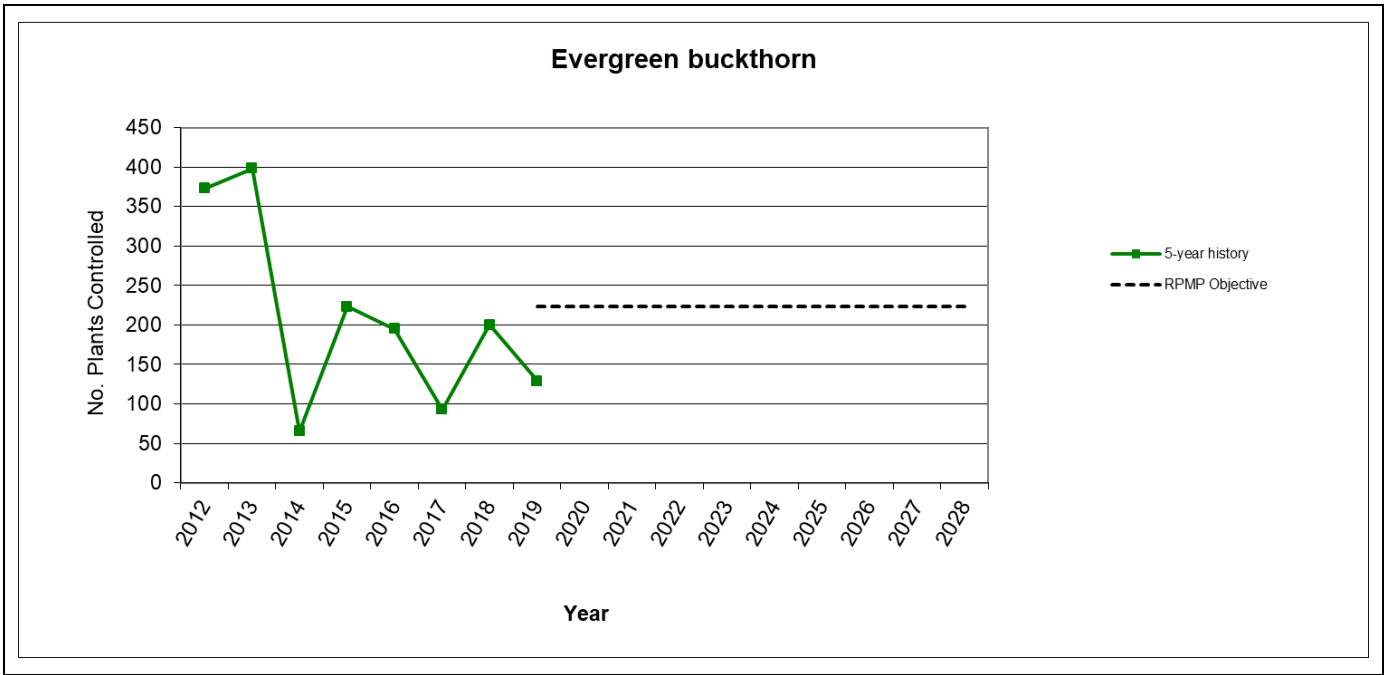


### 13. Evergreen buckthorn (*Rhamnus alaternus*)


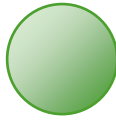
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<p><b>Objective</b> Over the duration of the Plan, control of evergreen buckthorn (<i>Rhamnus alaternus</i>) in the Marlborough district to less than or equal to 2015 levels to minimise adverse effects on the environment and enjoyment of the natural environment.</p> <p><b>Operations overview</b> A Memorandum of Understanding has been agreed to by DOC and Council that includes the management of evergreen buckthorn.</p> <p>Operational activities are pre-planned each year and are delivered by either:</p> <p>a) DOC staff, or;</p> <p>b) A joint operation between DOC and Council staff and/or contractors.</p>				
<p><b>Target 13.1</b> Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.</p>				
<p><b>2018/2019</b></p>		 <p>100% of evergreen buckthorn sites were visited in 2018/2019. This included searching a new site found in 2017/2018 but no plants were found.</p>		
<p><b>Target 13.2</b> Each year, 33% of sites that have a status of historical are visited for surveillance activities.</p>				
<p><b>2018/2019</b></p>		 <p>There are no current sites with a historical status. However, surveillance activities were carried out across an area near known infestations.</p>		

**Programme trend:**

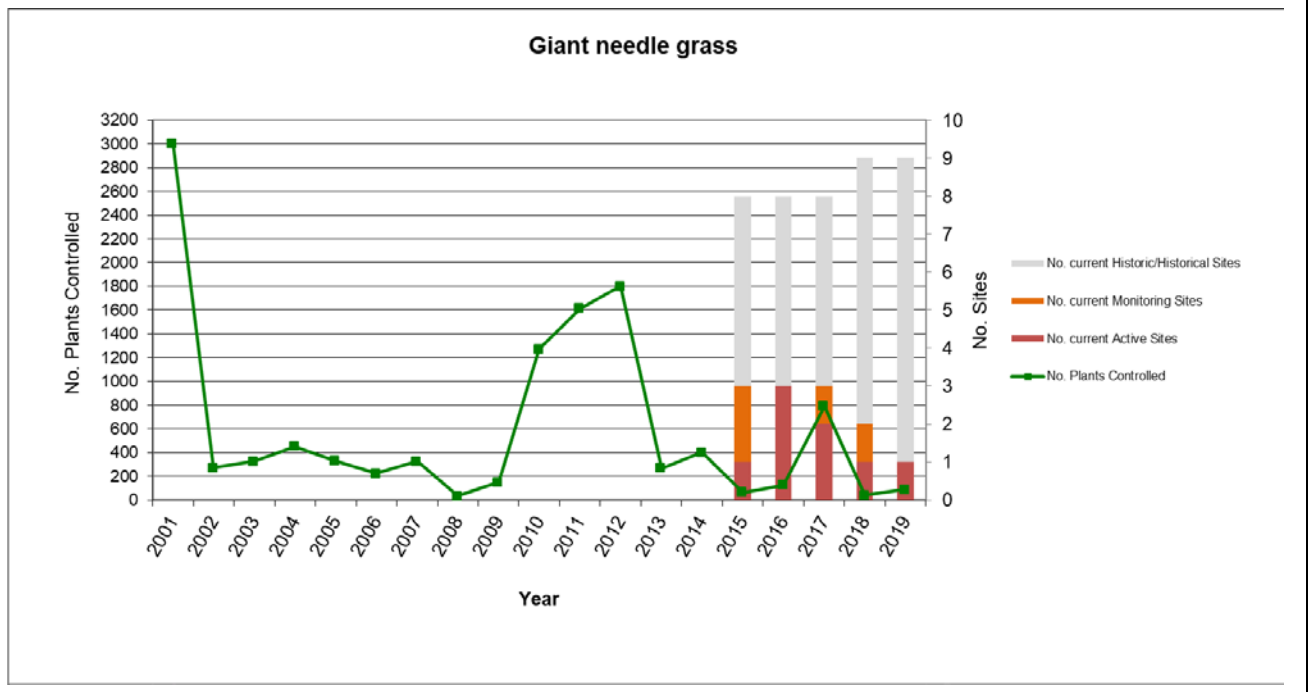


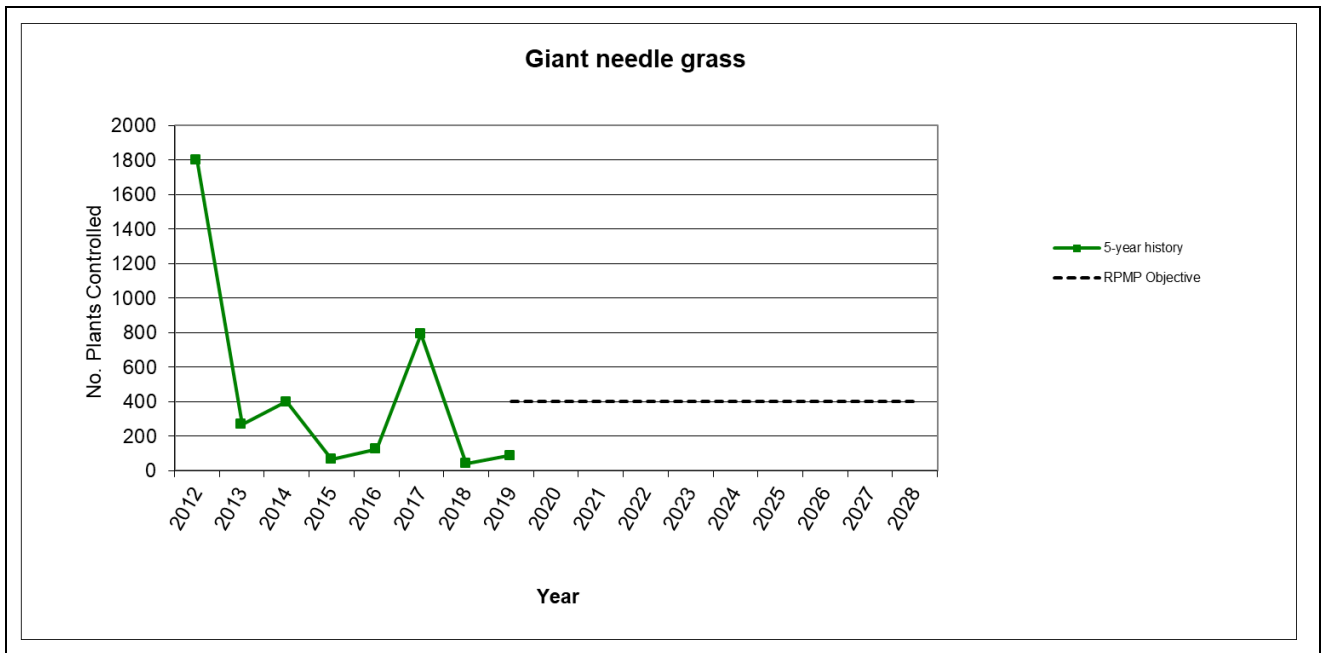


## 14. Giant needle grass (*Austrostipa rudis*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, control giant needle grass ( <i>Austrostipa rudis</i> ) in the Marlborough district to less than or equal to 2014 levels to minimise adverse effects on economic wellbeing.			
<b>Operations overview</b>	Council staff and/or contractors will carry out all operational activities.			
<b>Target 14.1</b>	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
<b>2018/2019</b>		100% of all high priority sites were visited for control work. The number of plants found remained below the RPMP objective.  Activities associated with rotational forestry at one of the key sites is likely to spike giant needle grass density in future.		
<b>Target 14.2</b>	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
<b>2018/2019</b>		Of the 8 historical sites, three were visited with no giant needle grass detected.		



**Programme trend:**









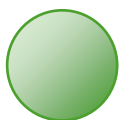

## 15. Gorse (*Ulex europaeus*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective 1</b>	Over the duration of the Plan, control gorse ( <i>Ulex europaeus</i> ) in the Upper Awatere Gorse Control Zone and the Upper Wairau and Waima/Ure Broom and Gorse Control Zones to minimise adverse effects on economic wellbeing, the environment and enjoyment of the natural environment.			
<b>Objective 2</b>	Over the duration of the Plan, control gorse ( <i>Ulex europaeus</i> ) across the remainder of the district, in situations where the presence of gorse on boundaries threatens adjoining land clear of or being managed for gorse, to minimise adverse effects on economic wellbeing.			
<b>Operations overview</b>	<p>Council staff will actively deliver communication, compliance and surveillance activities within the respective RPMP programme zones. This will be to ensure occupiers are aware of the RPMP obligations and follow through with an adequate level of control to meet RPMP programme objectives. Surveillance will also assist form accurate datasets of infestations that can also assist occupiers target control efforts.</p> <p>Council staff will also follow-up and investigate situations that come to their attention where gorse is against a boundary and potentially threatening adjoining land.</p>			
<b>Target 15.1</b>	By 30 June 2020, a baseline population assessment has been made, and metrics set, for the purposes of setting the longer term programme objective for broom within the control zones.			
<b>2018/2019</b>		<p>N/A</p> <p>Work in this area is continuing given a balanced (cost/benefit) monitoring metric for such a programme is proving difficult to establish.</p>		
<b>Target 15.2</b>	Each year, undertake inspection and/or surveillance activities in all three zones.			
<b>2018/2019</b>		<p><u>Waima/Ure</u></p> <p>This Zone was the focus for activities given it is a new programme. Contact and visits were made with all land occupiers. Information from these discussions as well as aerial surveillance has started to build a picture for the catchment. As initially though, there is very little gorse within the catchment.</p> <p><u>Upper Wairau</u></p> <p>Inspections of land within this Zone were carried out. A small number of issues relating to a lack of control were identified and are being worked through with the occupiers. A major milestone has been the development of a Management Plan for broom and gorse for Rainbow Station Farms. It is awaiting final sign-off by the occupier.</p> <p><u>Upper Awatere</u></p> <p>Given all occupiers within the Zone have very active management programmes, the nature of Councils operations are more surveillance and information gathering. This is often done in conjunction with property inspections assessing rabbit population abundance. There were no instances of follow-up needed in 2018/2019.</p>		


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<b>Target 15.3</b>	Each year, any situation that comes to Council's attention with regard to gorse on a boundary potentially threatening adjoining land is investigated, and compliance with the Rule determined, within 5 working days.	
<b>2018/2019</b>		No such complaints were received.
<b>Programme trend:</b> <i>Baseline assessments and monitoring metrics are yet to be set.</i>		


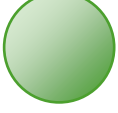
## 16. Kangaroo grass (*Themeda triandra*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, control kangaroo grass ( <i>Themeda triandra</i> ) in the Marlborough district to less than or equal to baseline levels* to minimise adverse effects on economic wellbeing, the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	<p>*A baseline assessment will be made either prior to or immediately after the Plan commences.</p> <p>There are multiple facets to the kangaroo grass programme delivered by Council. These are:</p> <ul style="list-style-type: none"> <li>• Staff and/or contractors will undertake strategic management of kangaroo grass on the majority of sites. These are commonly the newer or smaller, scattered infestations.</li> <li>• Active facilitation to develop management plans, and undertake compliance function where necessary, on the more heavy infested sites.</li> <li>• Continue to deliver ongoing communication, education and awareness initiatives.</li> </ul> <p>Note: there are other work programmes Council delivers outside of the RPMP that can have an influence on the kangaroo grass programme. See Part Two.</p>			
<b>Target 16.1</b>	By 30 June 2020, a baseline population assessment has been made, and metrics set, for the purposes of setting the longer term programme objective for kangaroo grass within the control zones.			
<b>2018/2019</b>		Work in this area is continuing given a balanced (cost/benefit) monitoring metric for such a programme is proving difficult to establish.		
<b>Target 16.2</b>	Each year, an inspection is undertaken, or contact is made with the occupier, on 100% of sites that have an infestation of kangaroo grass, where the occupier has a control obligation.			
<b>2018/2019</b>		100% percent of sites subject to an active compliance programme were inspected. This includes 7 properties within the Kangaroo grass containment areas, subject to RPMP rule 5.16.2.1 and 4 'fringe' properties with substantial infestations outside the containment areas, subject to RPMP rule 5.16.2.2.		
<b>Target 16.3</b>	Each year, undertake surveillance, and carry out required management work, on 100% of sites that have an infestation of kangaroo grass where Council undertakes strategic management.			
<b>2018/2019</b>		100% percent of sites subject to a programme where Council undertakes strategic management were visited and control undertaken.		
<b>Target 16.4</b>	Each year, a minimum of 20 hours of surveillance is carried out on land not previously known to have an infestation of kangaroo grass.			

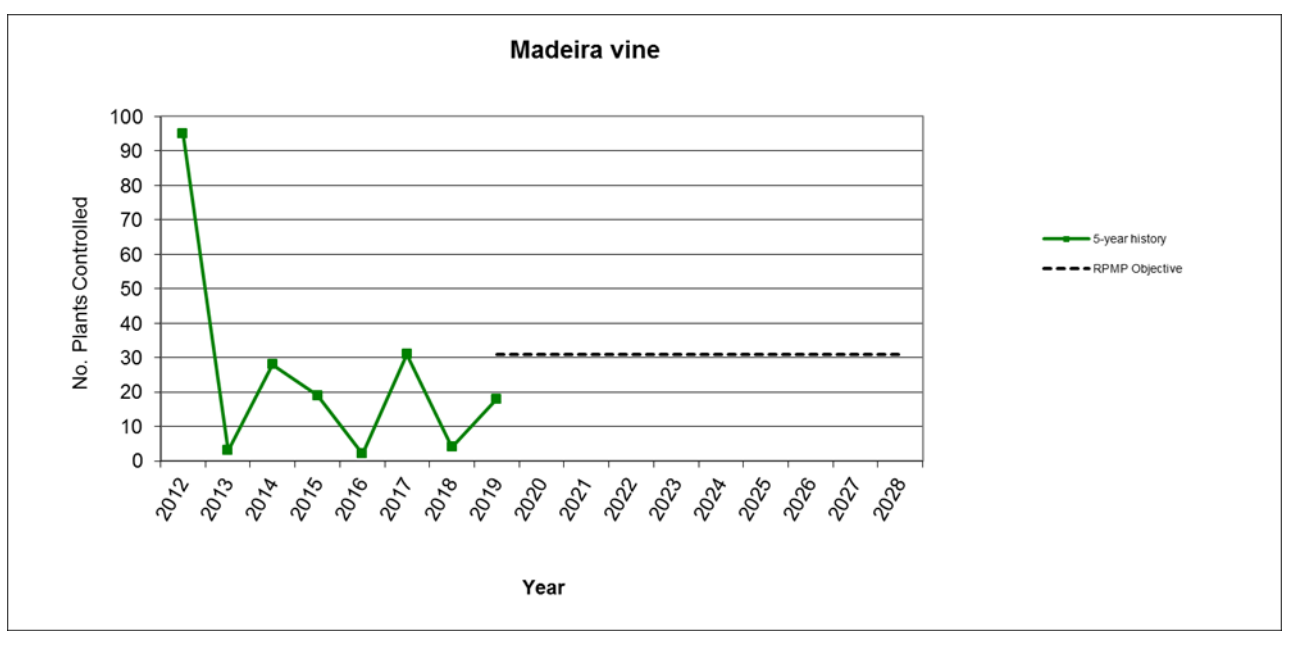
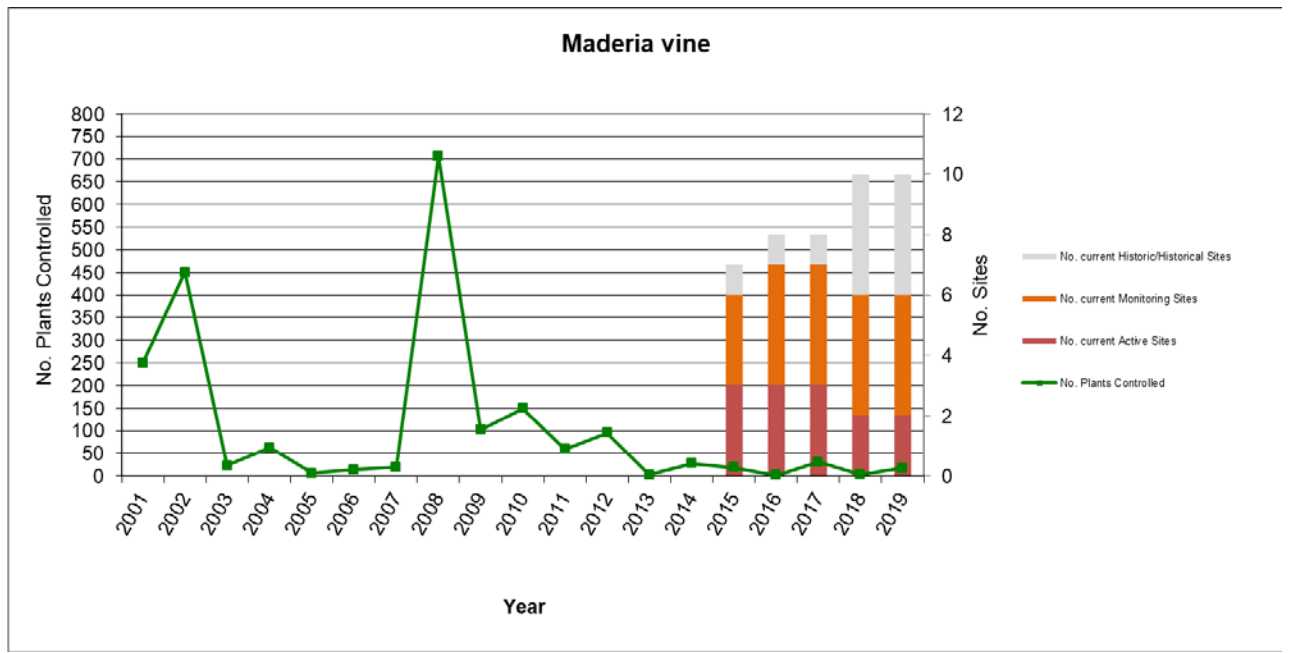
## Biosecurity Operational Plan Report 2018-2019

<b>2018/2019</b>		<p>More than 20 hours of surveillance is carried out each year on land outside of known kangaroo grass infested areas.</p> <p>Because kangaroo grass infestations often co-exist with nassella tussock, most of the surveillance is carried during compliance and surveillance work associated with the nassella tussock programme.</p> <p>Two new infestations were found in 2019; one at Conders Bend, and one at Ward.</p>
<p><b>Programme trend:</b></p> <p><b><i>Baseline assessments and metrics are yet to be set.</i></b></p>		




## 17. Madeira vine (*Anredera cordifolia*)


Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<p><b>Objective</b> Over the duration of the Plan, control madeira vine (<i>Anredera cordifolia</i>) in the Marlborough district to less than or equal to 2017 levels to minimise adverse effects on the environment and enjoyment of the natural environment.</p> <p><b>Operations overview</b> A Memorandum of Understanding has been agreed to by DOC and Council that includes the management of madeira vine.</p> <p>Operational activities are pre-planned each year and are delivered by either:</p> <ul style="list-style-type: none"> <li>a) Council staff and/or contractors (Blenheim, Seddon, Ward sites), or;</li> <li>b) DOC staff (Marlborough Sounds sites).</li> </ul> <p>DOC staff will undertake all operational activities for the sites within the Marlborough Sounds. This is due to the current sites being aligned geographically with existing DOC operations and an acknowledgement by DOC as being a key beneficiary of intervening at these small numbers of sites.</p>				
<p><b>Target 17.1</b> Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.</p>				
<p><b>2018/2019</b></p>		<p>All 'active' or 'monitoring' sites were visited for control in 2018/2019. Madeira vine tubers removed from one site were recorded by weight (15 kilos) since it was difficult to quantify the number of actual plants (propagules) controlled. Recording the data in this way does skew the results in terms of plants controlled.</p> <p>Note: All propagative material removed is likely to be of the same plant because Madeira it is not known to reproduce by seed in New Zealand. Long distance dispersal by seed is therefore highly unlikely. The total numbers of plants in Marlborough remain low, and these plants may be identical.</p>		
<p><b>Target 17.2</b> Each year, 33% of sites that have a status of historical are visited for surveillance activities.</p>				
<p><b>2018/2019</b></p>		<p>Both of the two historical sites were visited with no madeira vine plants detected.</p>		

Programme trend:



## 18. Mediterranean fanworm (*Sabella spallanzanii*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, prevent the establishment of Mediterranean fanworm ( <i>Sabella spallanzanii</i> ) in Marlborough to eliminate adverse effects on economic wellbeing, the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	<p>There are multiple facets to the Mediterranean fanworm programme delivered by Council. These are:</p> <ul style="list-style-type: none"> <li>Specialist dive contractors will undertake surveillance and removal of Mediterranean fanworm within areas where it has been detected previously. Currently that is only Picton Marina.</li> <li>Specialist dive contractors will undertake targeted surveillance in areas of high risk of ingress into Marlborough. There are currently Waikawa Marina, Waikawa Bay, Picton Port, Shakespeare Bay, Okiwi Bay, Elaine Bay, Duncan Bay, Endeavour Inlet, Ship Cove and Oyster Bay (Port Underwood).</li> <li>Responding to reports of suspected Mediterranean fanworm and/or fouled vessels that have recently arrived and undertaking compliance action if necessary.</li> <li>Deliver ongoing communication, education and awareness initiatives as is appropriate in conjunction with the Top of the South Marine Biosecurity Partnership</li> </ul> <p>Note: there are other work programmes Council delivers outside of the RPMP that can have an influence on the Mediterranean fanworm programme (see Part Two – Specific Projects).</p>			
<b>Target 18.1</b>	Each year, a minimum of two dive surveillance and removal operations are undertaken in Picton Marina.			
<b>2018/2019</b>		<p>Contracted divers undertook surveillance and removal operations in Picton Marina over Dec/Jan 2018/19 and in May 2019.</p> <p>Only 1 fanworm was found on each occasion in locations where it had been found previously within Picton Marina.</p>		
<b>Target 18.2</b>	Each year, a minimum of two targeted dive surveillance operations are carried out across Waikawa Marina, Waikawa Bay, Picton Port, and Shakespeare Bay.			
<b>2018/2019</b>		<p>These surveillance operations were carried in conjunction with the work in Picton Marina. No fanworm were found during these operations, prior to the detection of an infested vessel in Waikawa Marina in May 2019 – see target 18.4.</p>		
<b>Target 18.3</b>	Each year, a minimum of one targeted dive surveillance operation is carried out at Okiwi Bay, Elaine Bay, Duncan Bay, Endeavour Inlet, Ship Cove and Oyster Bay (Port Underwood).			
<b>2018/2019</b>		<p>Dive surveillance in the outer Pelorus locations occurred in September 2018 with the Queen Charlotte/Port Underwood locations having surveillance undertaken in May 2019.</p>		
<b>Target 18.4</b>	Each year, any situation that comes to Council's attention with regard to suspected Mediterranean fanworm or a fouled vessel recently arrived into Marlborough, has an investigation started within 24 hours.			

<p>2018/2019</p>		<p>A number of vessels were notified to Council via Marlborough Sounds Marinas that may of risk to the programme. A number of these are able to be assessed as low risk based on information provided. Two vessels requiring further investigation were able to be inspected while the contractor divers were operating within the marinas.</p> <p>One substantial response was required to a vessel notified in May 2019 as carrying a substantial infestation of fanworm discovered once lifted out of the water at the Waikawa Marina travel-lift.</p> <p>By the afternoon of the same day, the investigation had commenced and the immediate risk on the vessel itself had been addressed. Within one week, contracted divers had undertaken an intensive search of the travel lift are and the seafloor underneath where the vessel had been berthed. An infestation was discovered underneath the berth on the sea floor and subsequently removed.</p> <p>Waikawa Marina will now be treated in a similar fashion to Picton Marina given an infestation has been found in the environment with an aim to prevent establishment.</p>
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**Status of Mediterranean fanworm in Marlborough:**

Detected in Picton Marina and Waikawa Marina

Decteded on vessels arrived from out of region

Not established





**Left** – A vessel being lifted at Waikawa Marina in May 2019 which was found to have an infestation of Mediterranean fanworm on its keel.

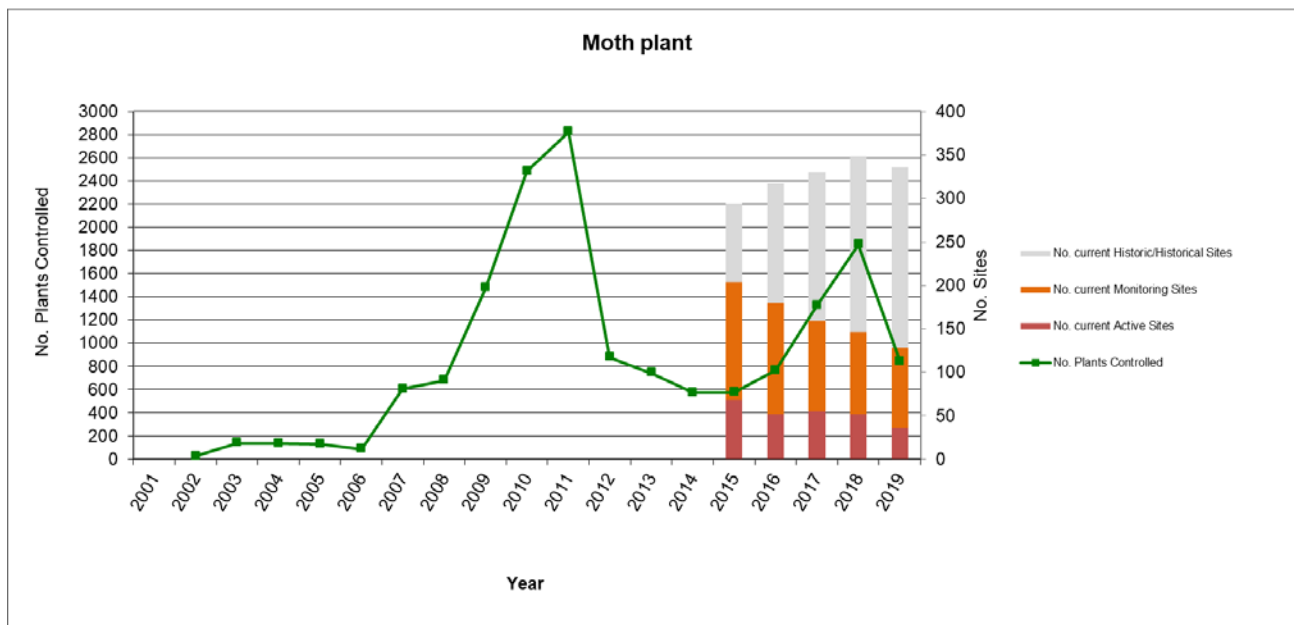
**Above** – the infestation of Mediterranean fanworm on the keel.

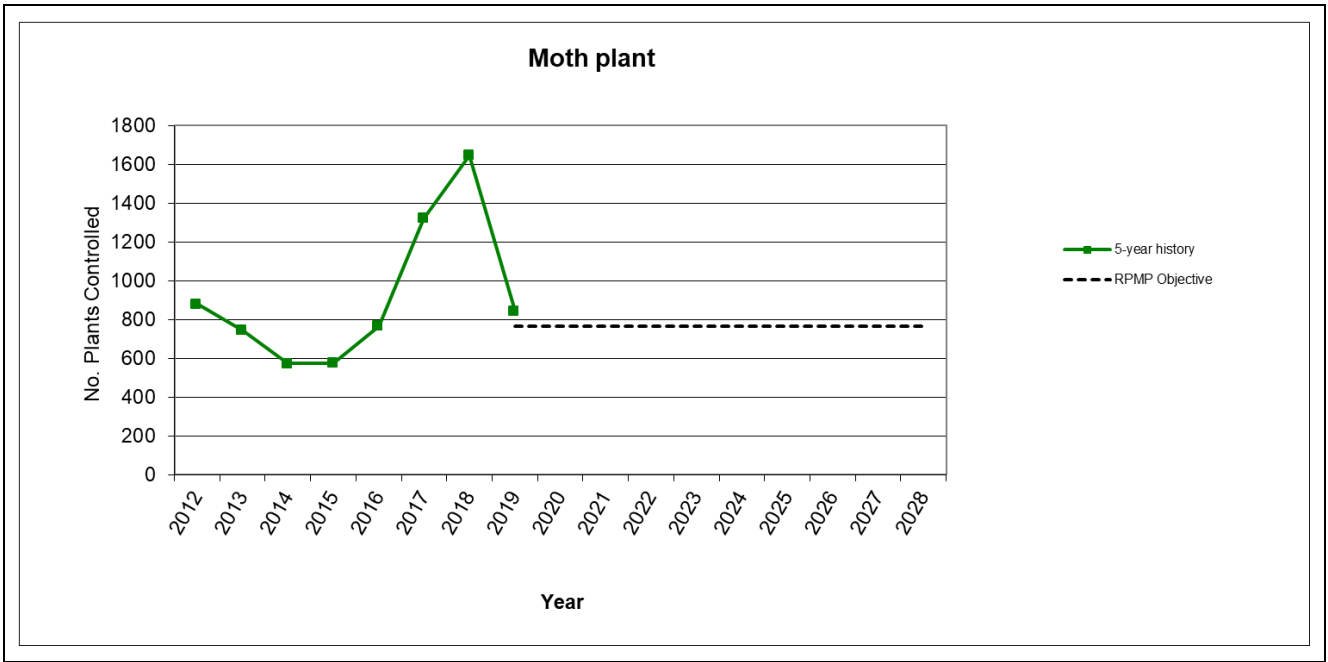


## 19. Moth plant (*Araujia hortorum*)




Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, control moth plant ( <i>Araujia hortorum</i> ) in the Marlborough district to less than or equal to 2016 levels to minimise adverse effects on the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	Council staff and/or contractors will carry out all operational activities.			
<b>Target 19.1</b>	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
<b>2018/2019</b>		100% of all 145 active and monitoring sites were visited in 2018/2019. At some monitoring sites no plants have been found for 5 years and these sites have now been reclassified as historical.		
<b>Target 19.2</b>	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
<b>2018/2019</b>		69 out of 203 (33%) sites categorised as historical at the start of 2018/2019 were visited for surveillance activities. A total of 16 plants were found on 9 of these sites which will now be entered back under active management.		


**Programme trend:**



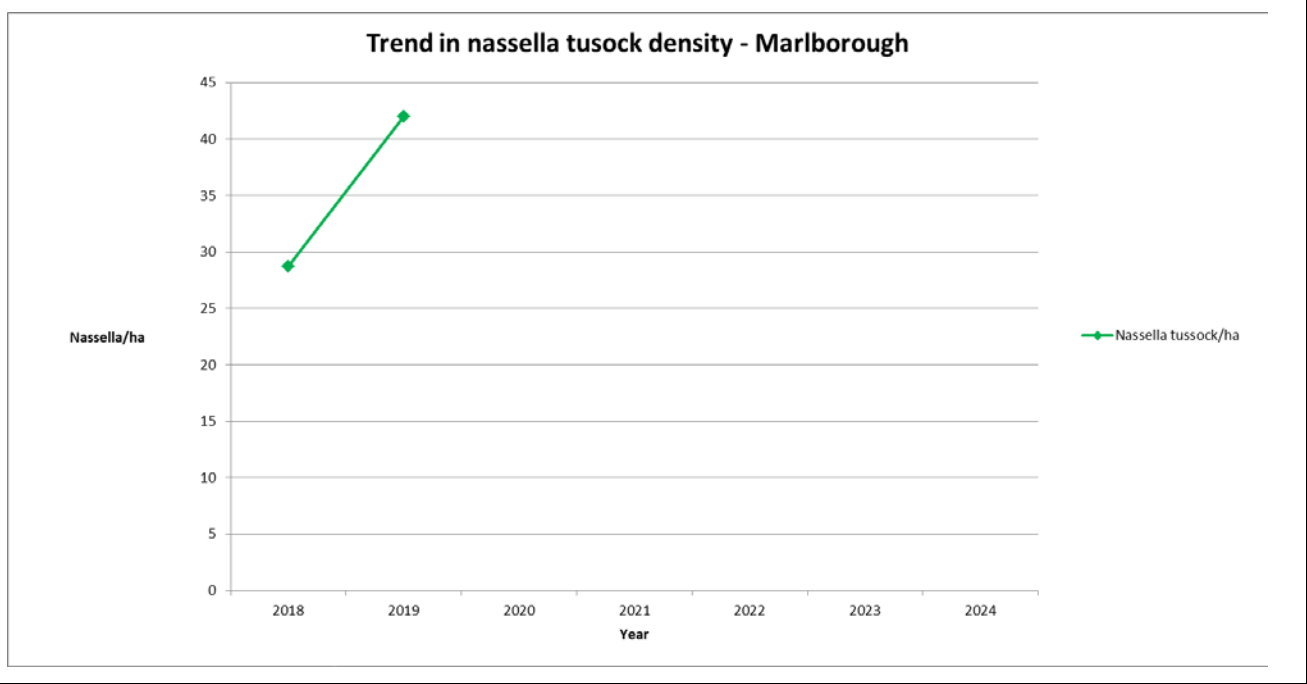


## 20. Nassella tussock (*Nassella trichotoma*)



Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<p><b>Objective</b> Over the duration of the Plan, control nassella tussock (<i>Nassella trichotoma</i>) in the Marlborough district to a population trend that is level or reducing to minimise adverse effects on economic wellbeing, the environment, and enjoyment of the natural environment.</p> <p><b>Operations overview</b> There are multiple facets to the nassella tussock programme delivered by Council. These are:</p> <ul style="list-style-type: none"> <li>• Staff and/or contractors will undertake periodic surveillance for nassella tussock on a number of sites. These are commonly the historical, smaller, or scattered infestations to check they are not becoming established or re-established.</li> <li>• Undertake an active compliance function on the majority of sites. This involves communication with occupiers and the use of Management Plans that help schedule control work that the occupier must complete and compliance inspections that Council may undertake.</li> <li>• For more heavily infested sites, facilitation of the development of Management Plans may be more comprehensive and involve the use of mapping and data management to assist the occupier.</li> <li>• Continue to deliver ongoing communication, education and awareness initiatives.</li> </ul> <p>Note: there are other work programmes Council delivers outside of the RPMP that can have an influence on the nassella tussock programme. See Part Two.</p>				
<p><b>Target 20.1</b> Each year by 30 April, provide to occupiers that are subject to obligations and subsequent inspection, communication detailing their obligation for the coming season.</p>				
<p><b>2018/2019</b></p>		<p>Prior to 30 April, a total of 361 land occupiers' part of the active inception regime were sent correspondence reminding them of their obligation under Council's RPMP rule for the 2019 calendar year.</p>		
<p><b>Target 20.2</b> Each year, an inspection is undertaken, on 70% of sites that have an infestation of nassella tussock, and the site is part of the active compliance programme.</p>				
<p><b>2018/2019</b></p>		<p>252 sites (70% of all sites subject to an active compliance programme) were inspected to ensure land occupiers were meeting their obligations to destroy nassella tussock on their property.</p>		
<p><b>Target 20.3</b> Each year, undertake surveillance, and carry out required management work, on 33% of sites that are not part of the active compliance programme.</p>				
<p><b>2018/2019</b></p>		<p>60 out of 190 sites (33%) were selected for planned surveillance activities. 64 sites were visited. One site was found to have significant infestation, and the site has been reclassified into the active compliance programme.</p>		
<p><b>Target 20.4</b> Each year, a minimum of 20 hours of surveillance is carried out on land not previously known to have an infestation of nassella tussock.</p>				

<b>2018/2019</b>		More than 20 hours was dedicated to surveillance work outside the known distribution range for nassella tussock. This work was carried out in fringe areas of the Wairau Valley and upper Awatere.
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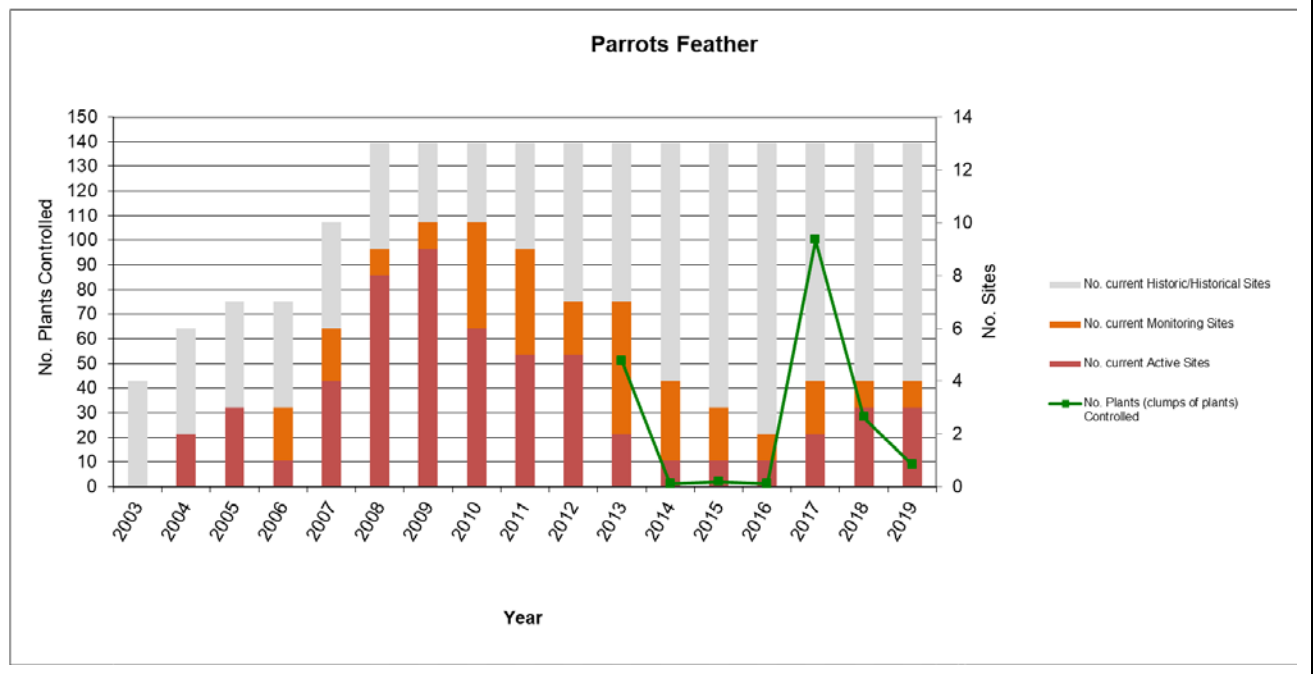
**Programme trend:**

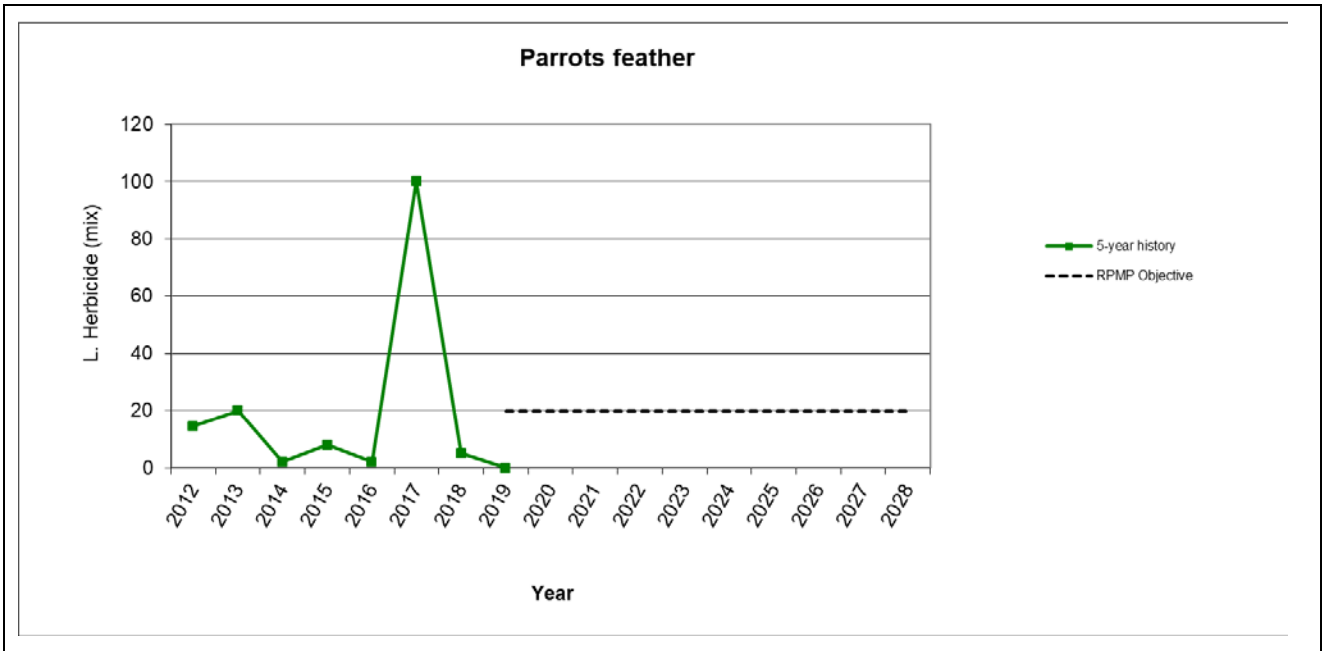


## 21. Parrots feather (*Myriophyllum aquaticum*)



Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, control parrots feather ( <i>Myriophyllum aquaticum</i> ) in the Marlborough district to less than or equal to 2013 levels to minimise adverse effects on the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	Council staff and/or contractors will carry out all operational activities.			
<b>Target 21.1</b>	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
<b>2018/2019</b>		100% of all active and monitoring sites were visited by biosecurity staff. A very small amount of parrots feather was found at one site, and removed by hand.		
<b>Target 21.2</b>	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
<b>2018/2019</b>		Of the nine historical sites, four were visited for surveillance activities, and no parrots feather was found.  Regular searches are carried out downstream of active infestations to ensure no re-establishment is occurring by fragmentation of any existing rafts before being destroyed.		

**Programme trend:**

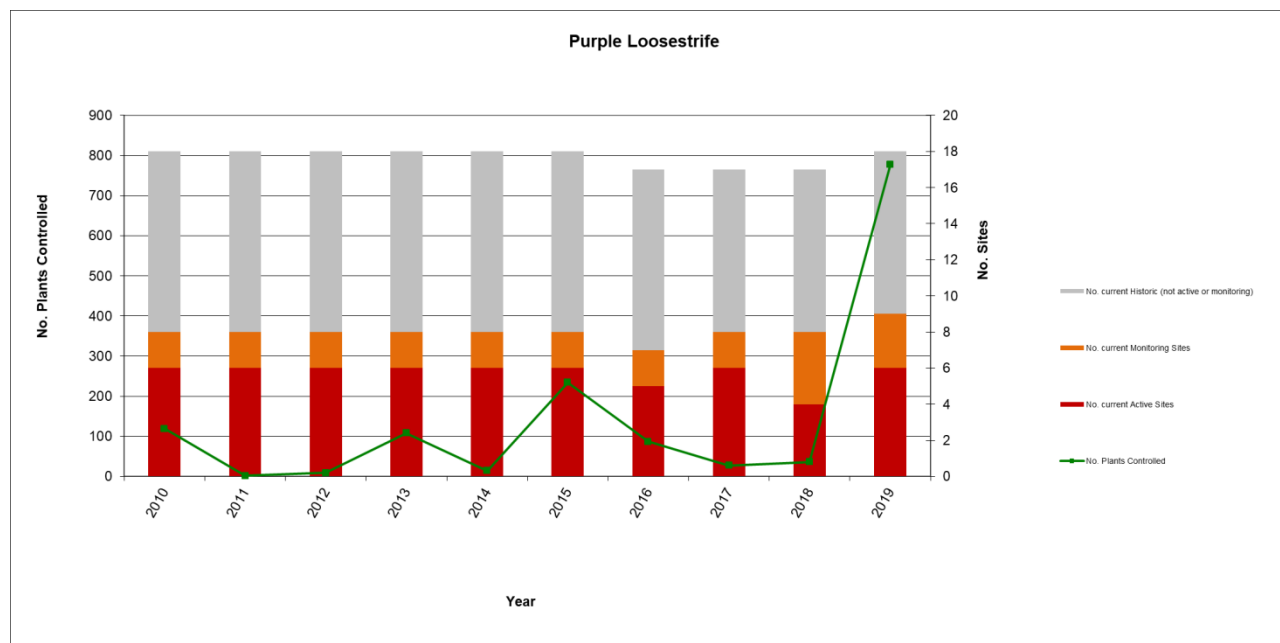


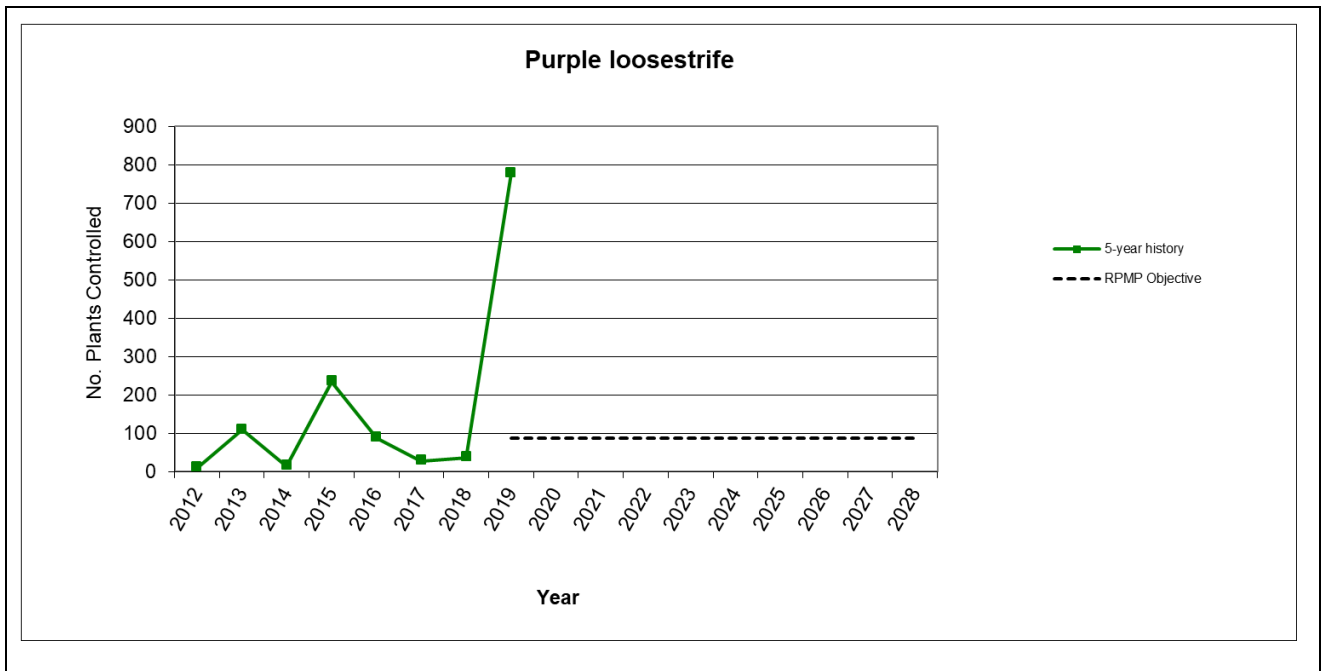


## 22. Purple loosestrife (*Lythrum salicaria*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<p><b>Objective</b> Over the duration of the Plan, control purple Loosestrife (<i>Lythrum salicaria</i>) in the Marlborough district to less than or equal to 2016 levels to minimise adverse effects on the environment and enjoyment of the natural environment.</p> <p><b>Operations overview</b> Council staff and/or contractors will carry out all operational activities.</p>				
<p><b>Target 22.1</b> Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.</p>				
<p><b>2018/2019</b></p>		 <p>100% of 'active' and 'monitoring' sites were inspected and control undertaken.</p> <p>A large spike occurred in 2018/2019 due to an infestation being discovered in a new area of an existing site in Rapaura.</p>		
<p><b>Target 22.2</b> Each year, 33% of sites that have a status of historical are visited for surveillance activities.</p>				
<p><b>2018/2019</b></p>		 <p>Of the nine historical sites, 3 were inspected for any signs of purple loosestrife regeneration from seed or root fragments. No purple loosestrife was found.</p> <p>To-date, no purple loosestrife has reoccurred where initial control work was undertaken outside the aquatic environment (dry urban gardens).</p>		



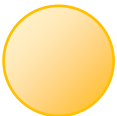
**Programme trend:**



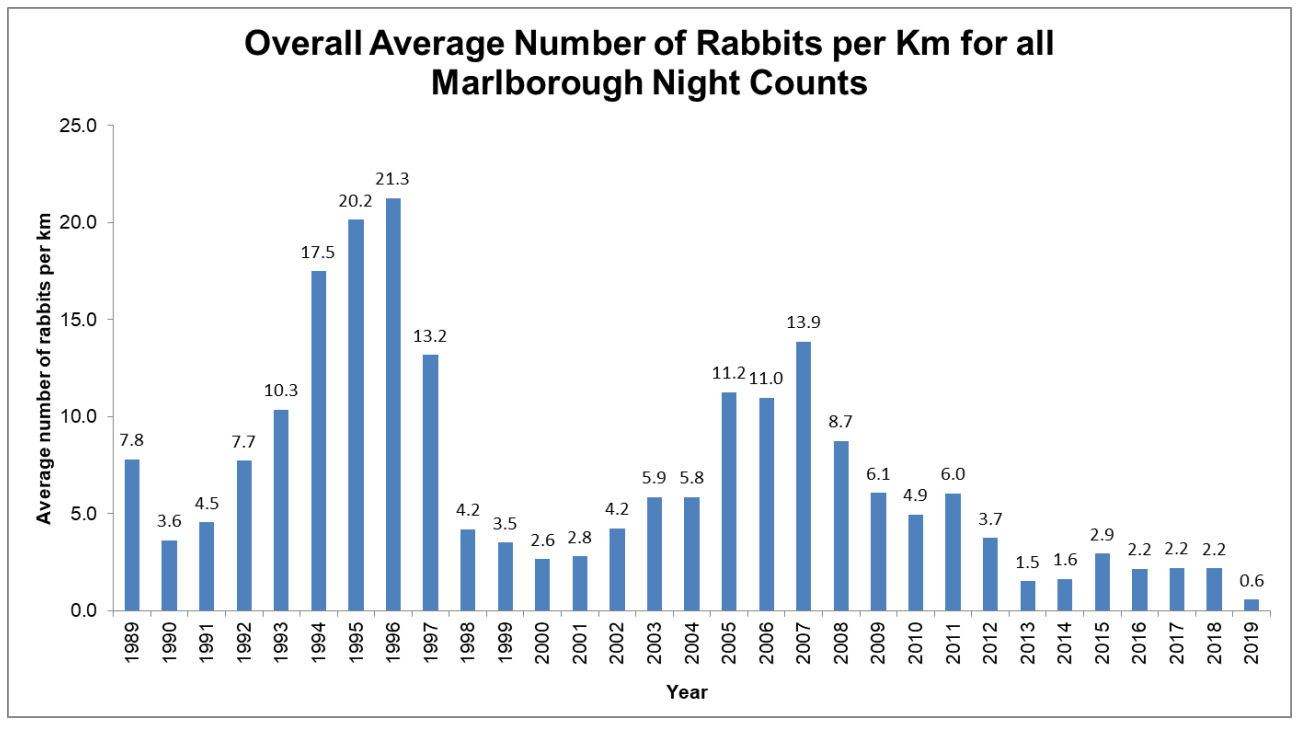





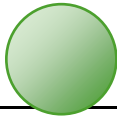
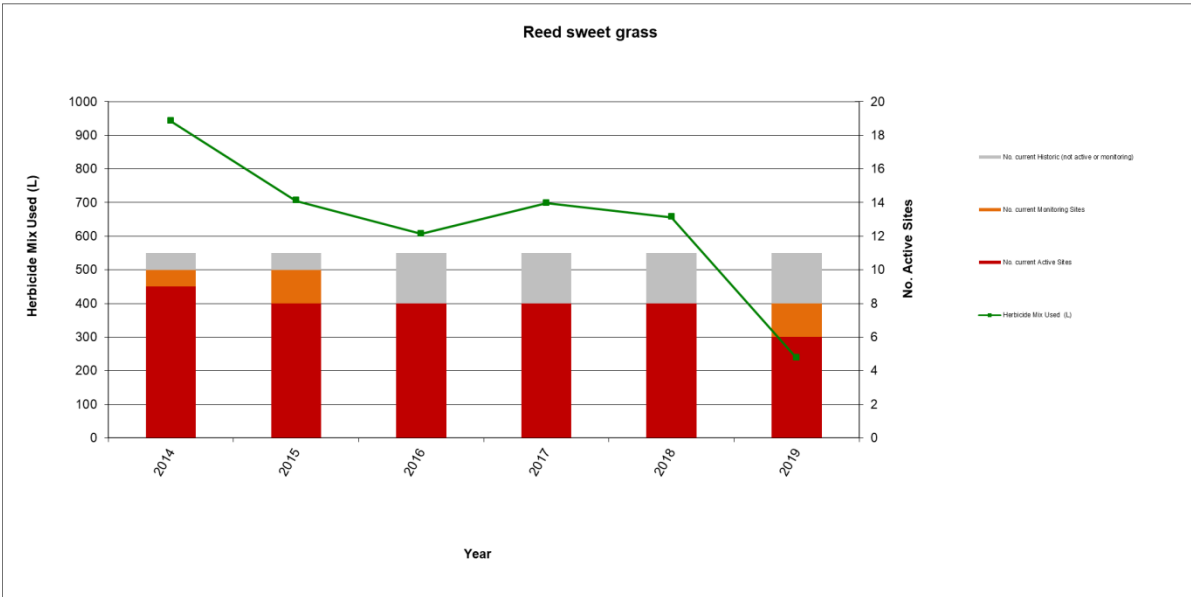
## 23. Rabbits – feral (*Oryctolagus cuniculus*)

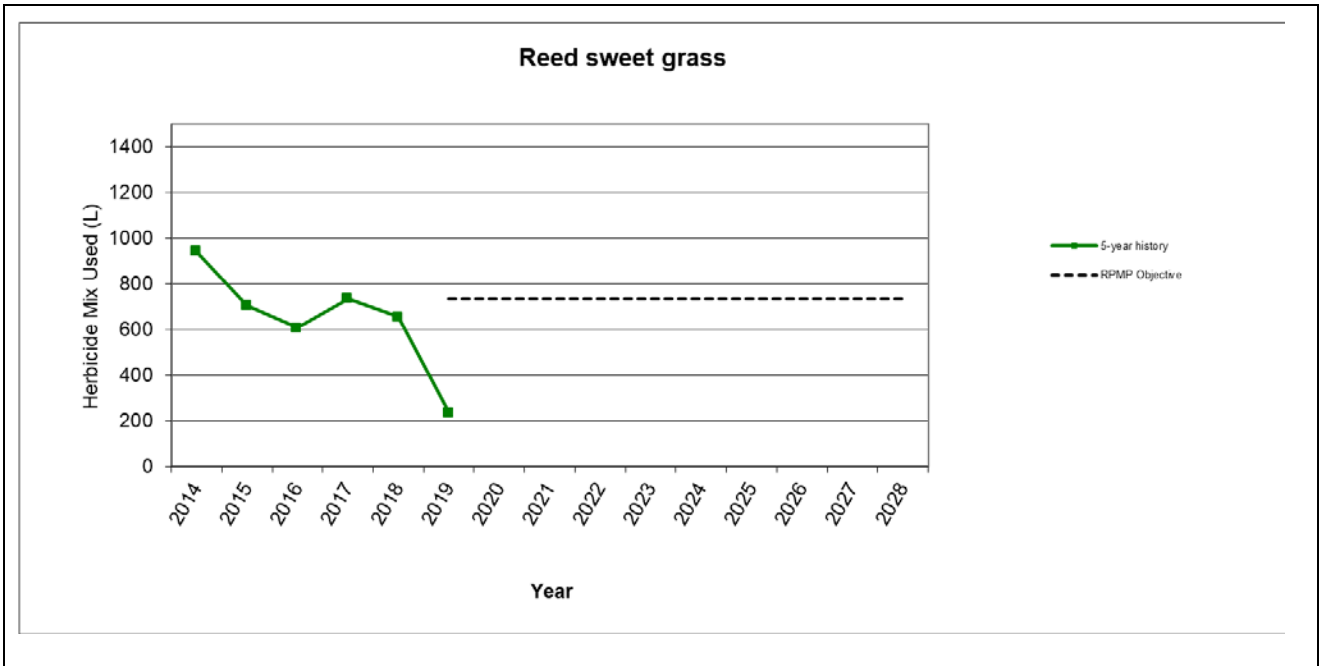
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, control feral rabbits ( <i>Oryctolagus cuniculus</i> ) in the Marlborough district to a population trend that is level or reducing to minimise adverse effects on economic wellbeing and the environment.			
<b>Operations overview</b>	<p>There are multiple facets to the rabbit programme delivered by Council. These are:</p> <ul style="list-style-type: none"> <li>• Staff undertaking targeted inspections of properties located in either high rabbit-prone parts of the district or those that have a recent history of sustaining high rabbit population levels.</li> <li>• Supporting research initiatives that seek to continue to maintain the efficacy of biological control agents such as the Rabbit Haemorrhagic Disease Virus (RHDV).</li> <li>• Continue to deliver ongoing communication, education and awareness initiatives.</li> </ul>			
<b>Target 23.1</b>	Each year, a schedule of sites is generated by 31 January outlining the coming season's inspections.			
<b>2018/2019</b>		An inspection schedule was developed by 31 January 2019 targeting properties in rabbit prone areas.		
<b>Target 23.2</b>	Each year, 100% of sites identified on the inspection schedule are inspected to assess rabbit population levels.			
<b>2018/2019</b>		All sites identified on the inspection schedule were inspected to assess rabbit population levels. This resulted in 25 sites being inspected no instance of populations found being above the maximum allowable levels in the RPMP.		
<b>Target 23.3</b>	Each year, undertake a minimum of one RHDV immunity survey of a rabbit population of relevance to the wider understanding of population immunity.			
<b>2018/2019</b>		A serological survey was planned to occur at Molesworth Station in 2018/2019 following up from the release of the RHDV K5 strain. However, due to continued disruptions, the survey did not go ahead as planned.		

Programme trend:





## 24. Reed sweet grass (*Glyceria maxima*)



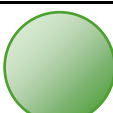
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led																																			
<b>Objective</b>		Over the duration of the Plan, control reed sweet grass ( <i>Glyceria maxima</i> ) in the Marlborough district to less than or equal to 2017 levels to minimise adverse effects on economic wellbeing, the environment and enjoyment of the natural environment.																																					
<b>Operations overview</b>		Council staff and/or contractors will carry out all operational activities.																																					
<b>Target 24.1</b>		Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.																																					
<b>2018/2019</b>		<p>All 'active and 'monitoring' sites were visited during the 2018/2019 season.</p> <p>The amount of herbicide required to control an infestation on the Northbank has reduced from 600 litres of spray mix in 2014 to only 50 litres in 2018/2019.</p> <p>The number of active sites has reduced significantly since 2014. It is expected that at least one of the current monitoring sites will become historical in the near to medium future, if no plants continue to be found.</p>																																					
<b>Target 24.2</b>		Each year, 33% of sites that have a status of historical are visited for surveillance activities.																																					
<b>2018/2019</b>		Both of the two historical sites were visited and no reed sweet-grass was detected.																																					
<b>Programme trend:</b>																																							
 <p style="text-align: center;"><b>Reed sweet grass</b></p> <table border="1"> <caption>Reed sweet grass Programme Trend Data (2014-2019)</caption> <thead> <tr> <th>Year</th> <th>No. current Active Sites</th> <th>No. current Monitoring Sites</th> <th>No. current Historic (not active or monitoring)</th> <th>Herbicide Mix Used (L)</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>8</td> <td>1</td> <td>1</td> <td>900</td> </tr> <tr> <td>2015</td> <td>7</td> <td>1</td> <td>1</td> <td>700</td> </tr> <tr> <td>2016</td> <td>6</td> <td>1</td> <td>1</td> <td>600</td> </tr> <tr> <td>2017</td> <td>6</td> <td>1</td> <td>1</td> <td>700</td> </tr> <tr> <td>2018</td> <td>6</td> <td>1</td> <td>1</td> <td>650</td> </tr> <tr> <td>2019</td> <td>4</td> <td>1</td> <td>1</td> <td>50</td> </tr> </tbody> </table>					Year	No. current Active Sites	No. current Monitoring Sites	No. current Historic (not active or monitoring)	Herbicide Mix Used (L)	2014	8	1	1	900	2015	7	1	1	700	2016	6	1	1	600	2017	6	1	1	700	2018	6	1	1	650	2019	4	1	1	50
Year	No. current Active Sites	No. current Monitoring Sites	No. current Historic (not active or monitoring)	Herbicide Mix Used (L)																																			
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2018	6	1	1	650																																			
2019	4	1	1	50																																			



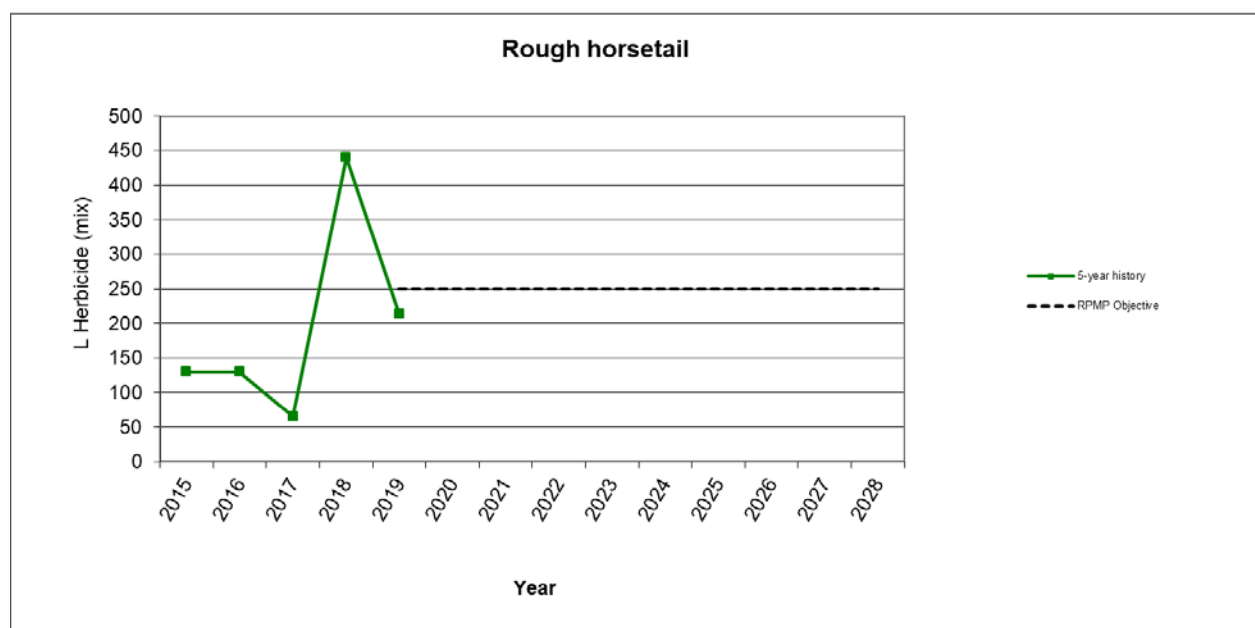
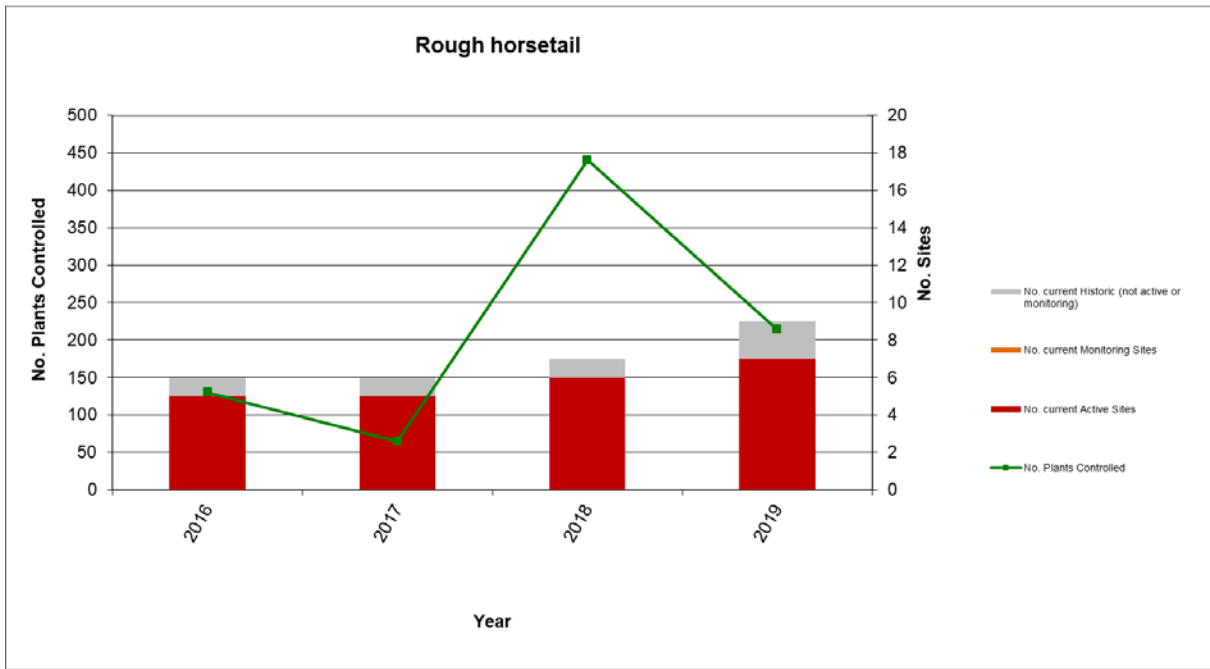
## 25. Rooks (*Corvus frugilegus*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, prevent the establishment of rooks ( <i>Corvus frugilegus</i> ) in the Marlborough district to prevent future impacts on economic wellbeing.			
<b>Operations overview</b>	Council staff and/or contractors will carry out all operational activities should rooks be detected in Marlborough.			
<b>Target 25.1</b>	Each year, undertake an appropriate awareness activity within the community to facilitate reporting of rooks if they are seen.			
<b>2018/2019</b>		A newspaper article was put to print in October 2018 highlighting rooks and asking for sightings.		
<b>Target 25.2</b>	Each year, respond to any report of rooks in Marlborough within 2 working days.			
<b>2018/2019</b>		A Biosecurity staff member observed a single rook while carrying out a property inspection near Fairhall in May 2019. With the bird remaining in the area, they returned the following day and were able to destroy the bird by way of shooting it.		
<p><b>Status of rooks in Marlborough:</b></p> <p>Last detection in 2019 (near Fairhall)</p> <p>Not established</p>				


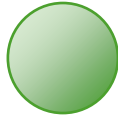
## 26. Rough horsetail (*Equisetum hyemale*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, control rough horsetail ( <i>Equisetum hymale</i> ) in the Marlborough district to a population trend that is level or reducing, to minimise adverse effects on economic wellbeing, the environment, and enjoyment of the natural environment.			
<b>Operations overview</b>	Council staff and/or contractors will carry out all operational activities.			
<b>Target 26.1</b>	By 30 June 2019, a baseline population assessment has been made, and metrics set, for the purposes of setting the longer term programme objective for rough horsetail.			
<b>2018/2019</b>		The amount of herbicide mix used to control existing infestations shall be used as a proxy indicator to monitor the presence and density of rough horsetail in Marlborough.  The objective for the duration of the plan is to ensure the amount of herbicide required to control existing infestations (as at 2018/2019) remains below 250 litres.		
<b>Target 26.2</b>	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
<b>2018/2019</b>		100% of active or monitoring sites were visited.		
<b>Target 26.3</b>	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
<b>2018/2019</b>		All historical sites were visited, no rough horsetail was detected.		

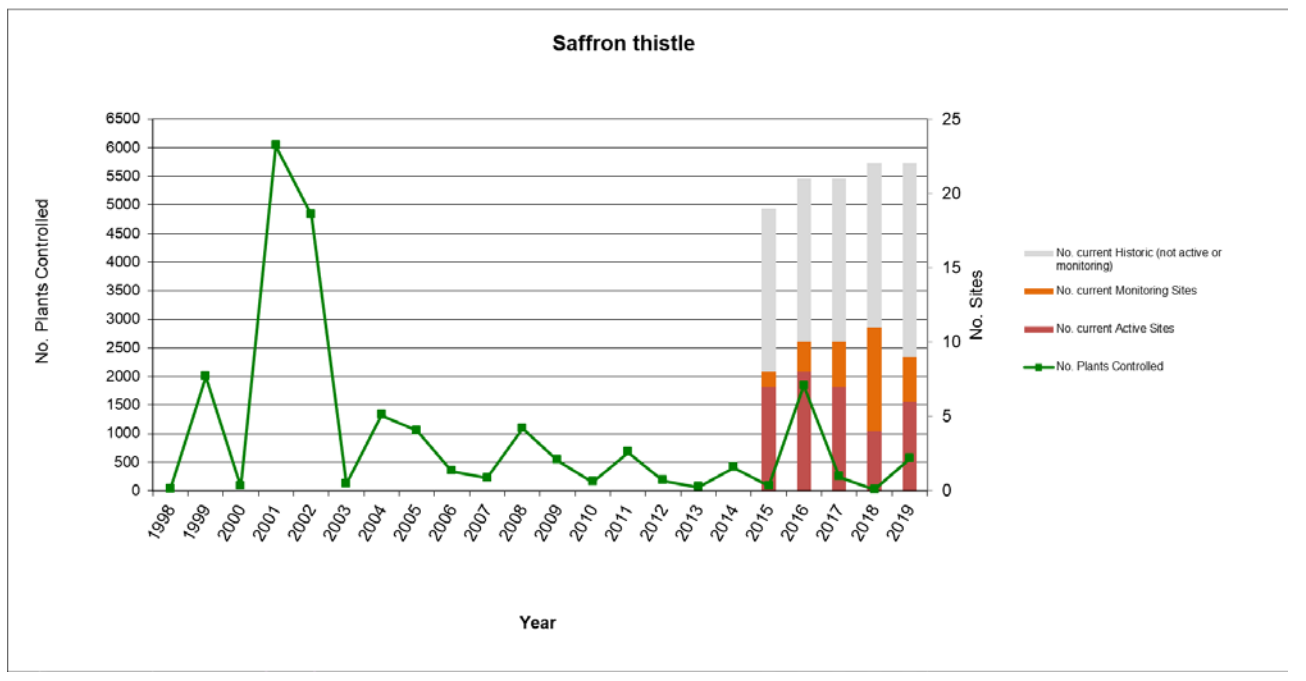
Programme trend:



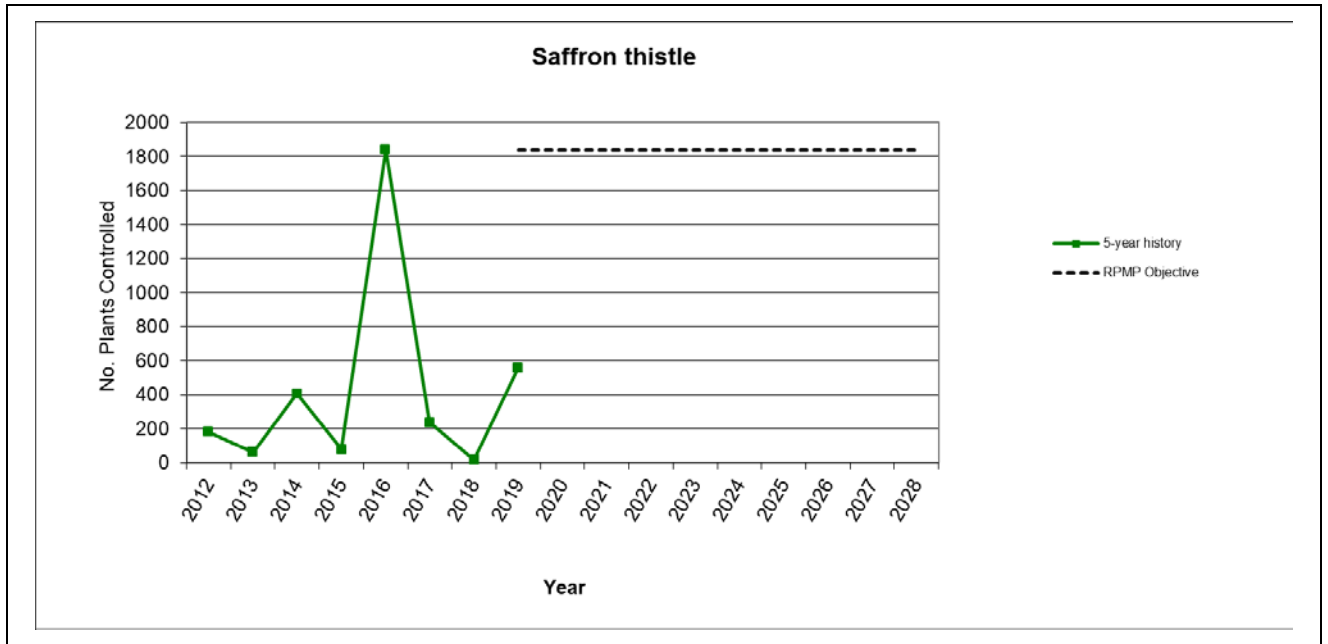
## 27. Saffron thistle (*Carthamus lanatus*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, control saffron thistle ( <i>Carthamus lanatus</i> ) in the Marlborough district to less than or equal to 2016 levels to minimise adverse effects on economic wellbeing, the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	Council staff and/or contractors will carry out all operational activities.			
<b>Target 27.1</b>	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
<b>2018/2019</b>		All sites with a status of 'active' or 'monitoring' were visited in 2018/2019.  A new site was found from information received by Council. The infestation level at this site greatly contributed to the number of plants destroyed in 2019.		
<b>Target 27.2</b>	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
<b>2018/2019</b>		50% of all historical sites were visited for surveillance activities. No saffron thistle was found.		


**Programme trend:**



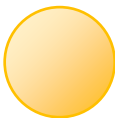

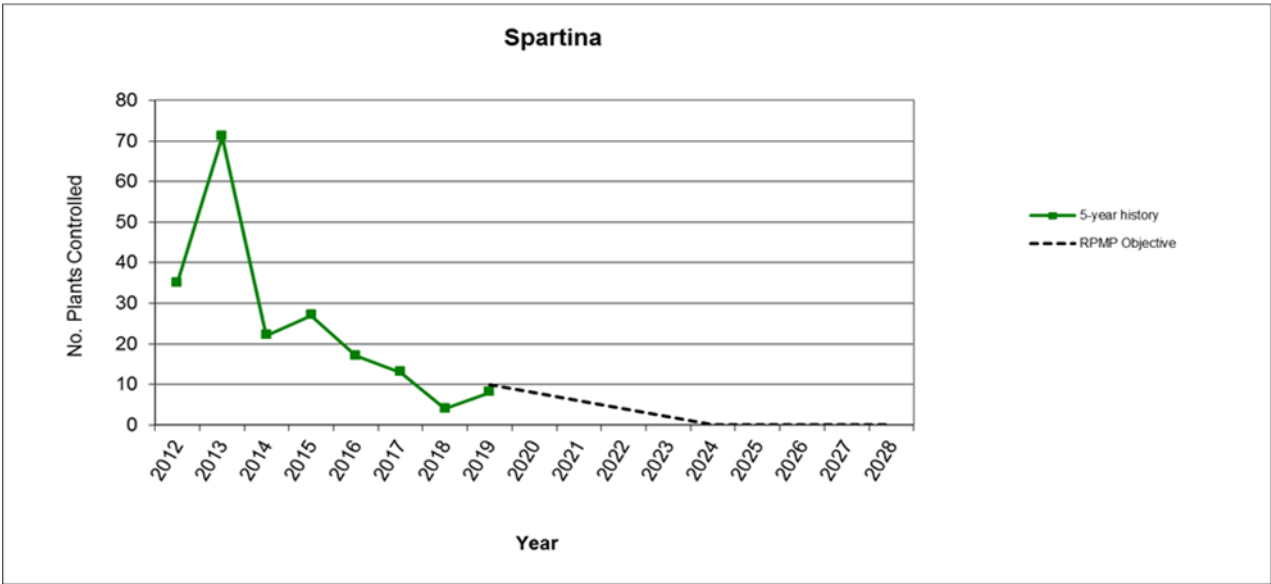






## 28. Senegal tea (*Gymnocoronis spilanthoides*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the term of the Plan, prevent the establishment of Senegal tea ( <i>Gymnocoronis spilanthoides</i> ) in the Marlborough district to prevent future impacts on environmental values and the enjoyment of the natural environment.			
<b>Operations overview</b>	Council staff and/or contractors will carry out all operational activities should Senegal tea be detected in Marlborough.			
<b>Target 28.1</b>	Ensure that historical sites of Senegal tea are inspected at last once every 5 years to ensure there is no long term re-emergence.			
<b>2018/2019</b>		Marlborough' only historical site for Senegal tea was searched in January and February 2019 to also determine the presence of purple loosestrife and parrots feather - which were also known to be present on the site. No RPMP pest plants were found.		
<p><b>Status of Senegal tea in Marlborough:</b></p> <p><b>Historically eradicated</b></p> <p><b>Not established</b></p>				

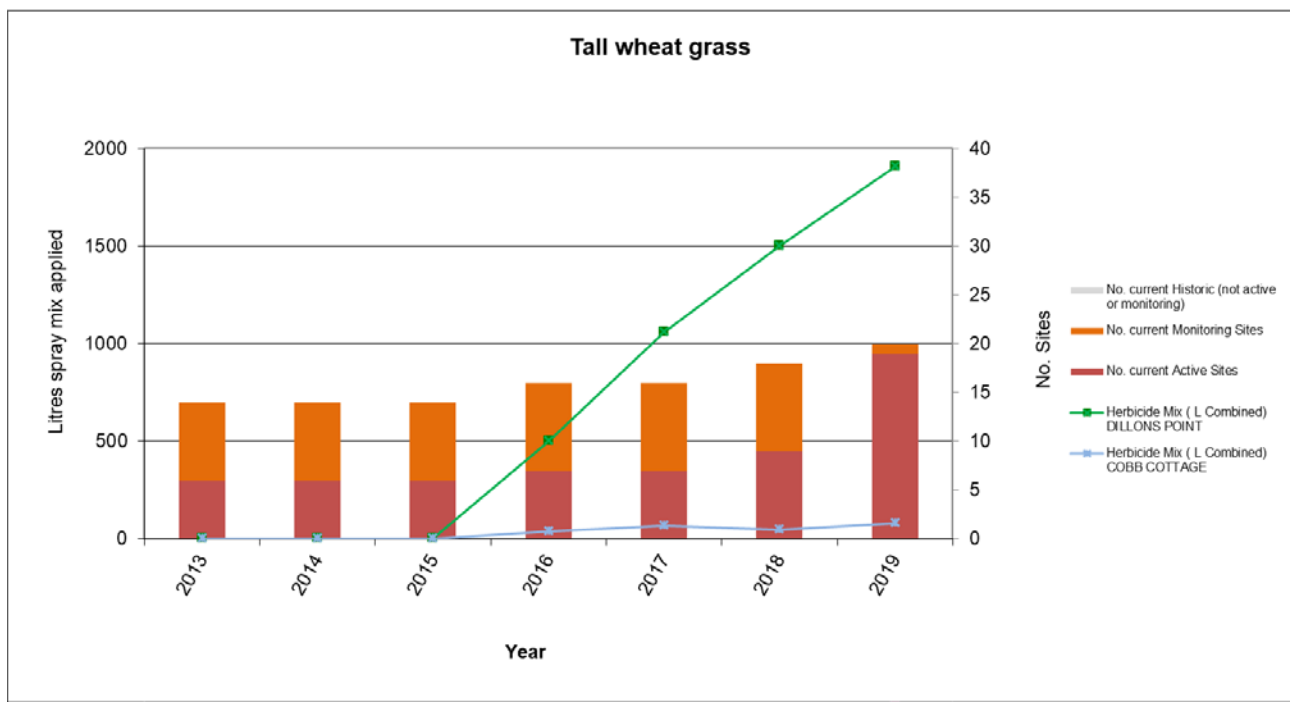
## 29. Spartina (*Spartina anglica*)

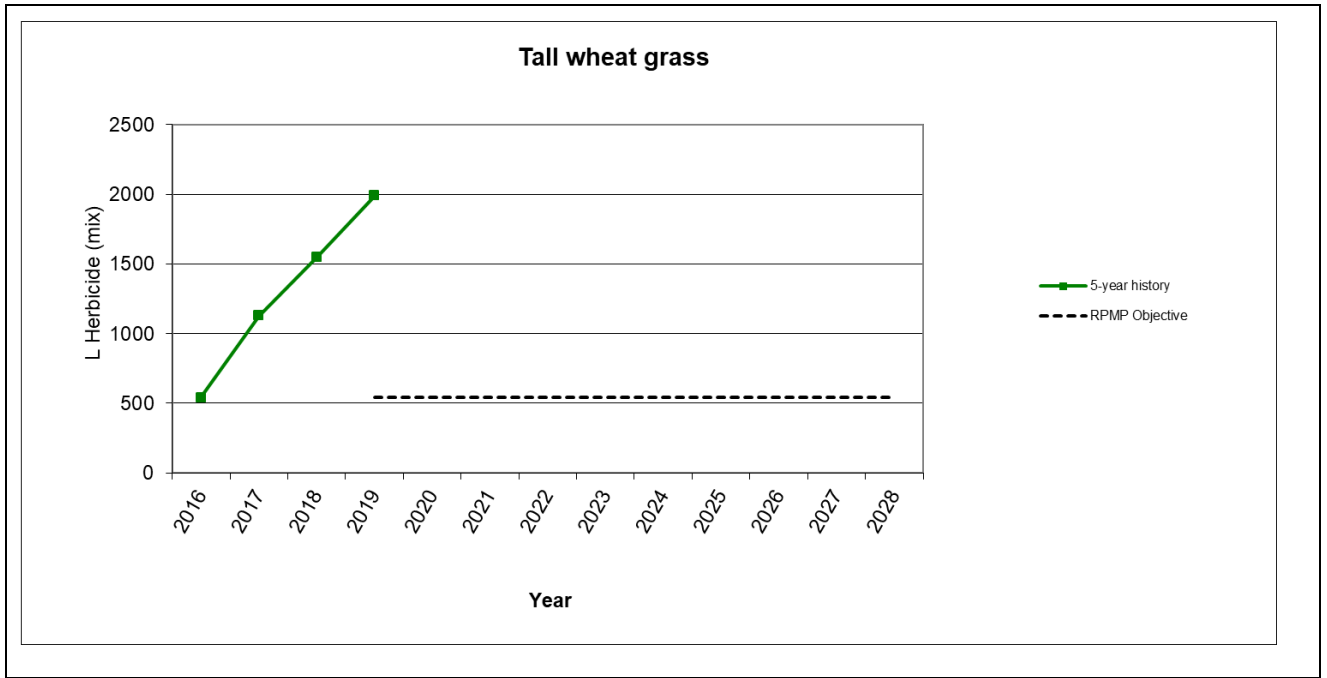
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led																																																						
<b>Objective</b>	By the end of the term of this Plan, spartina ( <i>Spartina anglica</i> ) on all known sites in the Marlborough district will have been controlled to zero density to prevent adverse effects on the environment, and enjoyment of the natural environment.																																																									
<b>Operations overview</b>	Operations for this programme are led and delivered by DOC. Each summer season, a team is assembled that conducts thorough searching all previously infested sites that are predominantly in the Pelorus Sound.																																																									
<b>Target 29.1</b>	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.																																																									
<b>2018/2019</b>		8/10 (80%) 'active' and 'monitoring' sites were visited for control or surveillance activities. Two sites were not visited, due to some ongoing classification and planning issues between Council and DOC. However, more than 900 man hours were committed to the spartina programme in 2018/2019 compared to 586 hours in 2017/2018.																																																								
<b>Target 29.2</b>	Each year, 33% of sites that have a status of historical are visited for surveillance activities.																																																									
<b>2018/2019</b>		Surveillance activities were undertaken at two of the 5 historical sites, equating to 200 man hours. A total of 8 spartina plants were found in 2018/2019 meaning these sites will be under active management.																																																								
<b>Programme trend:</b>																																																										
 <table border="1"> <caption>Spartina Programme Trend Data</caption> <thead> <tr> <th>Year</th> <th>No. Plants Controlled (5-year history)</th> <th>RPMP Objective</th> </tr> </thead> <tbody> <tr><td>2012</td><td>35</td><td>0</td></tr> <tr><td>2013</td><td>72</td><td>0</td></tr> <tr><td>2014</td><td>22</td><td>0</td></tr> <tr><td>2015</td><td>28</td><td>0</td></tr> <tr><td>2016</td><td>18</td><td>0</td></tr> <tr><td>2017</td><td>14</td><td>0</td></tr> <tr><td>2018</td><td>5</td><td>0</td></tr> <tr><td>2019</td><td>10</td><td>0</td></tr> <tr><td>2020</td><td>10</td><td>0</td></tr> <tr><td>2021</td><td>8</td><td>0</td></tr> <tr><td>2022</td><td>6</td><td>0</td></tr> <tr><td>2023</td><td>4</td><td>0</td></tr> <tr><td>2024</td><td>2</td><td>0</td></tr> <tr><td>2025</td><td>1</td><td>0</td></tr> <tr><td>2026</td><td>1</td><td>0</td></tr> <tr><td>2027</td><td>1</td><td>0</td></tr> <tr><td>2028</td><td>1</td><td>0</td></tr> </tbody> </table>					Year	No. Plants Controlled (5-year history)	RPMP Objective	2012	35	0	2013	72	0	2014	22	0	2015	28	0	2016	18	0	2017	14	0	2018	5	0	2019	10	0	2020	10	0	2021	8	0	2022	6	0	2023	4	0	2024	2	0	2025	1	0	2026	1	0	2027	1	0	2028	1	0
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2028	1	0																																																								

### 30. Tall wheat grass (*Thinopyrum ponticum*)


Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, control tall wheat grass ( <i>Thinopyrum ponticum</i> ) in the Marlborough district to less than or equal to 2016 levels to minimise adverse effects on economic wellbeing, the environment, and enjoyment of the natural environment.			
<b>Operations overview</b>	Council staff and/or contractors will carry out all operational activities.			
<b>Target 30.1</b>	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
<b>2018/2019</b>		<p>100% of all known sites were visited for surveillance or control activities.</p> <p>Surveillance was carried out at an additional 4 sites, resulting in the discovery of 2 new infestations.</p> <p>Given this is a new RPMP programme, the number of herbicide applications will remain high for some time, and are likely to exceed the RPMP objective in the near to medium future until Tall wheat grass infestations are reduced.</p>		
<b>Target 30.2</b>	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
<b>2018/2019</b>		There were no sites with a historical status in 2018/2019.		

**Programme trend:**



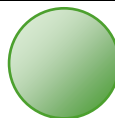




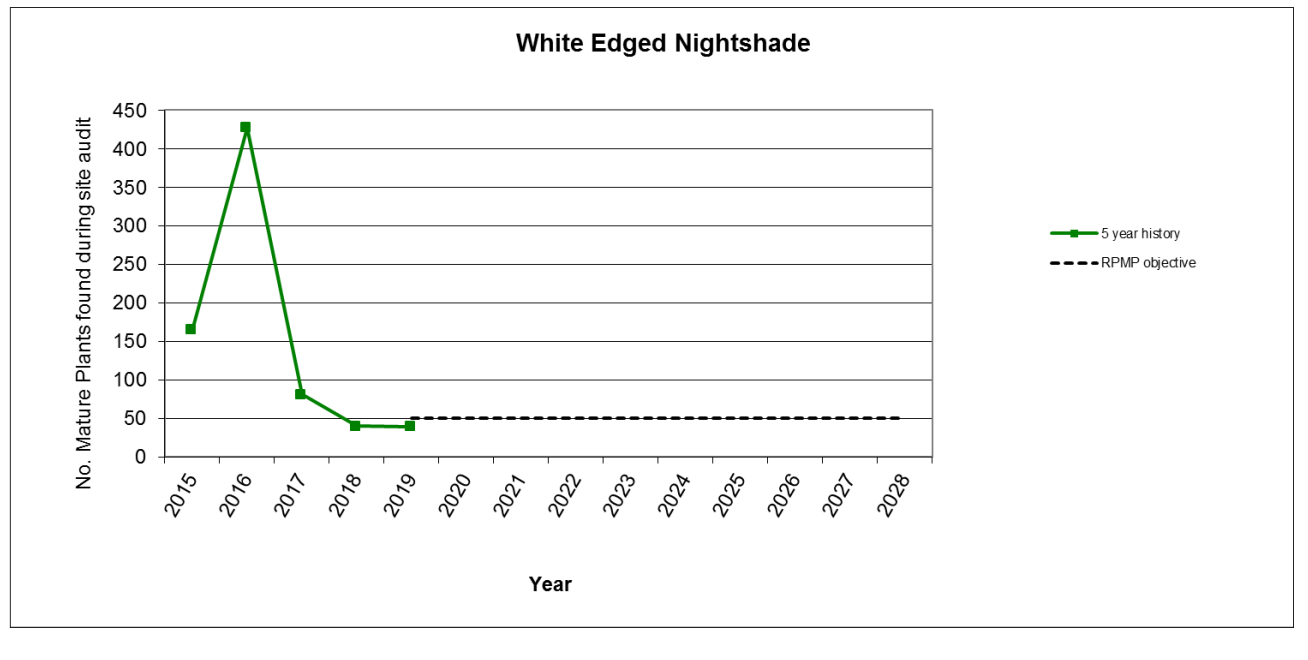
### 31. Wallabies (*Family Macropodidae*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, prevent the establishment of wallabies ( <i>Family: Macropodidae</i> ) in the Marlborough district to prevent future impacts on economic wellbeing, the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	Council staff and/or contractors will carry out all operational activities should wallabies be detected in Marlborough.  Further support could also be provided by DOC.			
<b>Target 31.1</b>	Each year, respond to any report of wallabies in Marlborough within 2 working days.			
<b>2018/2019</b>		<p>A third hand report (via social media) of wallabies being present in the Upper Wairau Valley was investigated the day after being received. No sign was found within the area.</p> <p>A second report of a wallaby being observed in Marlborough was submitted via email with a picture attached. The investigation commenced within 24 hours but resulted in a determination that the image was in fact of a juvenile eastern grey kangaroo and likely taken in Australia – not in Marlborough – and was a ‘stitch-up’ of the submitter by a friend. This unfortunately diverted valuable staff time.</p>		
<p><b>Status of wallabies in Marlborough:</b></p> <p>Un-verified reports of presence</p> <p>Not established</p>				

## 32. White-edged nightshade (*Solanum marginatum*)

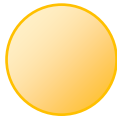

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective</b>	Over the duration of the Plan, control white-edged nightshade ( <i>Solanum marginatum</i> ) in the Marlborough district (excluding the White-edged Nightshade Containment Area) to less than or equal to 2016 levels to minimise adverse effects on economic wellbeing, the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	<p>There are multiple facets to the white-edged nightshade programme delivered by Council. These are:</p> <ul style="list-style-type: none"> <li>• Undertake an active compliance and surveillance function on all sites. This involves communication with occupiers and the use of voluntary completion dates to help focus annual control operations.</li> <li>• Continue to deliver ongoing communication, education and awareness initiatives.</li> </ul>			
<b>Target 32.1</b>	By 30 June 2020, a baseline population assessment has been made, and metrics set, for the purposes of setting the longer term programme objective for white-edged nightshade.			
<b>2018/2019</b>		<p>A baseline assessment has not yet been undertaken. However, to establish a baseline, data will be collated during the 2019/2020 season.</p> <ul style="list-style-type: none"> <li>• Number of mature plants (flowering or fruiting plants &gt;300mm high) found during the annual site audit, and</li> <li>• Land occupiers will be contacted prior to commencement of control operations, requesting that all plants found with flowers and/or fruit are tallied, and for this data be forwarded to council prior to commencement of a site audit in March 2020.</li> </ul> <p>For the purpose of this report, an arbitrary metric for the RPMP objective has been set to no more than 50 mature plants (flower and/or fruiting) found per year. This will be amended by 30 June 2020 when more reliable data has been obtained.</p>		
<b>Target 32.2</b>	Each year by 15 February, provide to all affected occupiers, communication reminding them of their obligation and include and a voluntary completion date.			
<b>2018/2019</b>		All affected land occupiers were sent letters in January 2019 to remind them of their obligation under the RPMP rule for white-edged nightshade. Land occupiers agreed to the advised Council inspection date.		
<b>Target 32.3</b>	Each year, an inspection is undertaken on the two sites adjacent to the Containment Area where White-edged nightshade is threatening susceptible land.			
<b>2018/2019</b>		Inspections were undertaken at both sites in March 2019. Mature plant numbers were low, and both sites were determined compliant with RPMP rule 5.32.2.		

Programme trend:










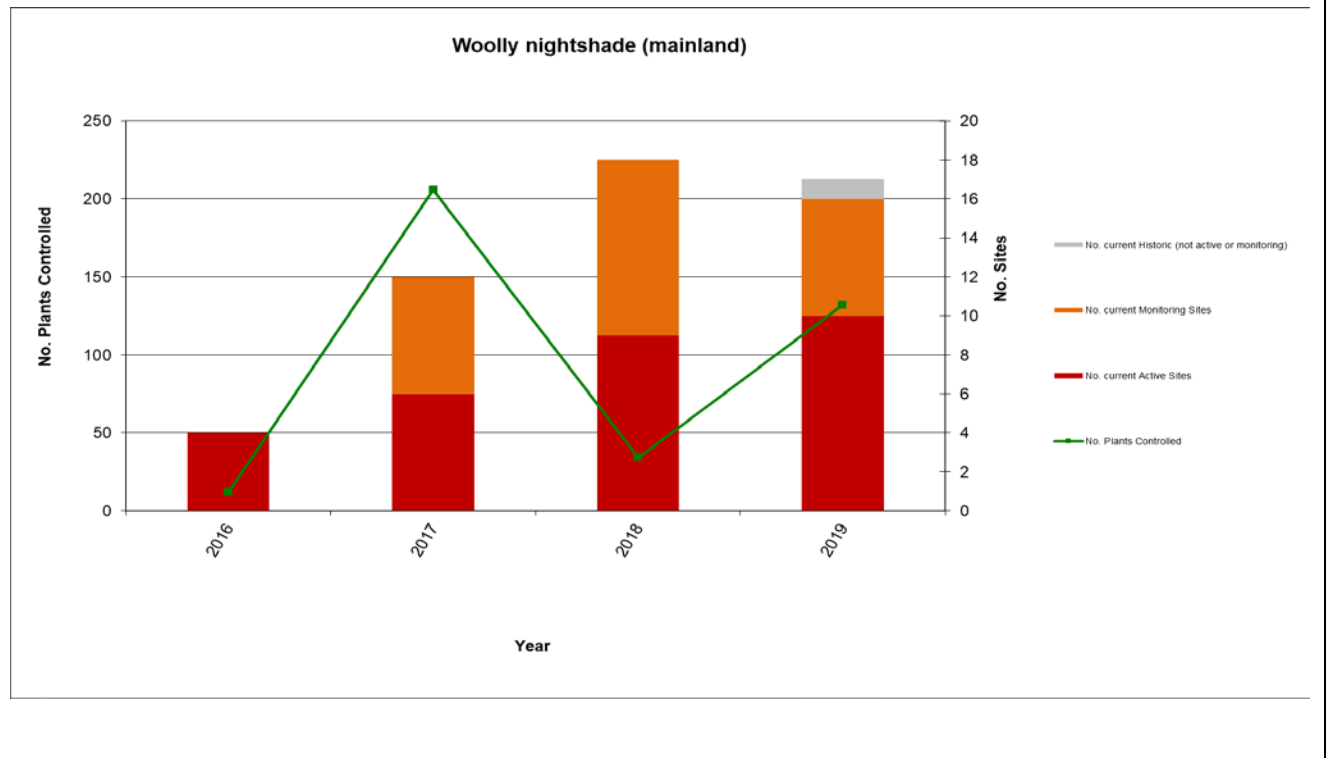
### 33. Willow-leaved hakea (*Hakea salicifolia*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objective 1</b>	By 2035, willow-leaved hakea ( <i>Hakea salicifolia</i> ) on Rangitoto ki te Tonga/D'Urville Island (see Map 12 RPMP) will have been controlled to zero levels, where no plants are found over the preceding 5 years, to prevent adverse effects on the environment, and enjoyment of the natural environment.			
<b>Objective 2</b>	By the end of the term of this Plan, willow-leaved hakea ( <i>Hakea salicifolia</i> ) on Rangitoto ki te Tonga/D'Urville Island will have been controlled to less than 10% of the original infestation size at the commencement of management based on plant numbers, to prevent adverse effects on the environment, and enjoyment of the natural environment.			
<b>Operations overview</b>	Council staff and/or contractors will carry out all operational activities.			
<b>Target 33.1</b>	By 30 June 2019, a detailed project plan has been prepared detailing the required operational activities to occur on Rangitoto ki te Tonga/D'Urville Island over the following 5 year period.			
<b>2018/2019</b>		Initial site investigations were undertaken on the island and background documents prepared for a Request for Information and Proposals (RFIP) from suitable contractors. This RFIP was released in May 2019. It is anticipated that detailed work plans will need to be worked up with a suitable contractor utilising their on-ground expertise against this new target and new location.		
<b>Target 33.2</b>	By 30 June 2020, an initial control operation is to have taken place on Rangitoto ki te Tonga/D'Urville Island in accordance with the project plan.			
<b>2018/2019</b>		N/A		
<b>Programme trend:</b> <i>Once the programme has commenced, graph representing the programme objective and trend history (if available).</i>				

### 34. Woolly nightshade (*Solanum mauritanium*)


Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
<b>Objectives</b>	Over the duration of the Plan, control woolly nightshade ( <i>Solanum mauritanium</i> ) in the Marlborough district by maintaining or reducing the number of plants found in known areas to minimise adverse effects on economic wellbeing, the environment and enjoyment of the natural environment.			
<b>Operations overview</b>	Council staff and/or contractors will carry out all operational activities.			
<b>Target 34.1</b>	By 30 June 2019, a detailed project plan has been prepared detailing the required operational activities to occur in Marlborough, with specific emphasis on Rangitoto ki te Tonga/D'Urville Island, over the following 5 year period.			
<b>2018/2019</b>		Initial site investigations were undertaken on the island and background documents prepared for a Request for Information and Proposals (RFIP) from suitable contractors. This RFIP was released in May 2019.  It is anticipated that detailed work plans will need to be worked up with a suitable contractor utilising their on-ground expertise against this new target and new location.		
<b>Target 34.2</b>	By 30 June 2020, an initial control operation is to have taken place on Rangitoto ki te Tonga/D'Urville Island in accordance with the project plan.			
<b>2018/2019</b>		N/A		
<b>Target 34.3</b>	Each year, a control operation is undertaken on Rangitoto ki te Tonga/D'Urville in accordance with the project plan			
<b>2018/2019</b>		N/A		
<b>Target 34.4</b>	Each year, 100% of sites (excluding those on Rangitoto ki te Tonga/D'Urville) that have a status of active or monitoring are visited for control and/or surveillance activities.			
<b>2018/2019</b>		100% of 'active' and 'monitoring' sites were visited for control. A total of 132 plants were destroyed from these sites.		
<b>Target 34.5</b>	Each year, 33% of sites (excluding those on Rangitoto ki te Tonga/D'Urville) that have a status of historical are visited for surveillance activities.			
<b>2018/2019</b>		There were no sites with a historical status in 2018/2019. .		

Programme trend:




## Part Two – Other biosecurity services or initiatives




### 1. Education and awareness

<b>Overview</b>	Continuing to raise the profile of invasive species is a critical part of the Biosecurity Team’s work. This can be providing general information and advice to the community, profiling RPMP pest species or putting out calls for sightings of RPMP species in the landscape.	
<b>Operational Summary for the coming year</b>	N/A	
<b>Target</b>	N/A	
<b>2018/2019</b>		<p>In conjunction with the Council Communications Team, there has been ongoing work to ensure Biosecurity-related messaging is continued to be put out through Council channels.</p> <p>There has also been a physical presence by staff endorsing biosecurity programmes/initiatives at the Garden Marlborough Fete in November 2018 and the Flaxbourne A&amp;P Show in March 2019. For the first time, a staff member also worked in with Council staff from northern New Zealand at the 2019 Hutchwilco Boat Show in promoting marine biosecurity.</p>


### 2. Investigation and analysis

<b>Overview</b>	<p>This service ensures both new threats are investigated, and those that are present are analysed as information comes to hand. The outcome of both investigations and analyse continually shape Council decisions and/or direction.</p> <p>The process used is outlined in further detail within the Marlborough District Council Biosecurity Strategy.</p>	
<b>Operational Summary for the coming year</b>	As a result of the decisions made during the RPMP review process, an investigation in the status of yellow-flag iris was committed to within the Tuamarina catchment.	
<b>Target 35</b>	By 30 June 2019, preliminary field surveillance for yellow-flag iris within the Tuamarina catchment is complete and reported to the Environment Committee.	
<b>2018/2019</b>		<p>A total of 25 hours were spent by Biosecurity staff undertaking surveillance within the Tuamarina catchment searching for yellow-flag iris.</p> <p>No infestations were discovered although many infestations of a close relative – stinking iris – were found recorded.</p>



### 3. Biocontrol

<p><b>Overview</b></p>	<p>For many invasive organisms that are well established in Marlborough (particularly invasive weed species), the only remaining intervention is control on an as needed basis by occupiers. What can assist that control is the introduction and movement where necessary of biological control agents.</p> <p>These biological control agents can also assist in the management of species managed under RPMP programmes.</p>	
<p><b>Operational Summary for the coming year</b></p>	<p>Council will continue to invest a core financial contribution into the National Biocontrol Collective. Councils around the country pool resources to fund a research programme to seek out and test biological control agents for invasive weed species.</p> <p>This contribution is currently \$15,000 excl GST.</p> <p>In addition to the core research programme, Council will budget for and request 'releases' of agents that could become available through the approval and mass-rearing side on the National Biocontrol Collective. These are typically new agents or agents where further releases ex mass reared stock are required.</p> <p>The budget for new releases is currently \$9,000 excl GST.</p>	
<p><b>Target 36.1</b></p>	<p>Each year, provide an annual contribution into the National Biological Control Initiative.</p>	
<p><b>2018/2019</b></p>		<p>A financial contribution of \$15,000 was provided to fund a collective research programme looking into new biological agents for invasive plant species.</p>
<p><b>Target 36.2</b></p>	<p>Each year, undertake a minimum of two new releases of biological control agents comprising of new agents (subject to availability) or existing agents available (subject to establishment status in Marlborough).</p>	
<p><b>2018/2019</b></p>		<p>Given the poorly establishment of control agents for tradescantia, only one new biological agent was available for release in 2018/2019. This was the Honshu White Admiral butterfly whose larvae feed solely on the invasive plant Japanese honeysuckle.</p> <p>One release of the Honshu White Admiral butterfly was made on a MDC Reserve in Picton with monitoring of establishment to occur over the coming years.</p>
<p><b>Target 36.3</b></p>	<p>Each year, undertake monitoring of all sites where agents were released ex-mass rearing stock within the previous 5 year period, to assess establishment status.</p>	
<p><b>2018/2019</b></p>		<p>Only two such releases had been made in the previous 5 years and these were both of agents targeting tradescantia. Monitoring occurred at both of these sites with unfortunately no evidence of establishment.</p>


## 4. Supporting Community Organisations

<p><b>Overview</b></p>	<p>On occasions, a community can come together to address concerns relating to harmful organisms within an area of interest.</p> <p>The organisms of concern are often those that are well established and the community is seeking a reduction in impact from those organisms. Outcomes can be related to improvement in biodiversity, aesthetics/landscapes, or even water yield and production values.</p> <p>While implementation of RPMP programmes is a priority, supporting these community organisations is a key goal within the Marlborough District Council Biosecurity Strategy. It is recognised that by supporting these organisations, the resulting work delivered and resources harnessed often well exceeds any single agency operating in isolation. In addition, the very nature of the organisations is community-driven, which make buy-in from the wider community an easier task.</p>	
<p><b>Operational Summary for the coming year</b></p>	<p>Support is provided through the Biosecurity Section of Council to:</p> <ul style="list-style-type: none"> <li>• Marlborough Sounds Restoration Trust - \$30,000 excl GST</li> <li>• South Marlborough Landscape Restoration Trust - \$30,000 excl GST</li> <li>• Chilean Needle Grass Action Group - \$25,000 excl GST</li> </ul>	
<p><b>Target 37</b></p>	<p>In 2018/19, provide an annual contribution into the following community organisations:</p> <ul style="list-style-type: none"> <li>• Marlborough Sounds Restoration Trust</li> <li>• South Marlborough Landscape Restoration Trust</li> <li>• Chilean Needle Grass Action Group</li> </ul>	
<p><b>2018/2019</b></p>		<p>Financial contributions by way of grants were made to the Marlborough Sounds Restoration Trust, South Marlborough Landscape Restoration Trust and a specific budget managed on behalf of the Chilean Needle Grass Action Group.</p>

## 5. Wilding Conifer Management


<p><b>Overview</b></p>	<p>The management of wilding conifers is a large, complex, landscape scale issue. What has been recognised is the need to approach the issue will all interested parties working in collaboration.</p> <p>Council sees its role as a lead facilitator in accordance with both the Marlborough District Council Biosecurity Strategy and statutory requirements relating to leadership under section 12B of the Biosecurity Act 1993.</p> <p>As part of this role in Marlborough, helping establish and maintain collaborative wilding conifer management programmes is integral to achieve positive outcomes.</p>	
<p><b>Operational Summary for the coming year</b></p>	<p>In relation to collaborative wilding conifer programmes, Council will:</p> <ul style="list-style-type: none"> <li>• Maintain active involvement with the National Wilding Conifer Control Programme (NWCCP) to ensure regional initiatives are aligned and well positioned.</li> <li>• As part of the NWCCP, fulfil the obligations of Regional Fundholder to ensure funded management works are delivered efficiently and effectively with open reporting lines.</li> <li>• Facilitate a Wilding Conifer Steering Group in Marlborough to ensure the key regional parties are well informed, foster collaboration and provide for transparent decision making.</li> <li>• Support and assist community organisations that have wilding conifers as an organism of interest (see Part Two, Section 4).</li> </ul> <p>The majority of resource allocated to this service is through the provision of staff time and related costs.</p>	
<p><b>Target 38.1</b></p>	<p>In 2018/19, fulfil the role of Regional Fundholder as part of the National Wilding Conifer Control Programme to the satisfaction of Biosecurity New Zealand (MPI).</p>	
<p><b>2018/2019</b></p>		<p>Throughout the course of the year, Biosecurity staff facilitated the activities of the National Wilding Conifer Control Programme regionally in Marlborough. This related solely to the Molesworth programme which was the only area receiving investment during Phase 1 of the programme.</p> <p>A large amount of work also went into preparing for a potential Phase 2 of the programme from 2019/20 onwards.</p>
<p><b>Target 38.2</b></p>	<p>In 2018/19, facilitate a Marlborough Wilding Conifer Steering Group meeting.</p>	
<p><b>2018/2019</b></p>		<p>As part of a review of the operating structure delivering the Molesworth programme, staff facilitated a process to re-form an oversight Steering Group for wilding conifer management moving forward.</p>

## 6. Research

<p><b>Overview</b></p>	<p>With all biosecurity programmes, a continual improvement in understanding relating both the organisms of interest and techniques to manage them is required.</p> <p>Some applied research is often carried out as part of operational programmes (e.g. farming system shifts to improve Chilean needle grass management) with other research more direct.</p>	
<p><b>Operational Summary for the coming year</b></p>	<p>Council has a current research focus comprising of:</p> <ul style="list-style-type: none"> <li>• Improved understanding of the risks related to the residual nature of flupropanate herbicide (as part of Council's role in supporting the product registration of Taskforce™ herbicide in New Zealand).</li> <li>• Undertaking further efficacy trials of Taskforce™ herbicide on kangaroo grass.</li> <li>• Ongoing support toward national research projects looking into the biological control of Vespula sp. wasps.</li> <li>• Ongoing support toward national research projects looking into the biological control of rabbits with RHDV.</li> </ul> <p>The research budget for 2018/19 is \$10,000.</p>	
<p><b>Target</b></p>	<p>N/A</p>	
<p><b>2018/2019</b></p>		<p>With the main research programme looking seeking further residual information coming to a close in 2017, the only related work undertaken was a further sample of bunches taken from grapevines that were part of the residual trial. This last sample was to round out a 6 years residual history and provide confirmation that residue levels of flupropanate have dropped to levels below the Maximum Residual Level.</p> <p>A trial to further test the efficacy of flupropanate targeting kangaroo grass was established in the Wairau Valley. The trial site will now be monitored over the coming 2-3 year period.</p> <p>Financial support has continued to be provided to the Sustainable Farming Fund project exploring potential biological control agents for Vespula sp. wasps.</p> <p>There continues to be work researching RHDV viruses led by Landcare Research. Although not deployed this year, Council is supporting this work by offering in-kind time to lay fly traps that are then analysed to assess virus loads being carried by the flies.</p>






## 7. Specific Projects

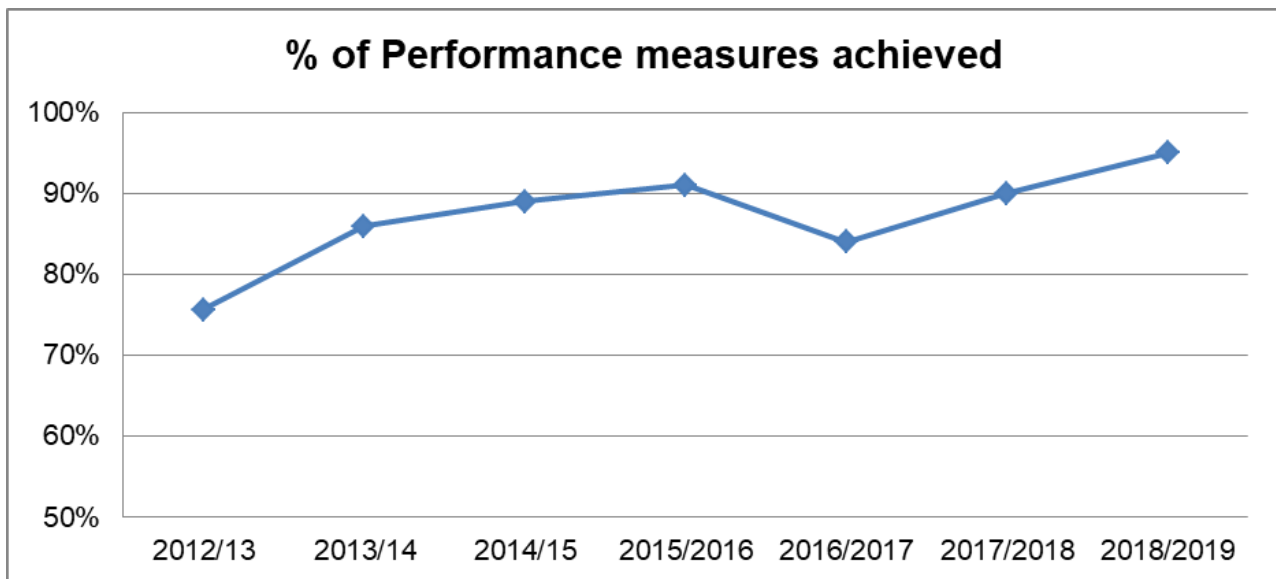
<p><b>Overview</b></p>	<p>On occasions, specific projects require the support and/or investment by Council. Each project is assessed on its merit and alignment with the Vision and Goals of the Marlborough District Council Biosecurity Strategy.</p>	
<p><b>Operational Summary for the coming year</b></p>	<p>Council has a current commitment to the following specific projects:</p> <ul style="list-style-type: none"> <li>• <b>Top of the South Marine Biosecurity Partnership</b>                      This initiative sees the three Top of the South (TOS) Councils come together with the Ministry for Primary Industries financially, and with many other parties in committee, to minimise the risk and impact of marine pests. It strongly supports the work delivered operationally by Council in the Mediterranean fanworm programme.                       A contractor delivers an agreed work programme across the TOS region which is focussed strongly on awareness, engagement, risk reduction and more recently surveillance/intelligence.   <u>Resource inputs:</u> <ol style="list-style-type: none"> <li>1. Financial contribution \$36,380</li> <li>2. Staff time and associated costs</li> </ol> </li> <li>• <b>Response to plague skinks in Marlborough</b>                      As a result of the detection of a breeding population of plague skinks in Marlborough (a first for the South Island), a response led by Biosecurity New Zealand and DOC commenced in June 2018.                       Council is a signatory to a Memorandum of Understanding in relation to this response and is fulfilling both a governance role and providing in-kind support to operations.   <u>Resource inputs:</u> Staff time and associated costs                 </li> </ul>	
<p><b>Target</b></p>	<p>N/A</p>	
<p><b>2018/2019</b></p>		<p>Council has continued to support the operation of the Top of the South Marine Biosecurity Partnership. This has been through the provision of co-funding in 2018-19 totalling \$36,380 and also fulfilling the role of Chairperson/Contract Manager.</p> <p>Over the course of the year, Biosecurity staff also sat on the Governance for the response to plague skinks being found in Marlborough and the South Island for the first time. As this response progressed, it was apparent that the infestations at Riverlands is established across a large area including the Cloudy Bay Business Park with advice suggesting they have been present for a long time. Interestingly, genetic work also signalled a close relationship to populations in their home range in Australia rather than those in the North Island.</p> <p>Given the situation in Havelock being a clear recent unintentional release, response activities re continuing attempting local elimination.</p>

## Part Three – Performance Summary

Overall scoring of performance objectives (excluding those that are not applicable):

Measure		2018/2019 Score
	Achieved	73 (95%)
	Almost Achieved	4 (5%)
	Not Achieved	0 (0%)
		77 (100%)

### Performance Trend



## Part Four – Operational Plan Review

In accordance with section 100B(1)(b) of the Biosecurity Act 1993, the Operational Plan 2018-2028 was subject to a review on 22 July 2019. The outcome of this review is summarised below.

Once ratified by Council, the proposed changes to the Operational Plan 2018-2028 will be carried out and be reported upon in the 2020 Operational Plan Report.

Section	Current content	Proposed change	Reason
Part 1 – Section 2. Bathurst bur	Target 2.2 Each year, 33% of sites that have a status of historical are visited for surveillance	Target 2.2 Each year, 10% of sites that have a status of historical are visited for surveillance, plus any site known to have had soil disturbance within the last 12 month period.	A large majority of historical sites for Bathurst bur have been under surveillance for 10+ years. A three year rotation for these sites is proving an inefficient use of resource. As a result, the plan is to extend the rotation but also make sure should any disturbance occur on those sites, surveillance is brought forward immediately.
Part 1 – Section 8. Chilean needle grass	New target	Target 8.7 Each year, a minimum of 6 sites without any infestations of Chilean needle grass – but are identified as being at risk - are visited for active surveillance.	There remain a number of sites that are either in close proximity to infestations or have historical linkages. By inserting such a target, this will ensure this component of important work is not missed during the control season.
Part 1 – Section 12. Eel grass	Target 12.2 Each year, 33% of sites that have a status of historical are visited for surveillance activities.	Remove Target 12.2	With so few sites of eel grass in close proximity, there is no need for such a rotation for historical sites. All sites can be easily monitored each year.
Part 1 – Section 16. Kangaroo grass	Target 16.1 By 30 June 2020, a baseline population assessment has been made, and metrics set, for the purposes of setting the longer term programme objective for <b>broom</b> within the control zones.	Target 16.1 By 30 June 2020, a baseline population assessment has been made, and metrics set, for the purposes of setting the longer term programme objective for <b>kangaroo grass</b> within the control zones.	Correcting a typographic error in drafting
Part 1 – Section 18. Mediterranean fanworm	Target 18.1 Each year, a minimum of two dive surveillance and removal operations are undertaken in Picton Marina.	Target 18.1 Each year, a minimum of two dive surveillance and removal operations are undertaken in Picton Marina <b>and Waikawa Marina.</b>	As a result of the detection of Mediterranean fanworm in 2018/2019, Waikawa Marina is now needing to be treated in the same way as Picton Marina.

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Section	Current content	Proposed change	Reason
Part 1 – Section 18. Mediterranean fanworm	Target 18.2 Each year, a minimum of two dive surveillance operations are carried out across Waikawa Marina, Waikawa Bay, Picton Port, and Shakespeare Bay.	Target 18.2 Each year, a minimum of two dive surveillance operations are <b>undertaken in</b> <del>Waikawa Marina,</del> Waikawa Bay, Picton Port, and Shakespeare Bay.	As a result of the detection of Mediterranean fanworm in 2018/2019, Waikawa Marina is now needing to be treated in the same way as Picton Marina. A minor grammatical alignment with Target 18.1.
Part 1 – Section 18. Mediterranean fanworm	Target 18.2 Each year, a minimum of one dive surveillance operations is carried out at Okiwi Bay, Elaine Bay, Duncan Bay, Endeavour Inlet, Ship Cove and Oyster Bay (Port Underwood).	Target 18.2 Each year, a minimum of one dive surveillance operations is <b>undertaken in</b> Okiwi Bay, Elaine Bay, Duncan Bay, Endeavour Inlet, Ship Cove, Oyster Bay (Port Underwood) and <b>Havelock Marina.</b>	A minor grammatical alignment with Target 18.1. Inclusion of annual surveillance in Havelock Marina incorrectly omitted from the Operational Plan.
Part 1 – Section 20. Nassella tussock	Target 20.4 Each year, a minimum of 20 hours of surveillance is carried out on land not previously known to have an infestation of nassella tussock.	Target 20.4 Each year, a minimum of <b>200 hours</b> of surveillance is carried out on land not previously known to have an infestation of nassella tussock.	To reflect the known effort that does occur in reality across land not known to have an infestation of nassella tussock.
Part 1 – Section 25. Rooks	Status of rooks in Marlborough: Last detection in 2010 (wharanui)	Status of rooks in Marlborough: Last detection in 2019 (near Fairhall)	As a result of the detection and destruction of a single rook near Fairhall in May 2019.
Part 1 – Section 26. Rough horsetail	Target 26.1 By 30 June 2019, a baseline population assessment has been made, and metrics set, for the purposes of setting the longer term programme objective for rough horsetail.	Remove Target 26.1	As reported, this target has been met and no longer required in the Operational Plan.
Part 1 – Section 28. Senegal tea	Target 28.1 Ensure that historical sites of Senegal tea are inspected at least once every 5 years to ensure there is no long term re-emergence.	Remove Target 28.1	There has been a change in the classification and management of sites where a pest has not been found for >10 years. This includes Senegal tea sites. These sites are no longer recorded as historical and captured by such a target.

Section	Current content	Proposed change	Reason
Part 1 – Section 32. White-edged nightshade	Target 32.1 By 30 June 2020, a baseline population assessment has been made, and metrics set, for the purposes of setting the longer term programme objective for white-edged nightshade.	Remove Target 32.1	As reported, this target has been met and no longer required in the Operational Plan.
Part 1 – Section 33. Willow-leaved hakea	Target 33.1 By 30 June 2019, a detailed project plan has been prepared detailing the required operational activities to occur on Rangitoto ki te Tonga/D’Urville Island over the following 5 year period.	Target 33.1 By 21 January 2020, a detailed project plan has been prepared detailing the required operational activities to occur on Rangitoto ki te Tonga/D’Urville Island over the following 5 year period.	As reported, this target was not fully achieved. As a result, the timeframe is proposed to be extended with the intent for the programme to get underway in 2019/20.
Part 1 – Section 33. Willow-leaved hakea	New target	Target 33.3 Each year, a control operation is undertaken on Rangitoto ki te Tonga/D’Urville in accordance with the project plan.	To align with the other programme Rangitoto ki te Tonga/D’Urville for woolly nightshade anticipated to be managed in tandem.
Part 2 – Section 2. Investigation and analysis	Target 35 By 30 June 2019, preliminary field surveillance for yellow- flag iris within the Tuamarina catchment is complete and reported to the Environment Committee.	Target 35 By 30 June 2020, undertake active surveillance activities for aquatic pest species at a minimum of 2 sites identified as being at risk from such threats.	The results of the preliminary surveillance for yellow-flag iris were reported as part of the Environment Committee Information Pack on 30 April 2019. The proposed replacement target is aimed at the early detection of aquatic pest species that may appear in the environment.
Part 2 – Section 3. Biocontrol	Target 36.3 Each year, undertake monitoring of all sites where agents were released ex-mass rearing stock within the previous 5 year period, to assess establishment status.	Target 36.3 Each year, undertake monitoring of all sites where agents were released ex-mass rearing stock within the previous 3 year period, to assess establishment status.	A 3 year period is deemed adequate to assess whether an agent remains to be present post-release.
Part 2 – Section 6. Research	Current research focus area: <ul style="list-style-type: none"> <li>Ongoing support toward national research projects looking into the biological control of rabbits with RHDV</li> </ul>	Removing the current research area in relation to RHDV national research projects.	Prior national research projects have come to their end and there are no such projects currently underway. Council will continue to undertake local sampling and assessment of RDHV immunity levels as part of the feral rabbit programme.