

Environment Committee Meeting

24 November 2022

This Report relates to Item 16 in the Agenda

“Biosecurity – Operational Plan Report 2021/2022”

Biosecurity

Operational Plan Report

2021/2022

September 2022



**MARLBOROUGH
DISTRICT COUNCIL**

**Biosecurity
Operational Plan Report
2021/2022**

Record No: 22149189

September 2022

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Introduction

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 (Act) 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.



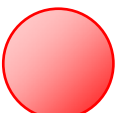

Part Two will report on various other biosecurity services and/or initiatives that Council has decided to implement or support.

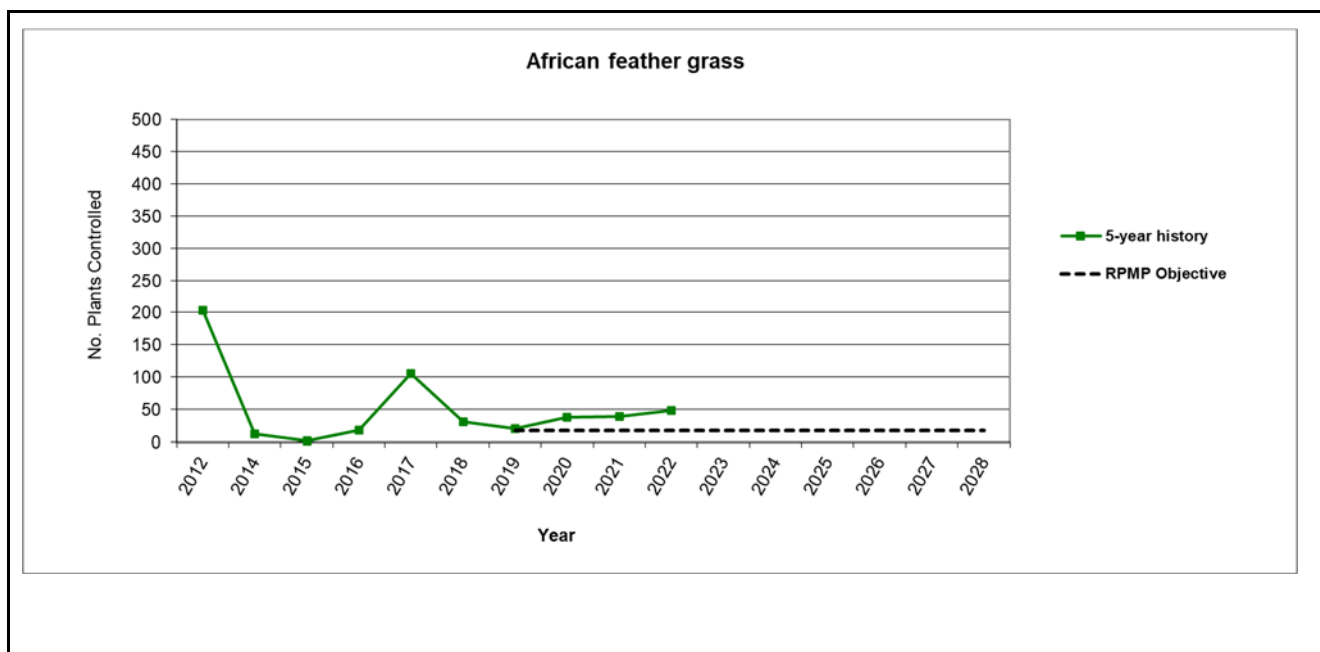
Part Three details a summary of performance against targets for the 2021/2022 year and over time.

Part Four details the annual review of the Operational Plan 2018-2028 in accordance with section 100B(1)(b) of the Act, including any proposed changes to the operational plan because of the review.



Performance Scoring System

The Operational Plan outlines several 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 2021/2022 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.

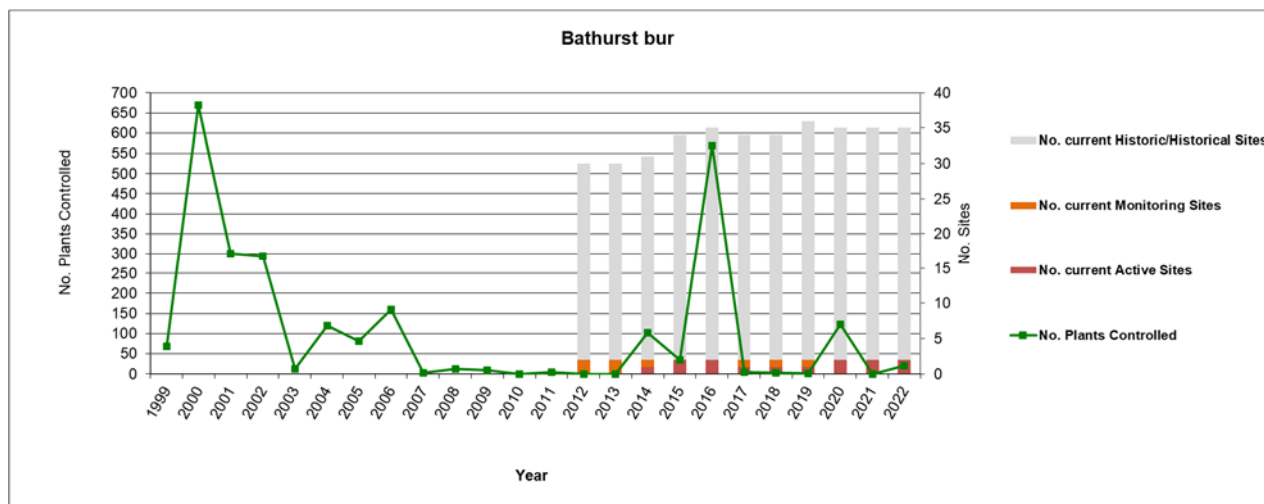


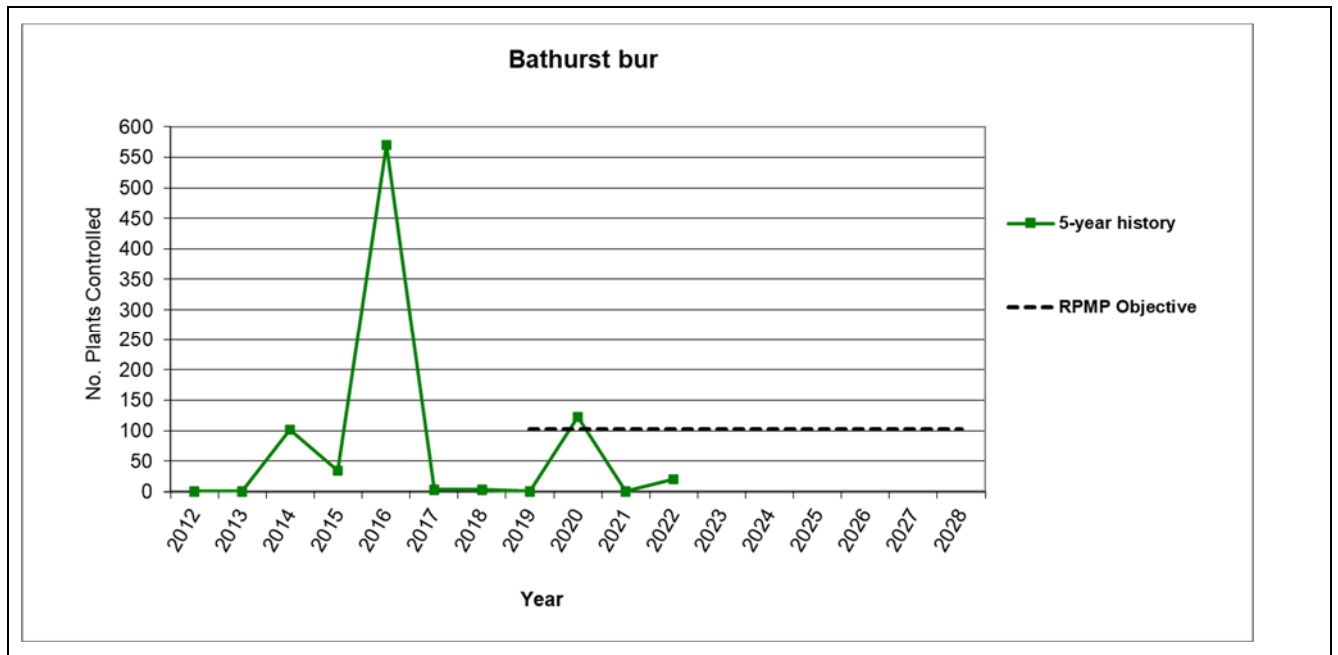
2. Bathurst bur (*Xanthium spinosum*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	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.			
Operations overview	Council staff and/or contractors will carry out all operational activities.			
Target 2.1	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
2021/2022		All 'active' and 'monitoring' Bathurst bur sites were visited for control activities for 2021/2022. Only 20 plants were found and destroyed, compared to 0 plants in 2020/2021 and 122 plants in 2019/2020.		
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.			
2021/2022		5 sites out of 33 sites (15%) with a historical status were visited for surveillance activities during 2021/2022. No plants were found at any historical site, and no historical sites were known to be subject to any soil disturbance.		

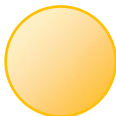

Programme trend:

 On track





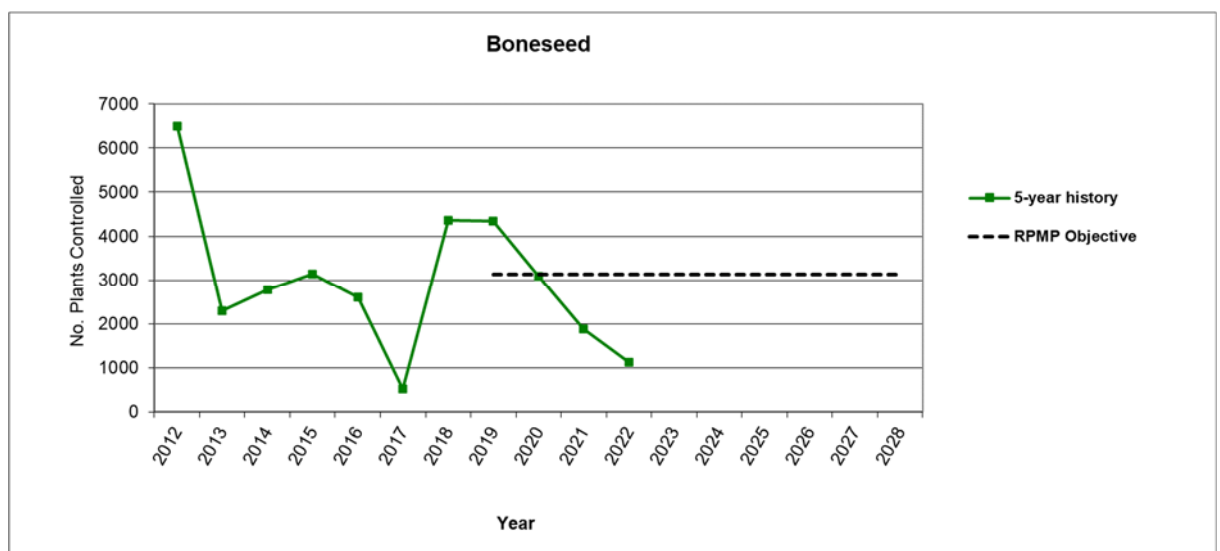
3. Boneseed (*Chrysanthemoides monilifera*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	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.			
Operations overview	A Memorandum of Understanding has been agreed to by the Department of Conservation (DOC) and Council that includes the management of boneseed. Operational activities are pre-planned each year and are delivered by either: a) Council staff and/or contractors, or; b) Joint operations between DOC and Council staff and/or contractors (predominantly Queen Charlotte Sound/Tory Channel sites), or; c) DOC staff (Kenepuru Sound, Ocean Bay sites).			
Target 3.1	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
2021/2022		92% of sites with a status of active or monitoring were visited during 2021/2022. This resulted in the removal of 1128 plants. Of the two sites that were not visited – one on Moenui Road was where a single plant was found and destroyed in 2019, and the other an active site in Double Bay on Arapaoa Island. These sites will be prioritised in 2022/2023.		
Target 3.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
2021/2022		One of the two historical sites was visited in 2021/2022.		

Programme trend:





On track






Large boneseed shrub found in Rarangi


4. Broom (*Cytisus scoparius*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective 1	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.			
Objective 2	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.			
Operations overview	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.			
Target 4.1	No more than 1 instance of non-compliance needing enforcement action is identified within the three Control Zones			
2021/2022		No situations were identified requiring enforcement action.		
Target 4.2	Each year, undertake inspection and/or surveillance activities in all three zones.			
2021/2022		<u>Waima/Ure</u> Surveillance was undertaken in the Ure area, very few plants were found. A number of landowners were spoken to on the roadside, landowners indicated that there were very few broom plants being found. <u>Upper Wairau</u> Inspections of land within this Zone were carried out. There are a number of areas that require follow up in the 2022/2023 year. <u>Upper Awatere</u> 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 are a few instances of where follow-up maybe needed in 2022/2023		


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Target 4.3	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.	
2021/2022		No reports/complaints were received during the 2021/2022 year.

5. Brushtail possum (*Trichosurus vulpecula*)

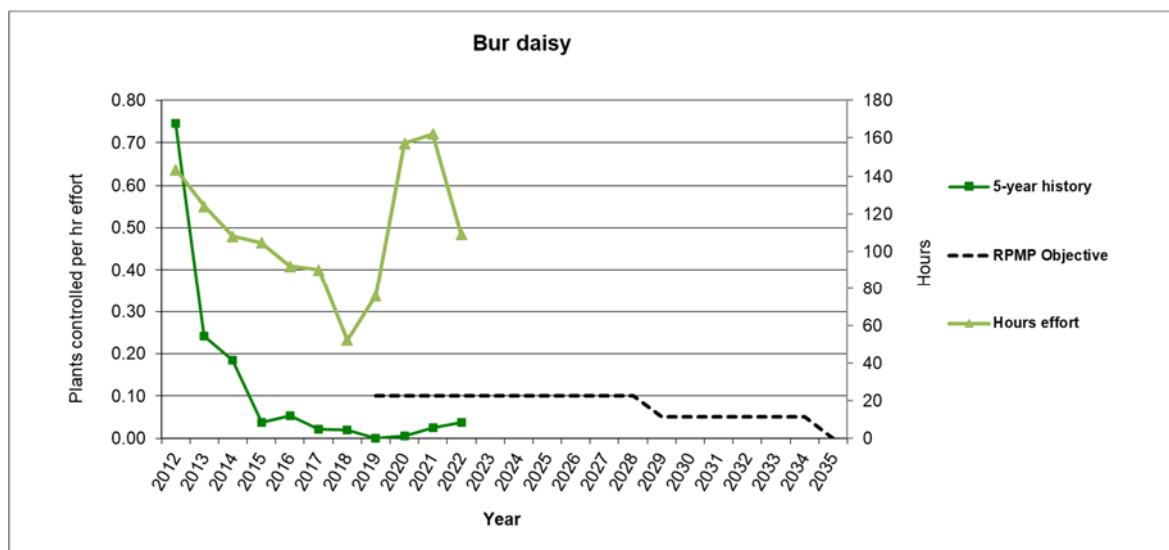
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	Over the duration of the Plan, prevent the establishment of brushtail possums (<i>Trichosurus vulpecula</i>) on islands currently known to be possum-free in the Marlborough Sounds (see Appendix 4 and Map 4 of the RPMP) to prevent future impacts on the environment and enjoyment of the natural environment.			
Operations overview	<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>			
Target 5.1	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.			
2021/2022		One report of shoreline carcass on was received by the Department of Conservation (DOC) on Arapaoa Island. A jointly funded investigation was overseen by DOC with no evidence found of any other live possums.		
Status of brushtail possums on designated islands:				
Not established				

6. Bur daisy (*Calotis lappulacea*)



Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective 1	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.			
Objective 2	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.			
Operations overview	Council staff and/or contractors will carry out all operational activities.			
Target 6.1	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
2021/2022		<p>109 hours of surveillance/control activities were undertaken at the only known Bur daisy site known to exist in Marlborough. Four plants were found.</p> <p>If a future trend determines that increased surveillance activities does not correlate to an increase in plants found, then future management plans to scale back those activities can be considered.</p>		

Programme trend:

 On track

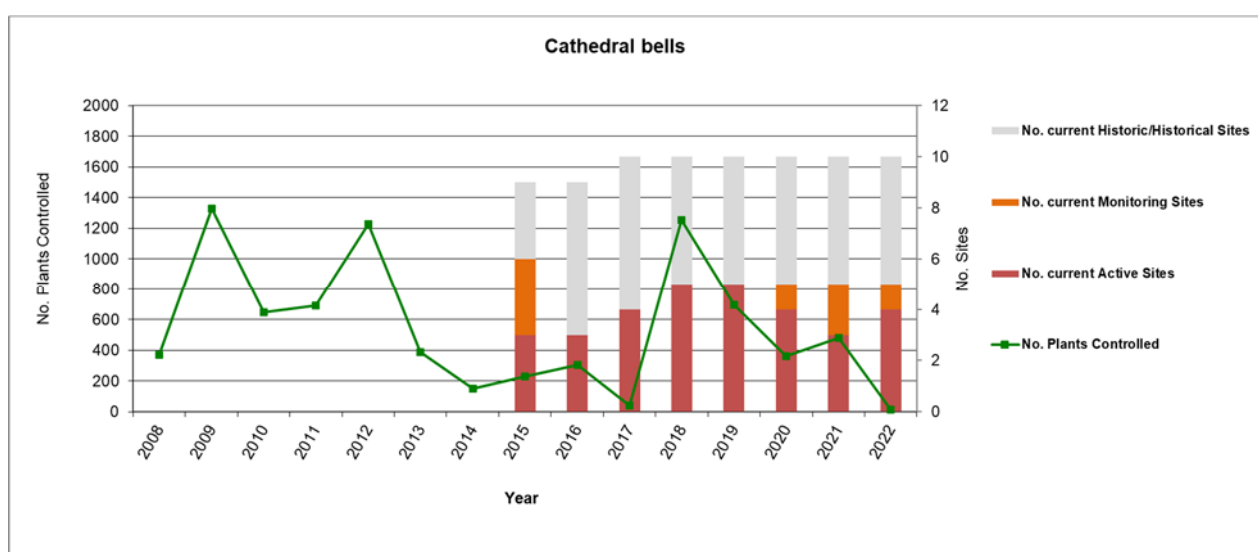


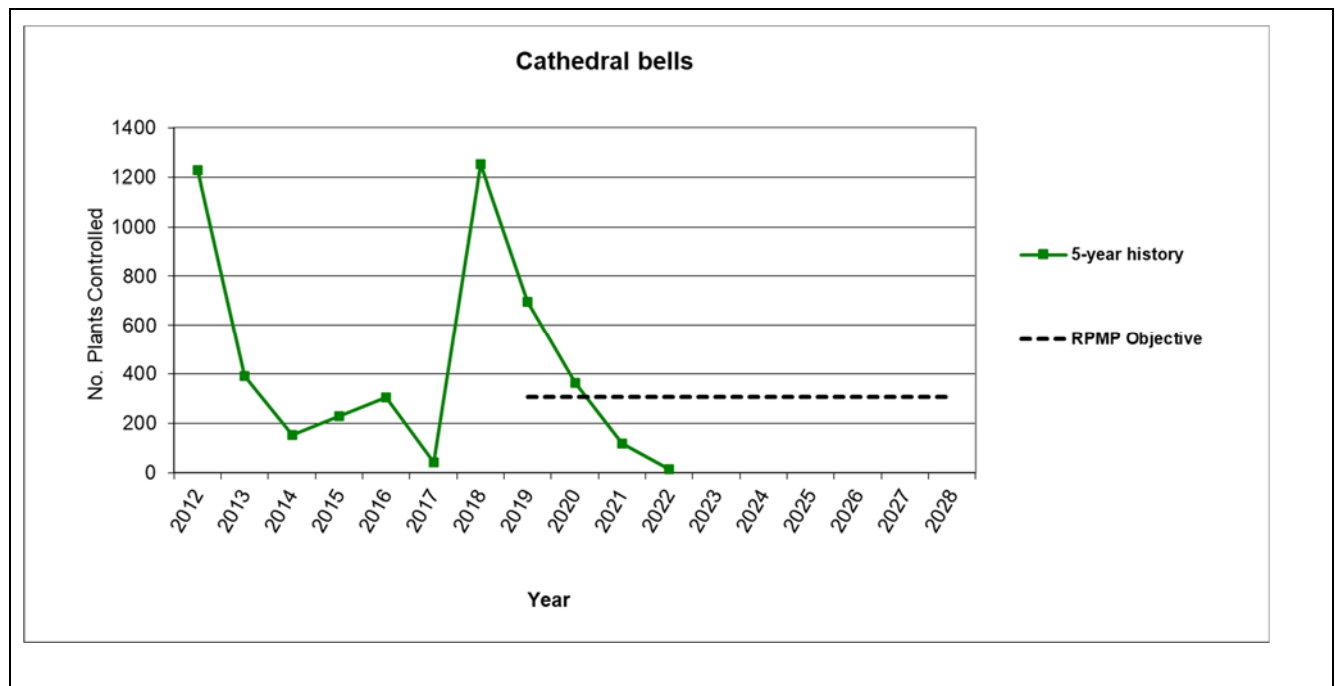
7. Cathedral bells (*Cobaea scandens*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	Over the duration of the Plan, control cathedral bells (<i>Cobea 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.			
Operations overview	A Memorandum of Understanding has been agreed to by DOC and Council that includes the management of cathedral bells. 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.			
Target 7.1	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
2021/2022		All five sites with the status of 'active or 'monitoring' were visited in 2021/2022. Only 16 plants were found and destroyed – substantially less than previous seasons.		
Target 7.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
2021/2022		3 sites out of 5 sites (60%) with a historical status were visited for surveillance activities during 2021/2022. No plants were found.		



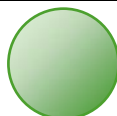
Programme trend:




 On track





8. Chilean needle grass (*Nassella neesiana*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	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. *A baseline assessment will be made either prior to or immediately after the Plan commences			
Operations overview	There are multiple facets to the Chilean needle grass programme delivered by Council. These are: <ul style="list-style-type: none">• 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.• Active facilitation to develop management plans, and undertake compliance function where necessary, on the more heavy infested sites.• Agree upon, and then where identified, provide cost sharing on the implementation of management plans.• 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.• Continue to deliver ongoing communication, education and awareness initiatives. 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.			
Target 8.1	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.			
2021/2022		Active facilitation and/or inspection occurred for 100% of sites.		
Target 8.2	Each year, carry out required management work, on 100% of sites that have an infestation of Chilean needle grass where Council undertakes strategic management.			
2021/2022		Control work visits by staff and/or contractors occurred on 100% of these sites.		
Target 8.3	Each year, any report of potential Chilean needle grass received by Council is investigated within 2 working days.			
2021/2022		Council received several reports of suspected Chilean needle grass in 2021/2022. All reports had an investigation started within 24 hours of receiving the report.		

Target 8.4	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.	
2021/2022		A calculated total of 2819 hours of staff and contractor time was spent on surveillance activities outside of previously known infested areas.
Target 8.5	Provide support to the Chilean Needle Grass Action Group or any other related project where there are shared outcomes.	
2021/2022		Council managed a specific budget on behalf of the Chilean Needle Grass Action Group in 2020/21. This was used to contract NZ Landcare Trust to deliver facilitation services for the group and fund other group-initiated expenses.
Target 8.6	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.	
2021/2022		A total of 30 sites without known populations of CNG were and checked throughout the flowering season.

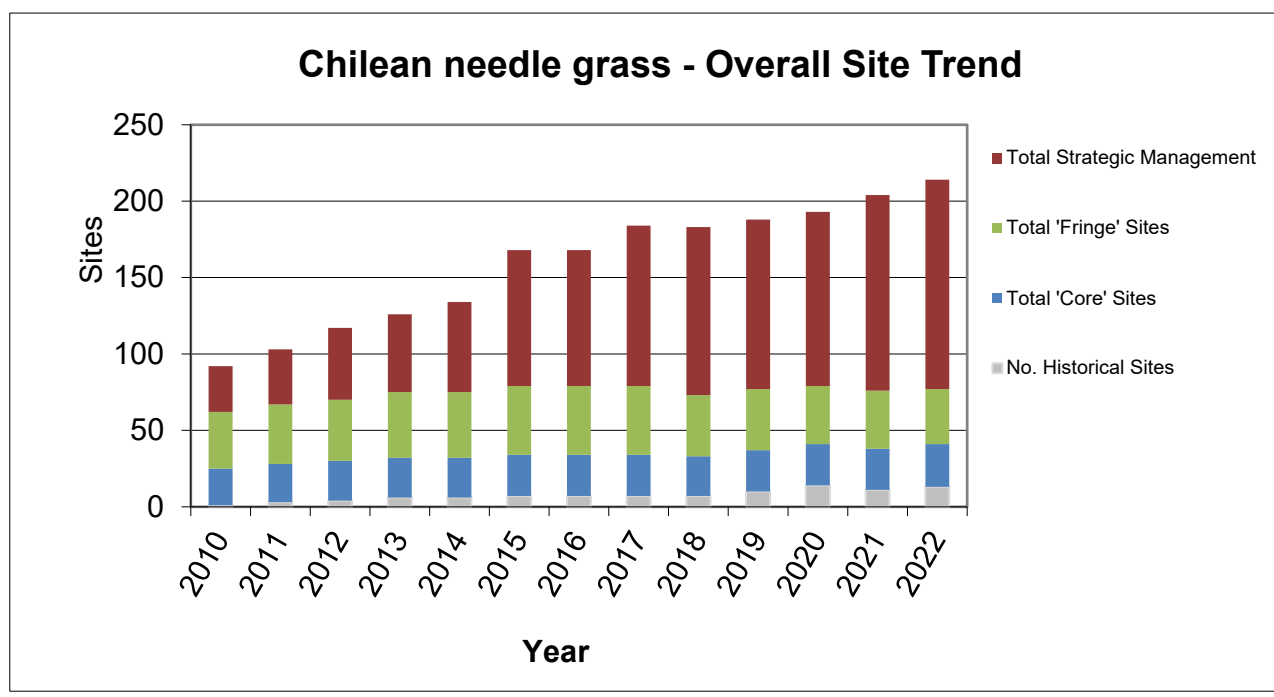
Programme trend:

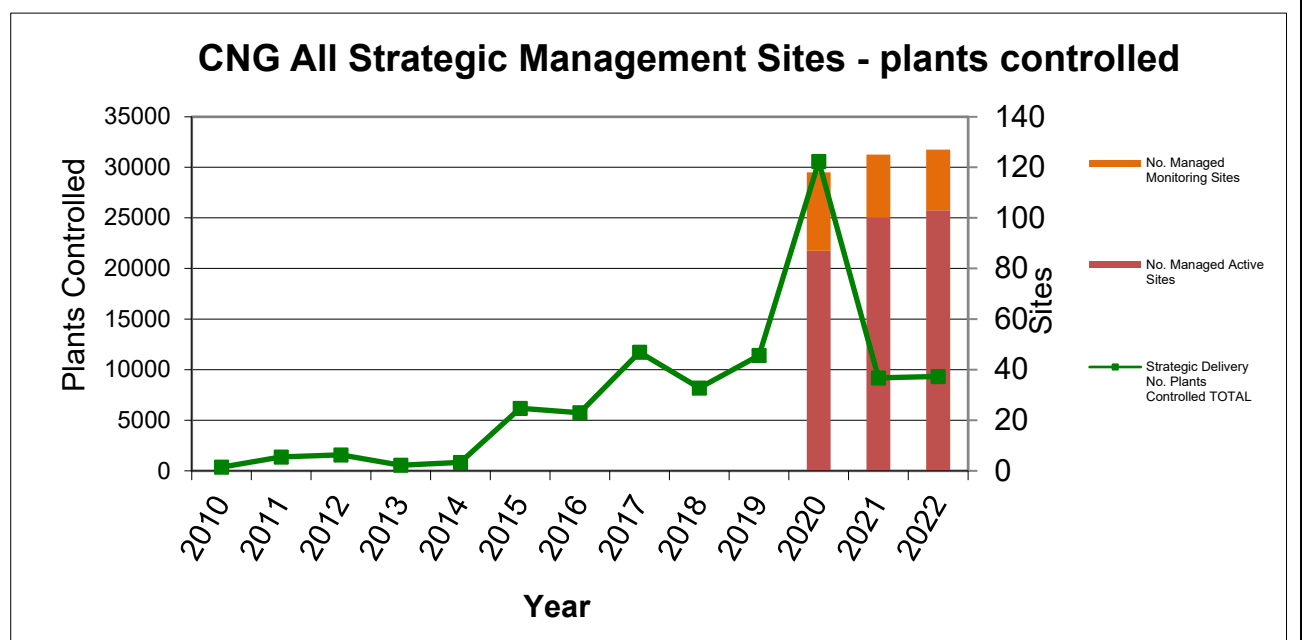
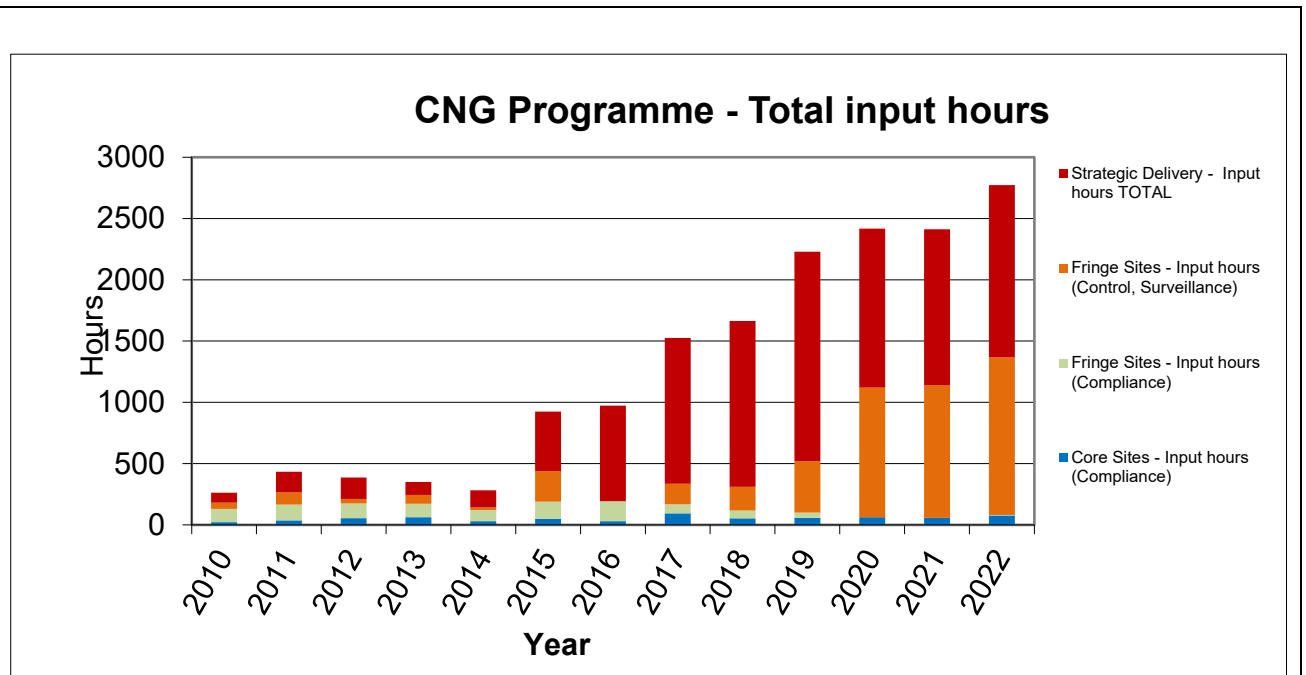


On track

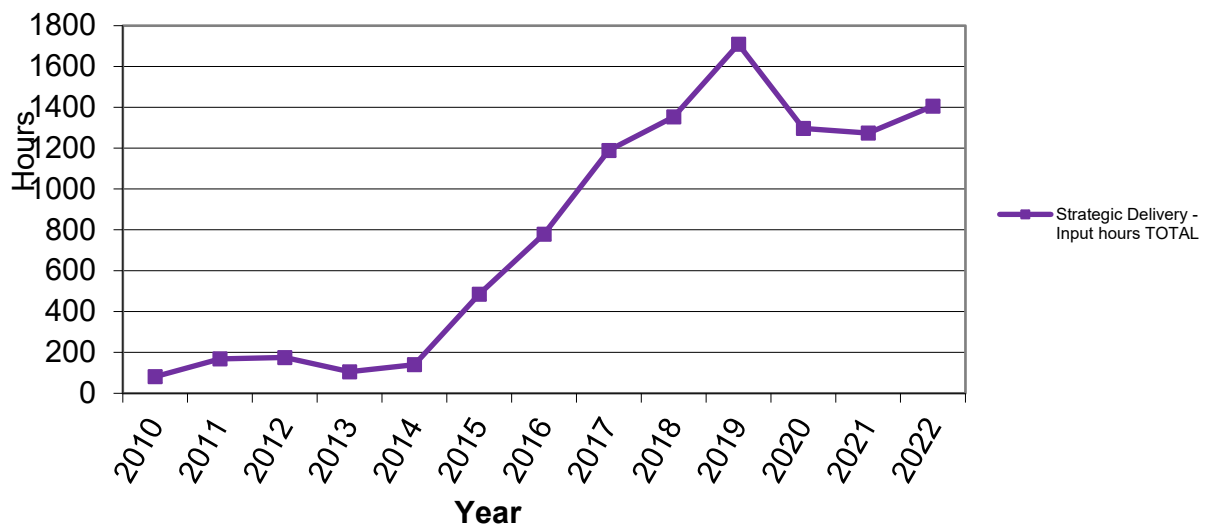
The following trend datasets are being used by Council to monitor the progress of the Chilean needle grass programme.

While the area affected is increasing, this is expected given this dataset is cumulative only. The number of plants controlled on strategic management sites is not trending upwards and the plants per unit effort is flat to marginally increasing on the baseline sites used for long term monitoring.

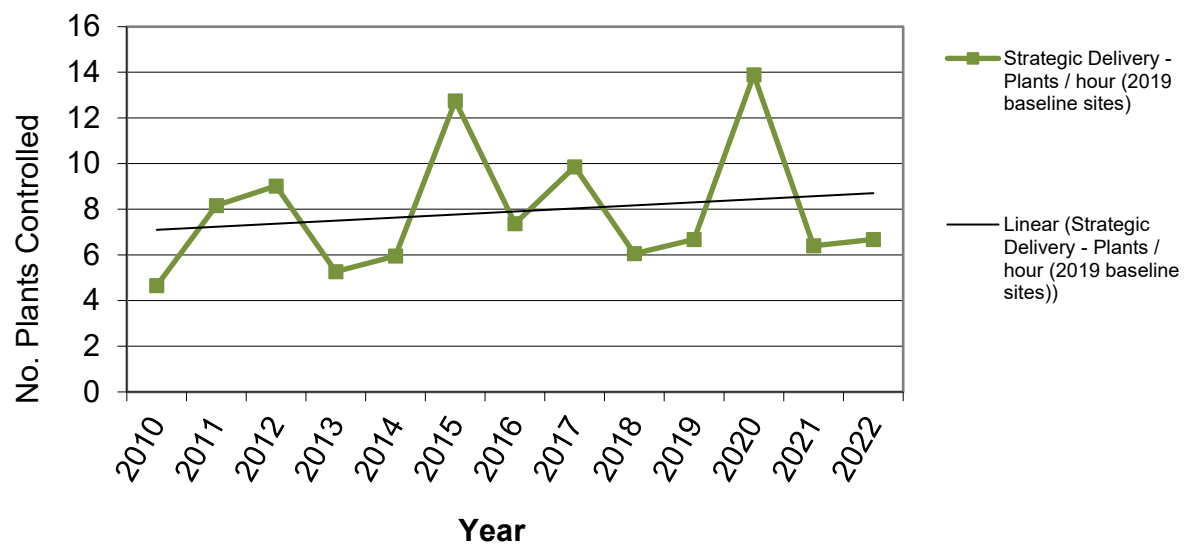


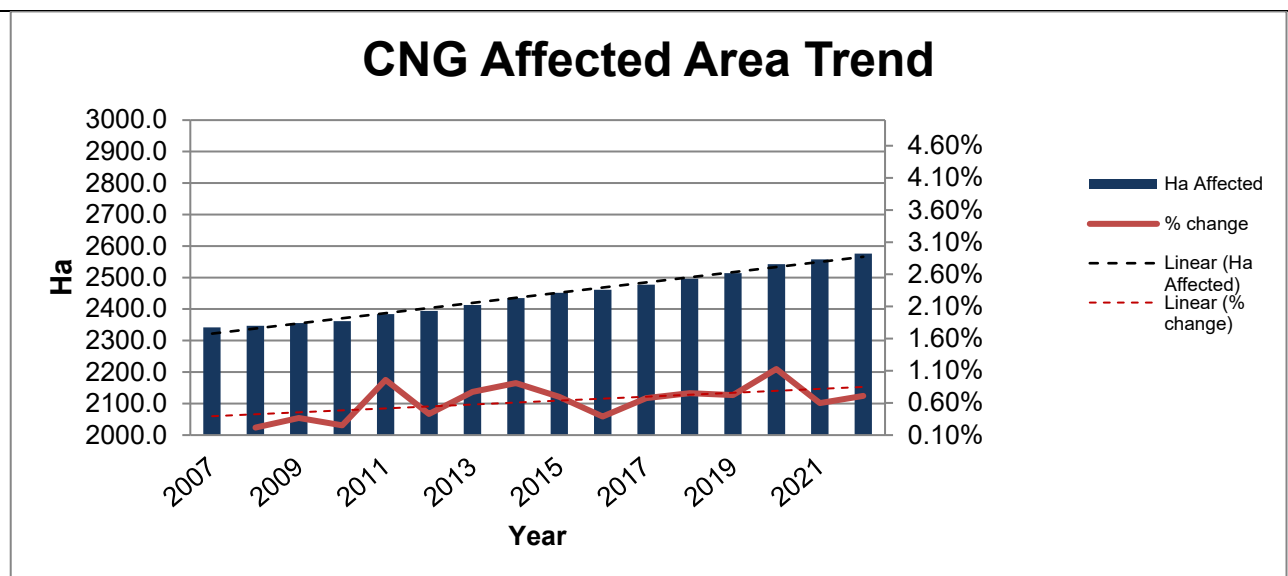


CNG Strategic Management Sites - input hours






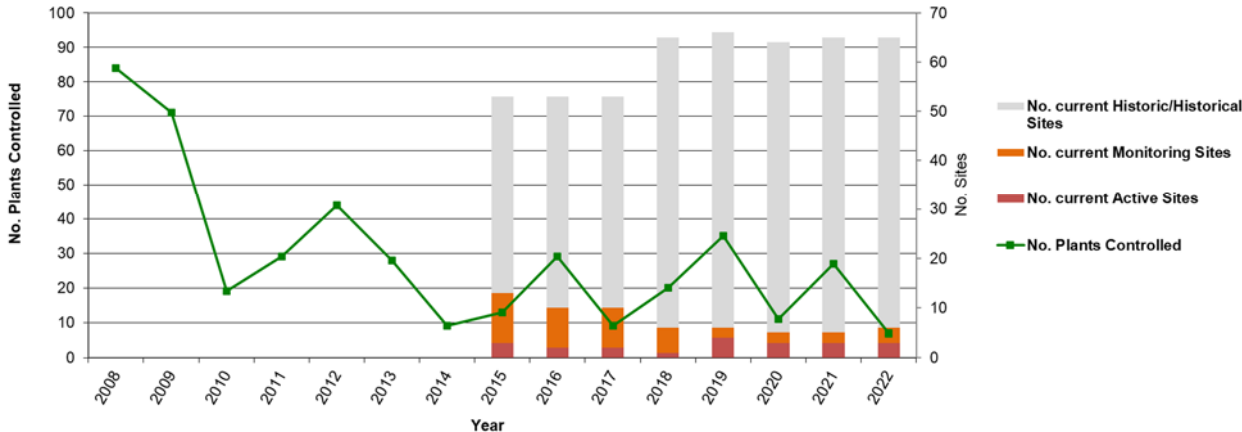
CNG Baseline Sites (2019) - plants/hour input

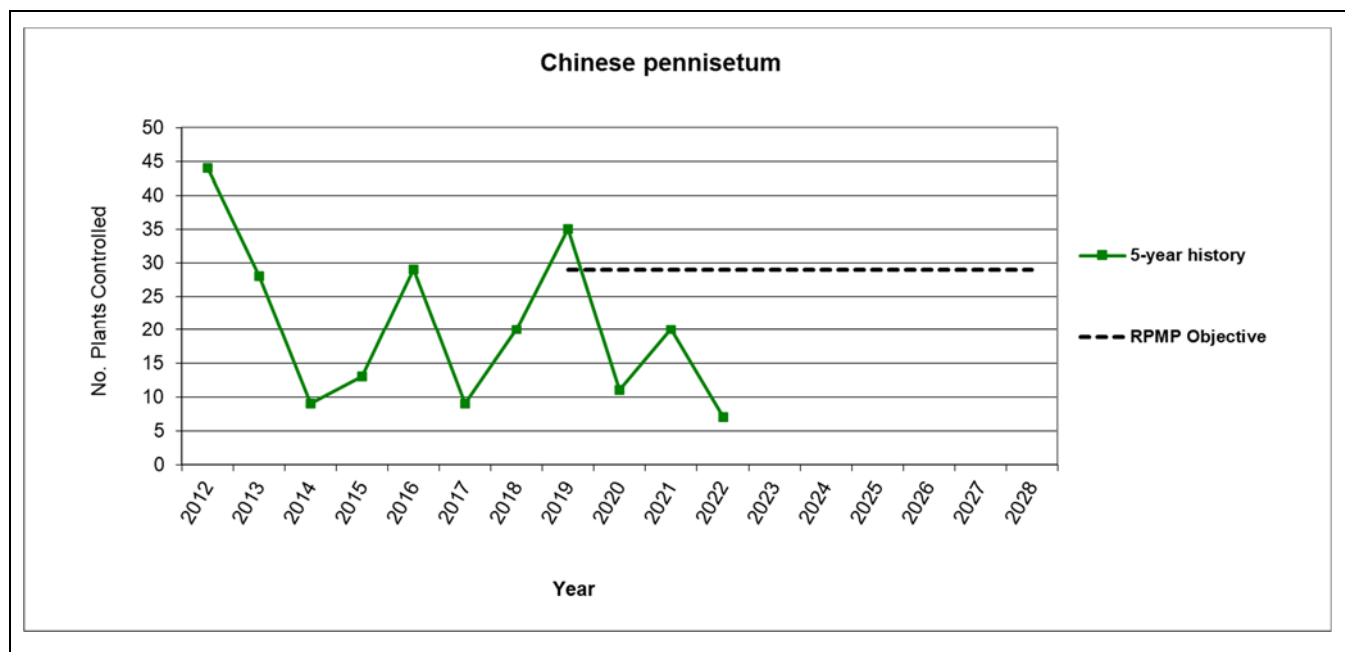






Chilean needle grass, found at Endeavour Park in Picton.

9. Chinese pennisetum (*Pennisetum alpecuroides*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led																																																																																
Objective	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.																																																																																			
Operations overview	Council staff and/or contractors will carry out all operational activities.																																																																																			
Target 9.1	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.																																																																																			
2021/2022		All 'active' and 'monitoring' sites were visited for 2021/2022. Overall, the annual plant numbers are trending to the RPMP objective, to keep plant numbers at or below 2016 levels. However, there is a short-term trend showing a spike in plant numbers every 2-3 years followed by a decrease in plant numbers in the following year. The reason for this pattern of events in not known.																																																																																		
Target 9.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.																																																																																			
2021/2022		21 out of 60 historical sites were visited and no plants were found.																																																																																		
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<div><p>Chinese pennisetum</p><table><thead><tr><th>Year</th><th>No. current Historic/Historical Sites</th><th>No. current Monitoring Sites</th><th>No. current Active Sites</th><th>No. Plants Controlled</th></tr></thead><tbody><tr><td>2008</td><td>0</td><td>0</td><td>0</td><td>85</td></tr><tr><td>2009</td><td>0</td><td>0</td><td>0</td><td>70</td></tr><tr><td>2010</td><td>0</td><td>0</td><td>0</td><td>20</td></tr><tr><td>2011</td><td>0</td><td>0</td><td>0</td><td>30</td></tr><tr><td>2012</td><td>0</td><td>0</td><td>0</td><td>45</td></tr><tr><td>2013</td><td>0</td><td>0</td><td>0</td><td>30</td></tr><tr><td>2014</td><td>0</td><td>0</td><td>0</td><td>10</td></tr><tr><td>2015</td><td>55</td><td>10</td><td>5</td><td>15</td></tr><tr><td>2016</td><td>55</td><td>10</td><td>5</td><td>30</td></tr><tr><td>2017</td><td>55</td><td>10</td><td>5</td><td>15</td></tr><tr><td>2018</td><td>65</td><td>10</td><td>5</td><td>20</td></tr><tr><td>2019</td><td>65</td><td>10</td><td>5</td><td>35</td></tr><tr><td>2020</td><td>65</td><td>10</td><td>5</td><td>15</td></tr><tr><td>2021</td><td>65</td><td>10</td><td>5</td><td>25</td></tr><tr><td>2022</td><td>65</td><td>10</td><td>5</td><td>10</td></tr></tbody></table></div>					Year	No. current Historic/Historical Sites	No. current Monitoring Sites	No. current Active Sites	No. Plants Controlled	2008	0	0	0	85	2009	0	0	0	70	2010	0	0	0	20	2011	0	0	0	30	2012	0	0	0	45	2013	0	0	0	30	2014	0	0	0	10	2015	55	10	5	15	2016	55	10	5	30	2017	55	10	5	15	2018	65	10	5	20	2019	65	10	5	35	2020	65	10	5	15	2021	65	10	5	25	2022	65	10	5	10
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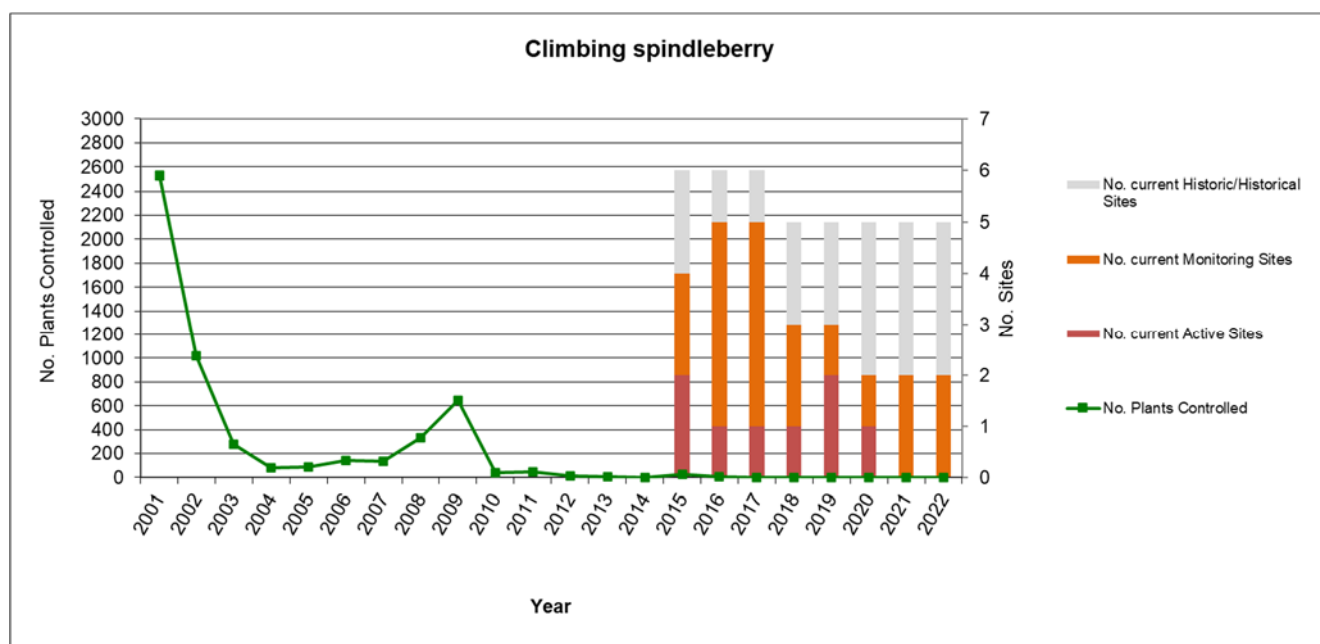


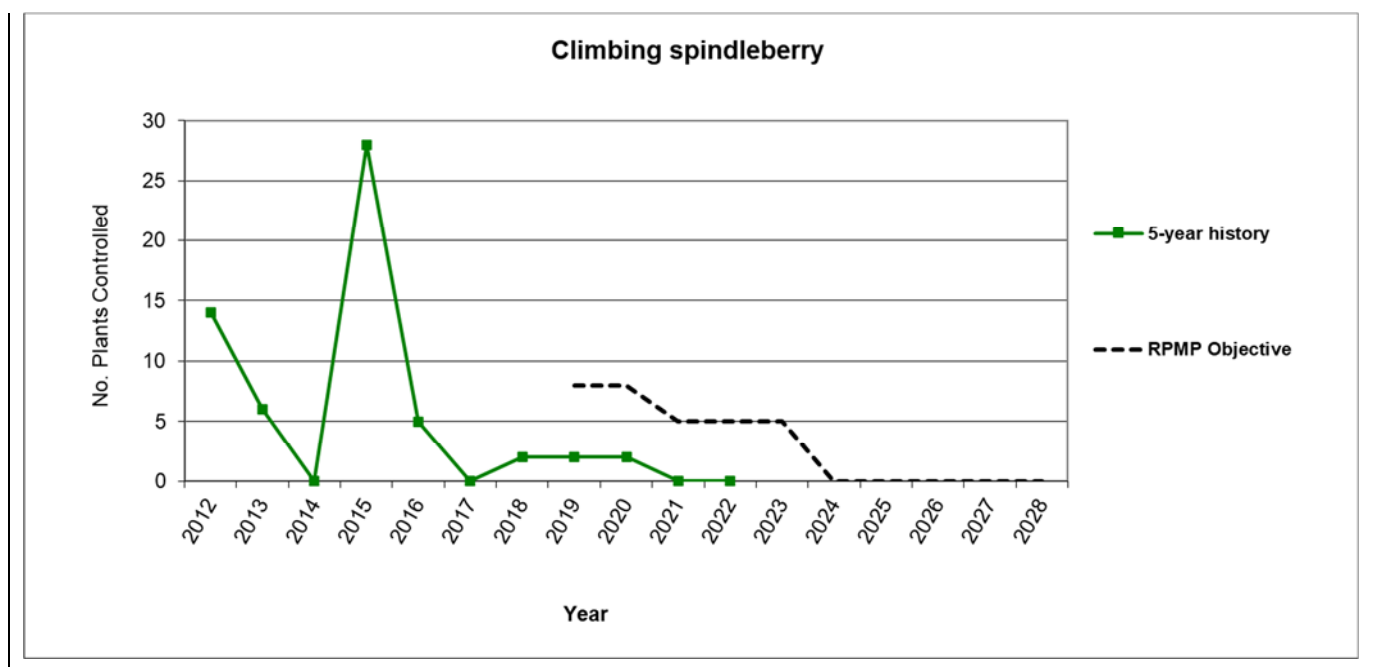
10. Climbing spindleberry (*Celastrus orbiculatus*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	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.			
Operations overview	A Memorandum of Understanding has been agreed to by DOC and Council that includes the management of climbing spindleberry. 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.			
Target 10.1	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
2021/2022		All 'active' and 'monitoring' sites were visited for 2021/2022. No plants were found at any of the sites. There are currently no active spindleberry sites in Marlborough.		
Target 10.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
2021/2022		All historical sites were visited, with no plants were found.		




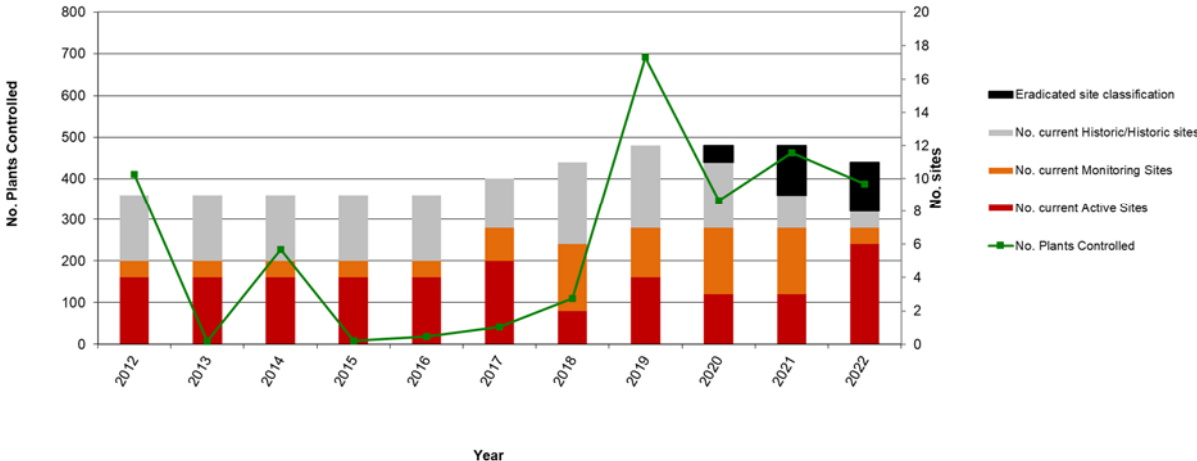
Programme trend:

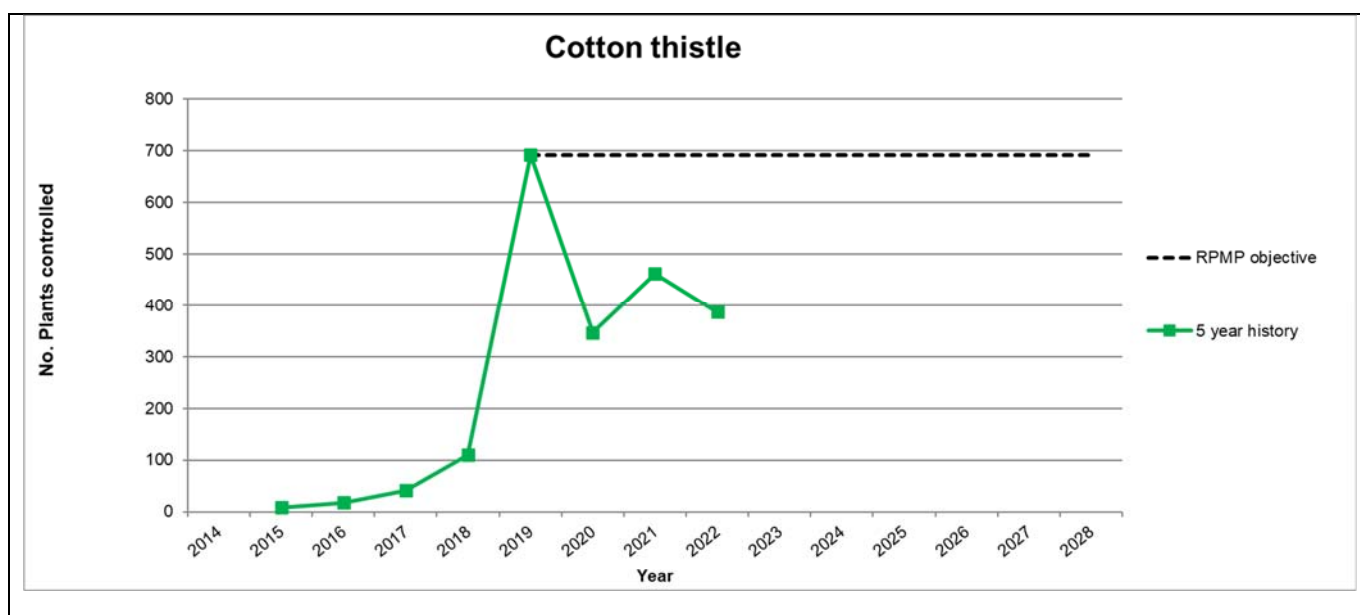
 On track






11. Cotton thistle (*Onopordum acanthium*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led																																																												
Objective	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. *A baseline level assessment will be made either prior to or immediately after the Plan commences.																																																															
Operations overview	Council staff and/or contractors will carry out all operational activities.																																																															
Target 11.1	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.																																																															
2021/2022		All sites with a status of active or monitoring were visited in 2021/2022.																																																														
Target 11.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.																																																															
2021/2022		The one historical site was visited for a surveillance inspection. No plants were found.																																																														
Programme trend:																																																																
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<div><p>Cotton thistle</p><table><thead><tr><th>Year</th><th>No. current Active Sites</th><th>No. current Monitoring Sites</th><th>No. current Historic/Historic sites</th><th>No. Plants Controlled</th></tr></thead><tbody><tr><td>2012</td><td>180</td><td>40</td><td>120</td><td>10</td></tr><tr><td>2013</td><td>180</td><td>40</td><td>120</td><td>10</td></tr><tr><td>2014</td><td>180</td><td>40</td><td>120</td><td>10</td></tr><tr><td>2015</td><td>180</td><td>40</td><td>120</td><td>10</td></tr><tr><td>2016</td><td>180</td><td>40</td><td>120</td><td>10</td></tr><tr><td>2017</td><td>180</td><td>40</td><td>120</td><td>10</td></tr><tr><td>2018</td><td>180</td><td>40</td><td>120</td><td>10</td></tr><tr><td>2019</td><td>180</td><td>40</td><td>120</td><td>18</td></tr><tr><td>2020</td><td>180</td><td>40</td><td>120</td><td>10</td></tr><tr><td>2021</td><td>180</td><td>40</td><td>120</td><td>10</td></tr><tr><td>2022</td><td>180</td><td>40</td><td>120</td><td>10</td></tr></tbody></table></div>					Year	No. current Active Sites	No. current Monitoring Sites	No. current Historic/Historic sites	No. Plants Controlled	2012	180	40	120	10	2013	180	40	120	10	2014	180	40	120	10	2015	180	40	120	10	2016	180	40	120	10	2017	180	40	120	10	2018	180	40	120	10	2019	180	40	120	18	2020	180	40	120	10	2021	180	40	120	10	2022	180	40	120	10
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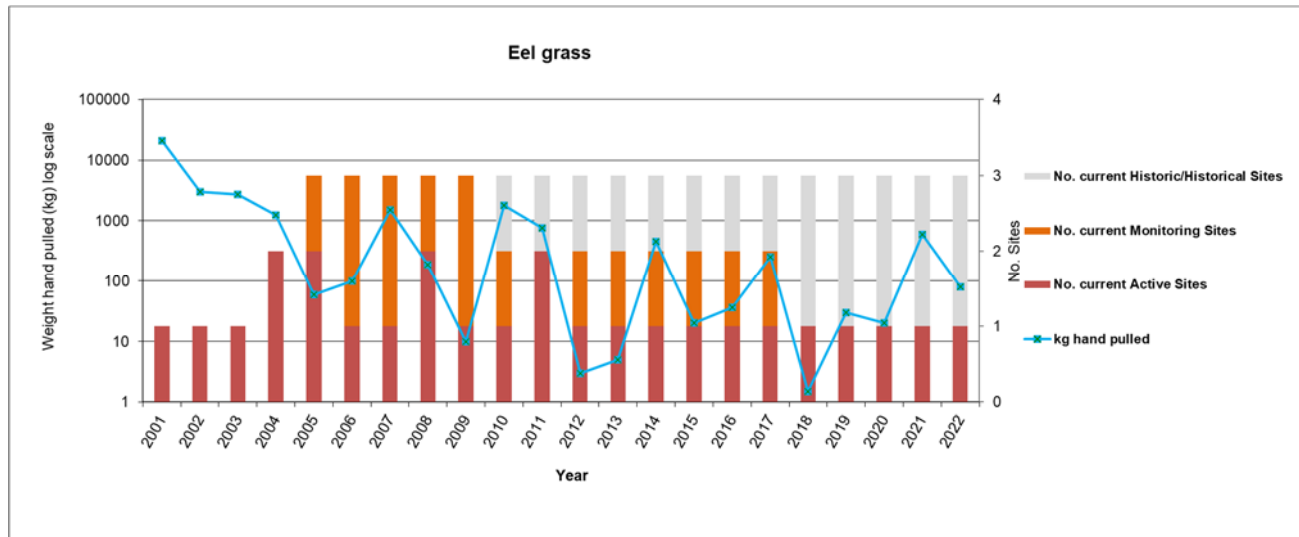
12. Eel grass (*Vallisneria australis*)

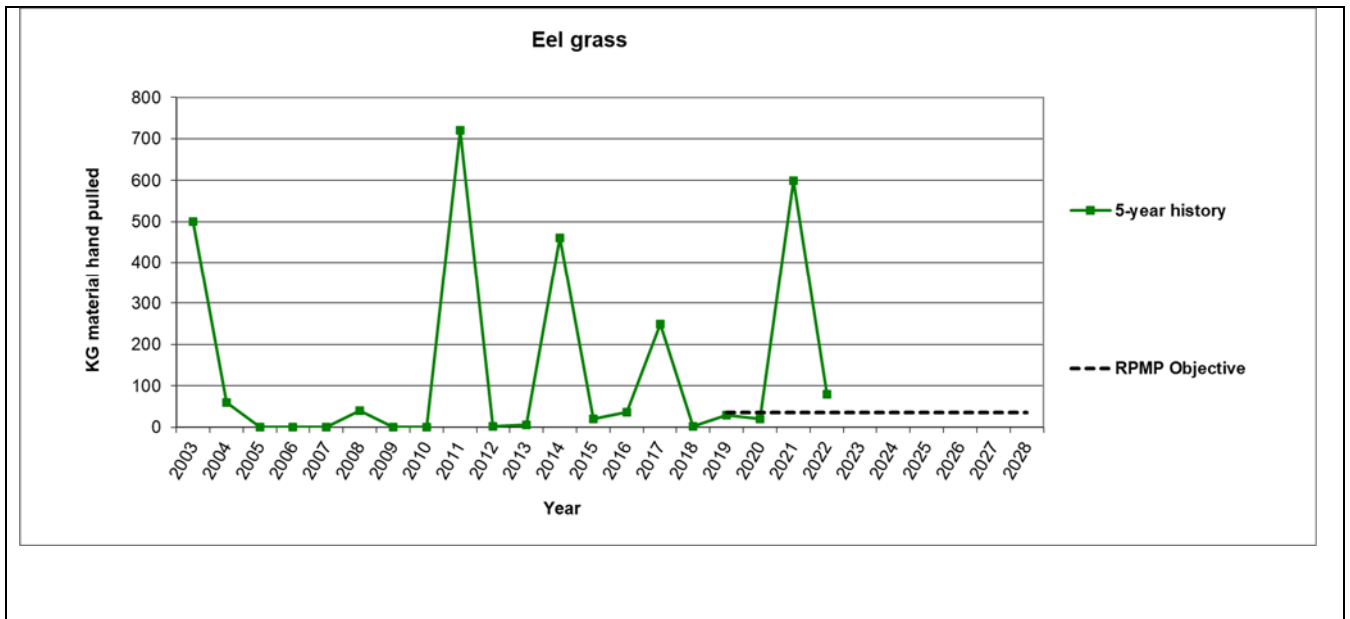
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	Over the duration of the Plan, control eel grass (<i>Vallisneria australis</i>) in the Marlborough district to less than or equal to 2016 levels to minimise adverse effects on the environment and enjoyment of the natural environment.			
Operations overview	Council staff and/or contractors will carry out all operational activities.			
Target 12.1	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
2021/2022	 <p>All active/monitoring eel grass sites were visited in 2021/2022. 80 kilos of silt contaminated with eel grass rhizomes was removed from Waterlea Creek compared to 600 kg in 2020/2021.</p> <p>The current data trend shows that the eel grass density at Waterlea Creek spikes every second or third year, despite the removal of all visible plants each year. A change in operational practice is recommended to ensure closer monitoring of the infestation site throughout the year.</p>			

Programme trend:




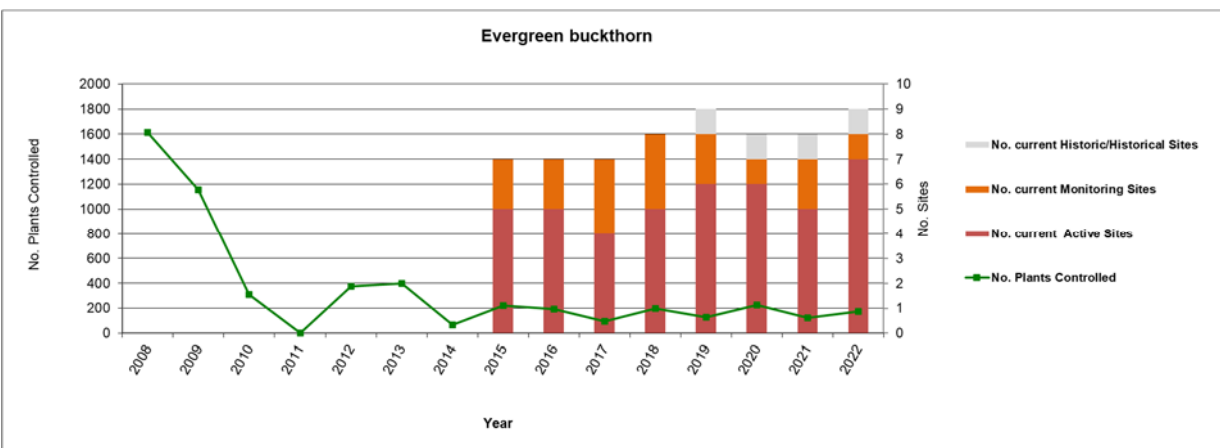


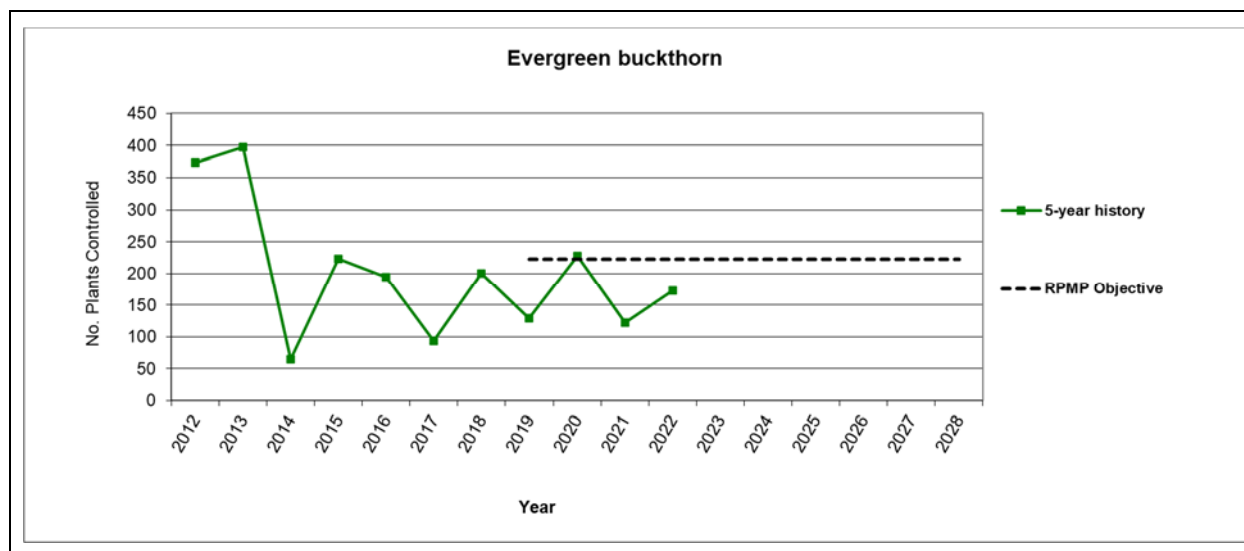
Not meeting objective







13. Evergreen buckthorn (*Rhamnus alaternus*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led																																																																																
Objective	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.																																																																																			
Operations overview	A Memorandum of Understanding has been agreed to by DOC and Council that includes the management of evergreen buckthorn. Operational activities are pre-planned each year and are delivered by either: a) DOC staff, or; b) A joint operation between DOC and Council staff and/or contractors.																																																																																			
Target 13.1	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.																																																																																			
2021/2022		All active and monitoring evergreen buckthorn sites were visited in 2021/2022.																																																																																		
Target 13.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.																																																																																			
2021/2022		The only historical evergreen buckthorn site was visited during 2021/2022, and no plants were found.																																																																																		
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<div><p>Evergreen buckthorn</p><table><thead><tr><th>Year</th><th>No. current Historic/Historical Sites</th><th>No. current Monitoring Sites</th><th>No. current Active Sites</th><th>No. Plants Controlled</th></tr></thead><tbody><tr><td>2008</td><td>0</td><td>0</td><td>0</td><td>1600</td></tr><tr><td>2009</td><td>0</td><td>0</td><td>0</td><td>1200</td></tr><tr><td>2010</td><td>0</td><td>0</td><td>0</td><td>300</td></tr><tr><td>2011</td><td>0</td><td>0</td><td>0</td><td>100</td></tr><tr><td>2012</td><td>0</td><td>0</td><td>0</td><td>400</td></tr><tr><td>2013</td><td>0</td><td>0</td><td>0</td><td>400</td></tr><tr><td>2014</td><td>0</td><td>0</td><td>0</td><td>100</td></tr><tr><td>2015</td><td>0</td><td>0</td><td>0</td><td>200</td></tr><tr><td>2016</td><td>0</td><td>0</td><td>0</td><td>200</td></tr><tr><td>2017</td><td>0</td><td>0</td><td>0</td><td>100</td></tr><tr><td>2018</td><td>0</td><td>0</td><td>0</td><td>200</td></tr><tr><td>2019</td><td>0</td><td>0</td><td>0</td><td>100</td></tr><tr><td>2020</td><td>0</td><td>0</td><td>0</td><td>200</td></tr><tr><td>2021</td><td>0</td><td>0</td><td>0</td><td>100</td></tr><tr><td>2022</td><td>0</td><td>0</td><td>0</td><td>200</td></tr></tbody></table></div>					Year	No. current Historic/Historical Sites	No. current Monitoring Sites	No. current Active Sites	No. Plants Controlled	2008	0	0	0	1600	2009	0	0	0	1200	2010	0	0	0	300	2011	0	0	0	100	2012	0	0	0	400	2013	0	0	0	400	2014	0	0	0	100	2015	0	0	0	200	2016	0	0	0	200	2017	0	0	0	100	2018	0	0	0	200	2019	0	0	0	100	2020	0	0	0	200	2021	0	0	0	100	2022	0	0	0	200
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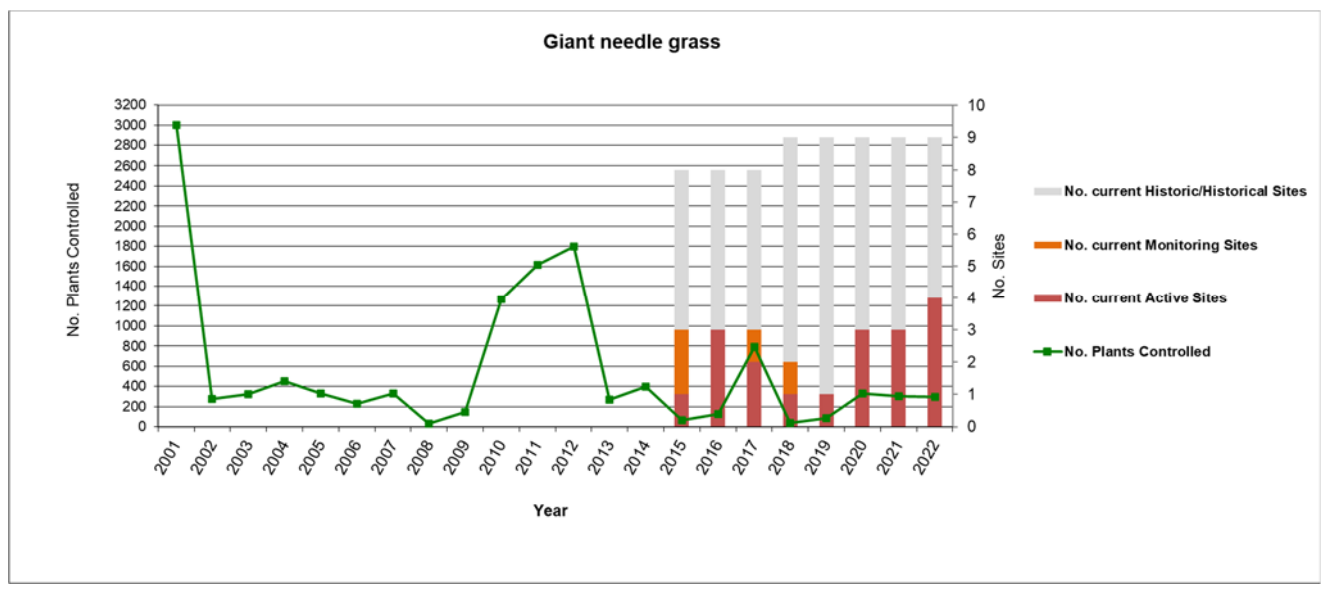


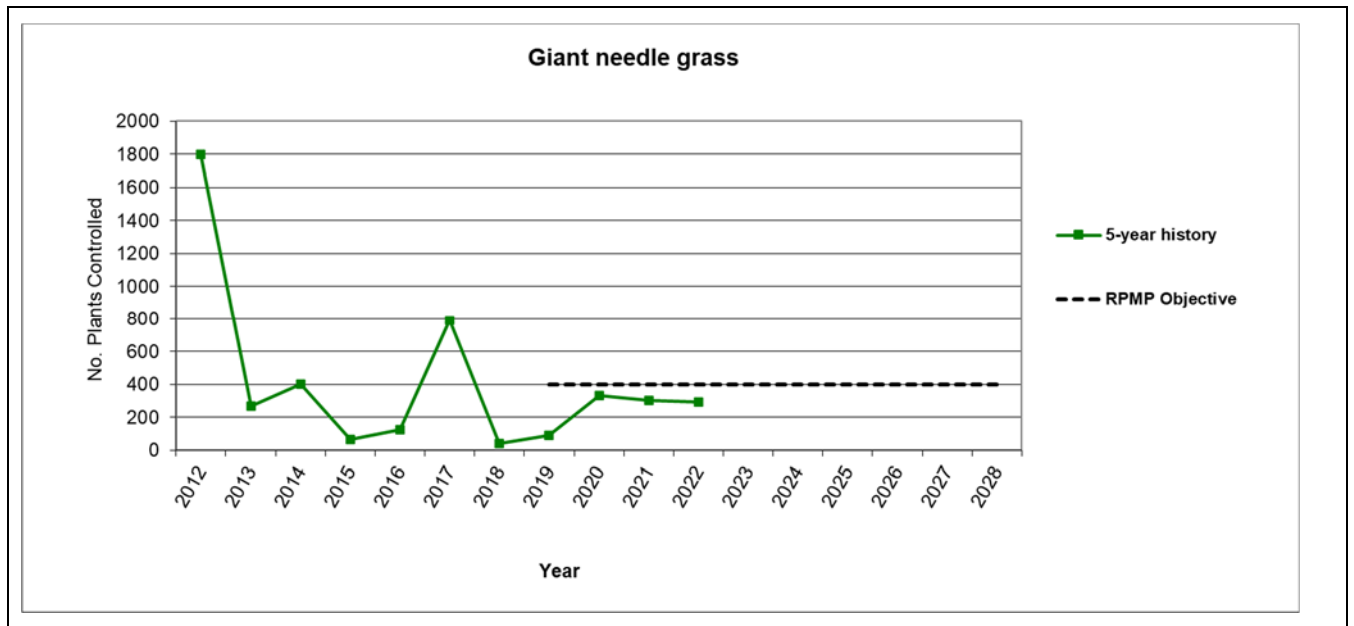
14. Giant needle grass (*Austrostipa rudis*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective 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.				
Operations overview Council staff and/or contractors will carry out all operational activities.				
Target 14.1 Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.				
2021/2022		100% of all high priority sites were visited for control work. The number of plants found remained below the RPMP objective.		
Target 14.2 Each year, 33% of sites that have a status of historical are visited for surveillance activities.				
2021/2022		5 out of 6 historical sites were visited for surveillance activities.		



Programme trend:

 On track









15. Gorse (*Ulex europaeus*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective 1	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.			
Objective 2	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.			
Operations overview	<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>			
Target 15.1	No more than 1 instance of non-compliance needing enforcement action is identified within the three Control Zones.			
2021/2022		No instances requiring enforcement action were identified this season.		
Target 15.2	Each year, undertake inspection and/or surveillance activities in all three zones.			
2021/2022		<p><u>Waima/Ure</u></p> <p>Surveillance was undertaken in the Ure area, very few plants were found. A number of landowners were spoken to on the roadside, landowners indicated that there were very few broom plants being found.</p> <p><u>Upper Wairau</u></p> <p>Inspections of land within this Zone were carried out. There are a number of areas that require follow up this in the 2022/2023 year.</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 are a few instances of where follow-up maybe needed in 2022/2023.</p>		

Biosecurity Operational Plan Report 2021-2022

Target 15.3	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.	
2021/2022		One report was received and followed up with within 5 working days.

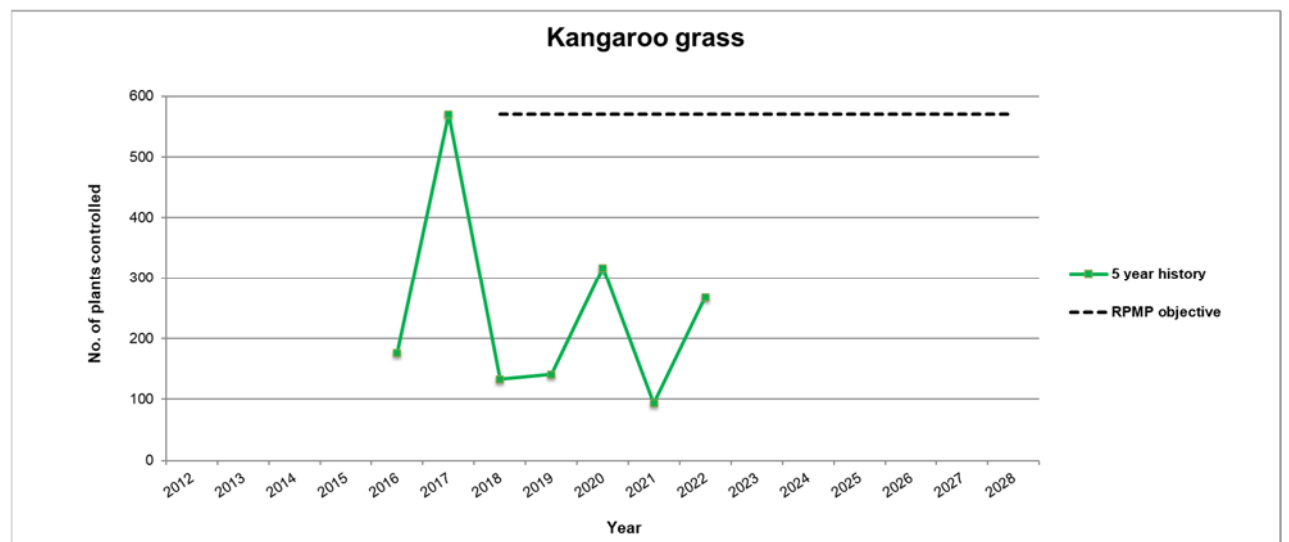
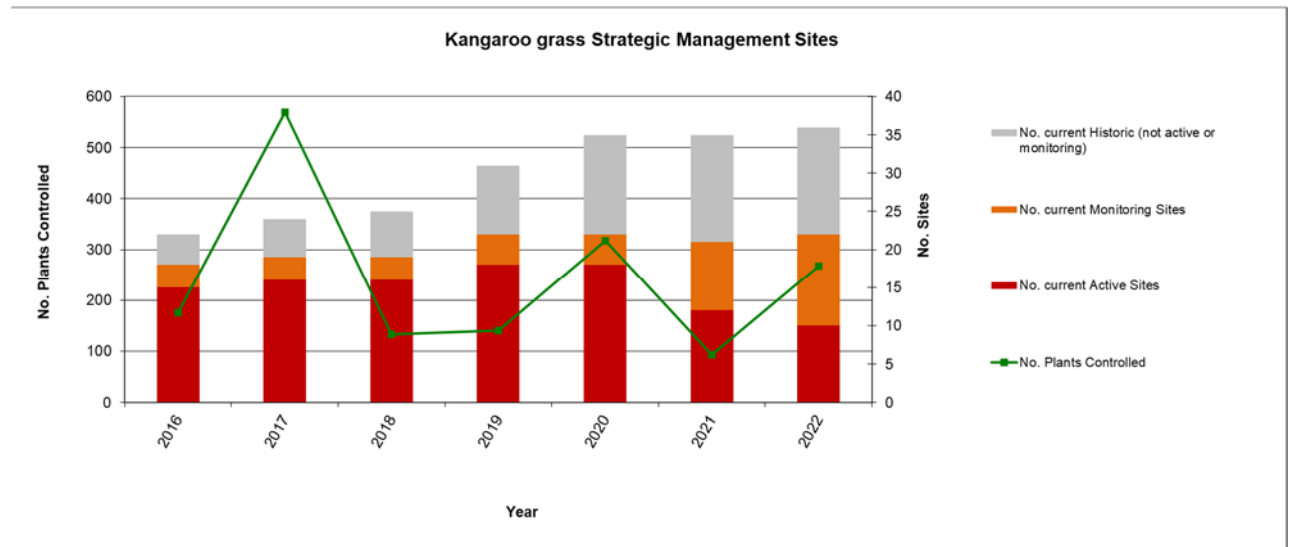
16. Kangaroo grass (*Themeda triandra*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	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. *A baseline assessment will be made either prior to or immediately after the Plan commences.			
Operations overview	There are multiple facets to the kangaroo grass programme delivered by Council. These are: <ul style="list-style-type: none">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.Active facilitation to develop management plans, and undertake compliance function where necessary, on the more heavy infested sites.Continue to deliver ongoing communication, education and awareness initiatives. 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.			
Target 16.1	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.			
2021/2022		100% percent of sites (11 properties) subject to an active compliance programme were inspected.		
Target 16.2	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.			
2021/2022		96% percent of sites subject to a programme where Council undertakes strategic management were visited and control undertaken if required. The one site not visited will be prioritised in the 2022/2023 season.		
Target 16.3	Each year, a minimum of 20 hours of surveillance is carried out on land not previously known to have an infestation of kangaroo grass.			
2021/2022		A calculated total of 84 hours of staff and contractor time was spent on surveillance activities outside of previously known infested areas.		



Programme trend:



On track

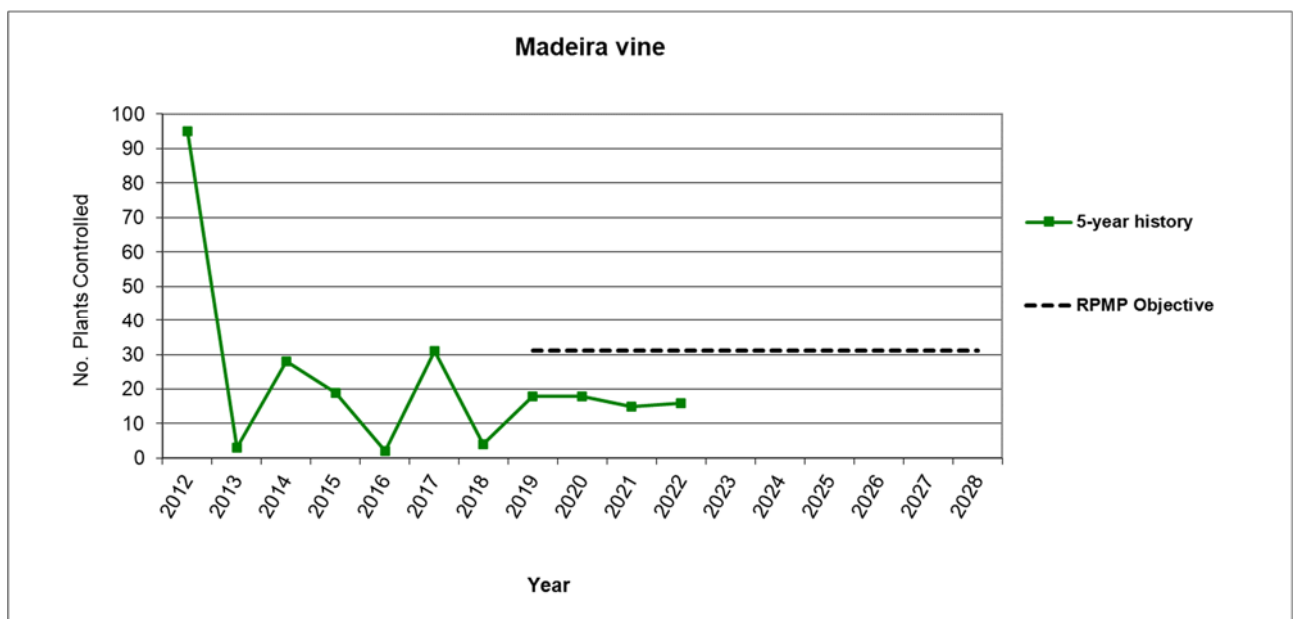
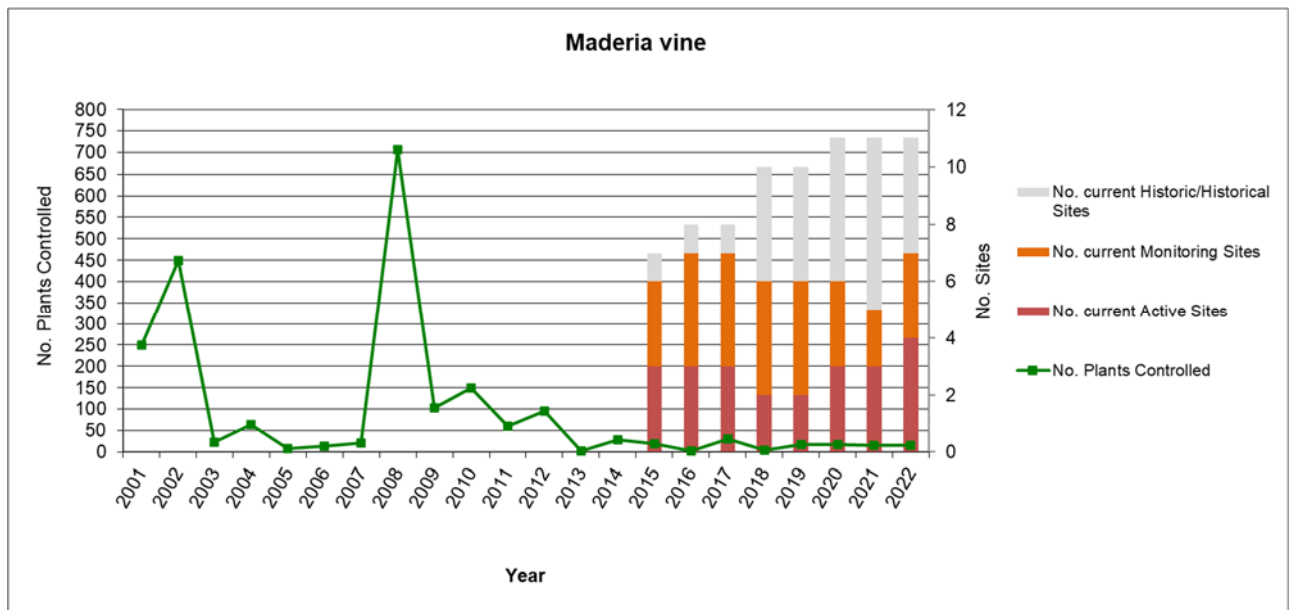


17. Madeira vine (*Anredera cordifolia*)


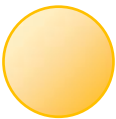
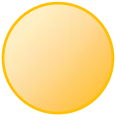
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	Over the duration of the Plan, control madeira vine (<i>Andredera cordifolia</i>) in the Marlborough district to less than or equal to 2017 levels to minimise adverse effects on the environment and enjoyment of the natural environment.			
Operations overview	<p>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> <p>a) Council staff and/or contractors (Blenheim, Seddon, Ward sites), or;</p> <p>b) DOC staff (Marlborough Sounds sites).</p> <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>			
Target 17.1	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
2021/2022		All 'active' and 'monitoring' sites were visited for control in 2021/2022. This resulted in the destruction of 16 plants. These plants were found across 4 active sites. No plants have been found at three of the monitoring sites for the last 5 years, and status of these sites has been changed to 'historical'.		
Target 17.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
2021/2022		All historical sites were visited, and no plants were found.		



Programme trend:

➡ On track





18. Mediterranean fanworm (*Sabella spallanzanii*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	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.			
Operations overview	<p>There are multiple facets to the Mediterranean fanworm programme delivered by Council. These are:</p> <ul style="list-style-type: none">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.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).Responding to reports of suspected Mediterranean fanworm and/or fouled vessels that have recently arrived and undertaking compliance action if necessary.Deliver ongoing communication, education and awareness initiatives as is appropriate in conjunction with the Top of the South Marine Biosecurity Partnership <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>			
Target 18.1	Each year, a minimum of two dive surveillance and removal operations are undertaken in Picton Marina, Waikawa Marina Grove Arm and Port Underwood (East Arm).			
2021/2022		Contracted divers undertook surveillance and removal operations in Picton and Waikawa Marina over Nov/Dec/Jan 2021/22 and in May/June 2022. Small numbers of fanworm were found on one vessel during this surveillance.		
		Two checks were undertaken in Port Underwood and Grove arm with no fanworm found.		
Target 18.2	Each year, a minimum of two dive surveillance operations are undertaken in Waikawa Bay, Picton Port, and Shakespeare Bay.			
2021/2022		Only one dive surveillance operation was undertaken in Shakespeare Bay. The delays in delivering this programme were due to issues with contractor capacity to deliver within the required timeframe. No fanworm were found during these operations.		
Target 18.3	Each year, a minimum of one dive surveillance operation is undertaken in Okiwi Bay, Elaine Bay, Duncan Bay, Endeavour Inlet, Ship Cove, Oyster Bay (Port Underwood) and Havelock Marina.			
2021/2022		Dive surveillance was undertaken at most sites excluding Havelock Marina, due to issues with contractor capacity to deliver within the required timeframe.		

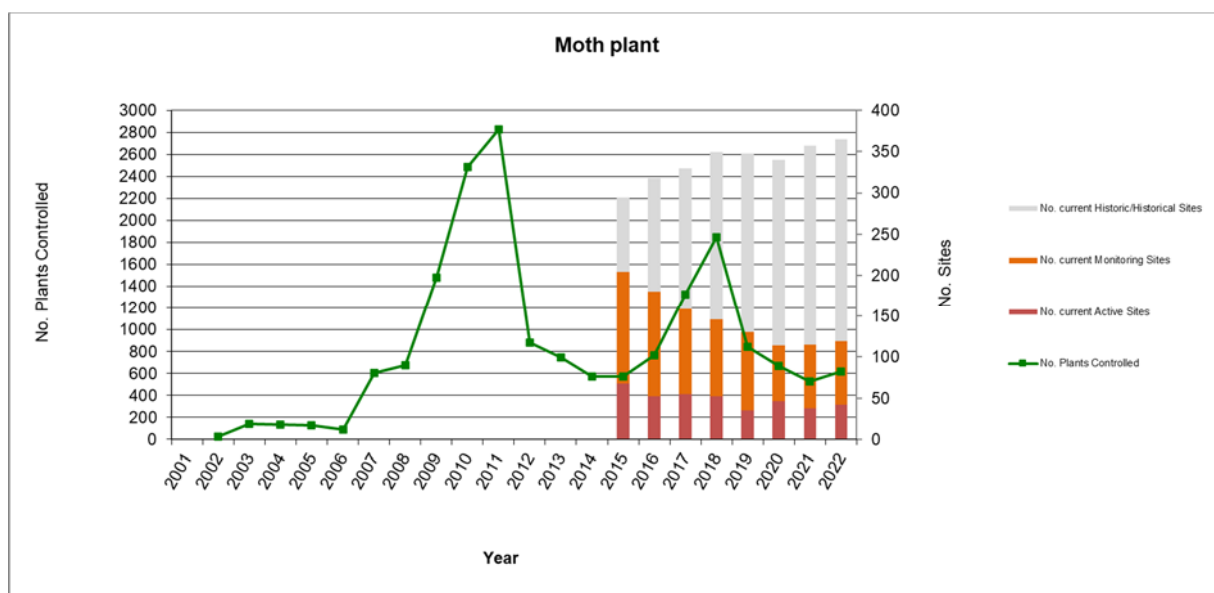
Target 18.4	Each year, any situation that comes to Council's attention with regard to suspected Mediterranean fanworm or a fouled vessel recently arrived into Marlborough, has an investigation started within 24 hours.	
2021/2022		<p>A number of vessels were notified to Council via Marlborough Sounds Marinas that may be a risk to the programme. A number of these vessels were able to be assessed and snorkelled by the Biosecurity team.</p> <p>All reports of fanworm had an investigation started within 24hrs.</p>
Status of Mediterranean fanworm in Marlborough: Not established		
Detected in Picton Marina, Waikawa Marina, Grove Arm and Port Underwood (East Arm) – there is no evidence of establishment after response actions.		
Detected on vessels arrived from out of region – no evidence of establishment after response actions.		
		
Biosecurity Officer inspecting a high risk structure that arrived from the North Island		

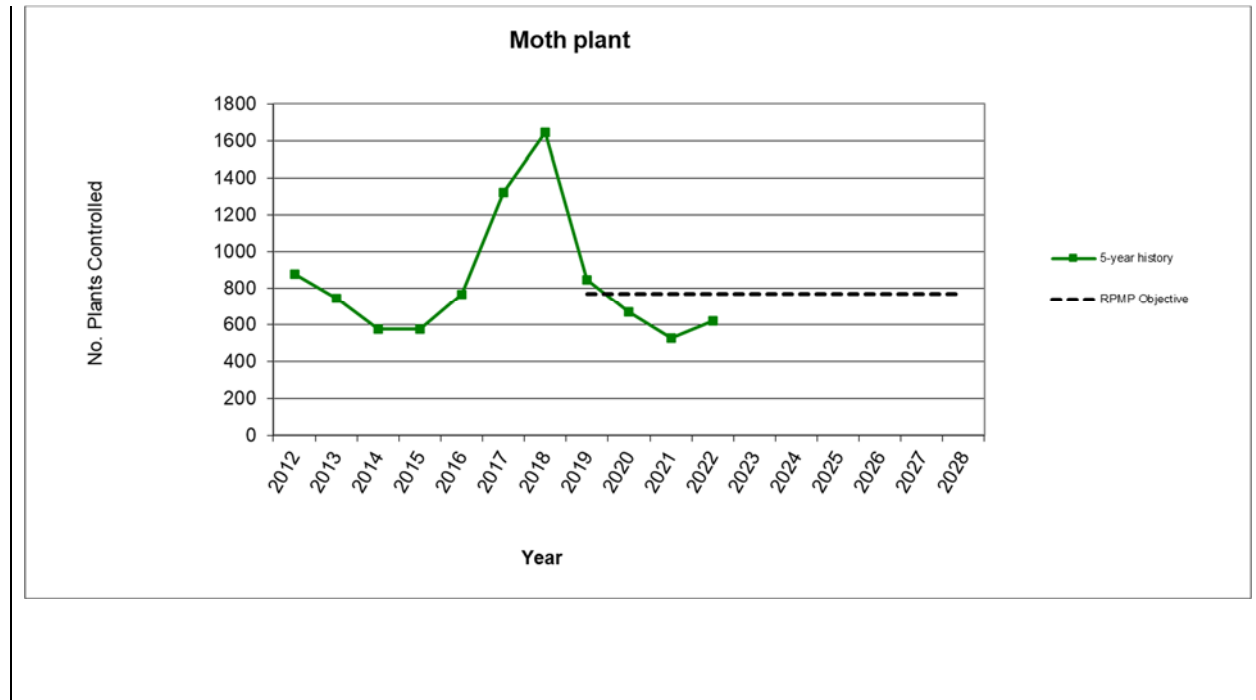
19. Moth plant (*Araujia hortorum*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	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.			
Operations overview	Council staff and/or contractors will carry out all operational activities.			
Target 19.1	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
2021/2022		A site inspection priority was determined before the commencement of Moth plant control in 2021/2022; the inspection priority included 85 ‘monitoring’ sites and 33 ‘active’ sites, all sites were inspected resulting in the destruction of 561 plants (including seedlings).		
Target 19.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
2021/2022		75 of the 212 historical sites (35%) were inspected in 2021/2022.		



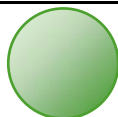
Programme trend:

 On track





20. Nassella tussock (*Nassella trichotoma*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	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.			
Operations overview	<p>There are multiple facets to the nassella tussock programme delivered by Council. These are:</p> <ul style="list-style-type: none">• 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.• 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.• 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.• Continue to deliver ongoing communication, education and awareness initiatives. <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>			
Target 20.1	Each year by 30 April, provide to occupiers that are subject to obligations and subsequent inspection, communication detailing their obligation for the coming season.			
2021/2022		For the 2021 active compliance programme 370 land occupiers were sent letters reminding them of their obligation to destroy nassella tussock.		
Target 20.2	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.			
2021/2022		271 sites (73% of all sites subject to the active compliance programme) were inspected to ensure land occupiers were meeting their obligations to destroy nassella tussock on their property.		
Target 20.3	Each year, undertake surveillance, and carry out required management work, on 33% of sites that are not part of the active compliance programme.			
2021/2022		Surveillance activities were carried out at 67 out of 193 sites (35%) not subject to the active compliance programme.		
Target 20.4	Each year, a minimum of 200 hours of surveillance is carried out on land not previously known to have an infestation of nassella tussock.			

2021/2022

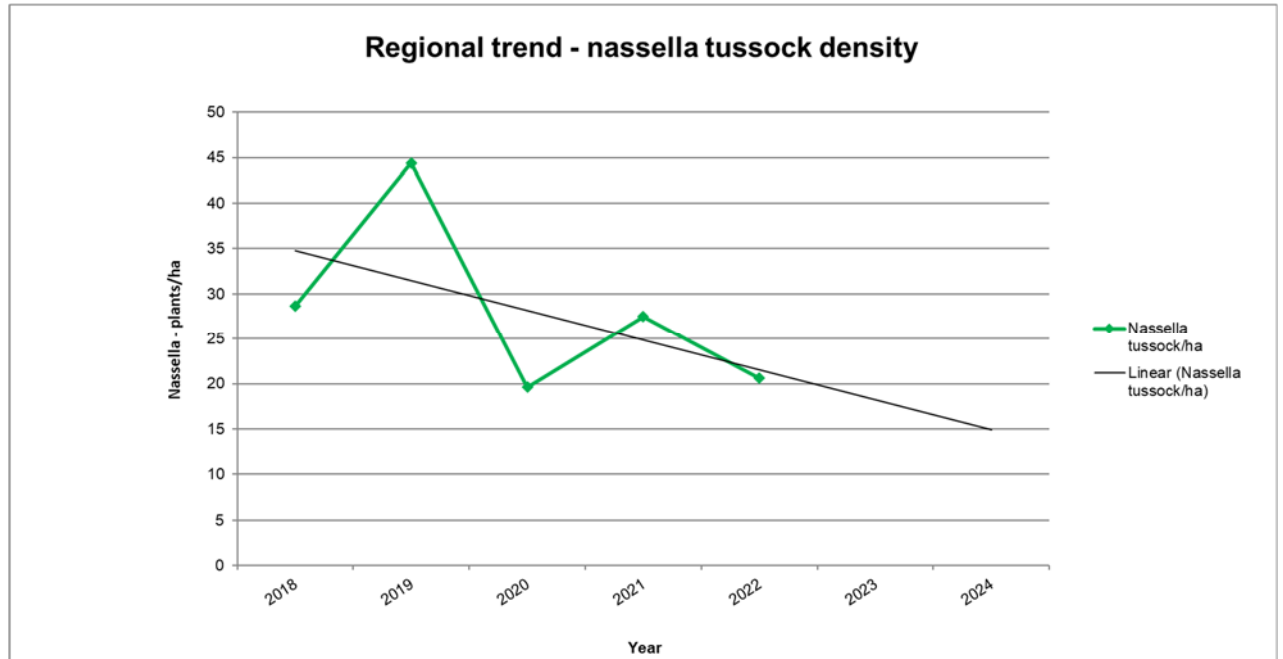


A total of 572 hours has been calculated to have been spent undertaking passive surveillance on affected properties but on land not previously known to have an infestation of nassella tussock.



Where new infestations were found the spatial distribution data was updated in Council's geographical information system to map the distribution of nassella in the Marlborough region.

Programme trend:

 On track



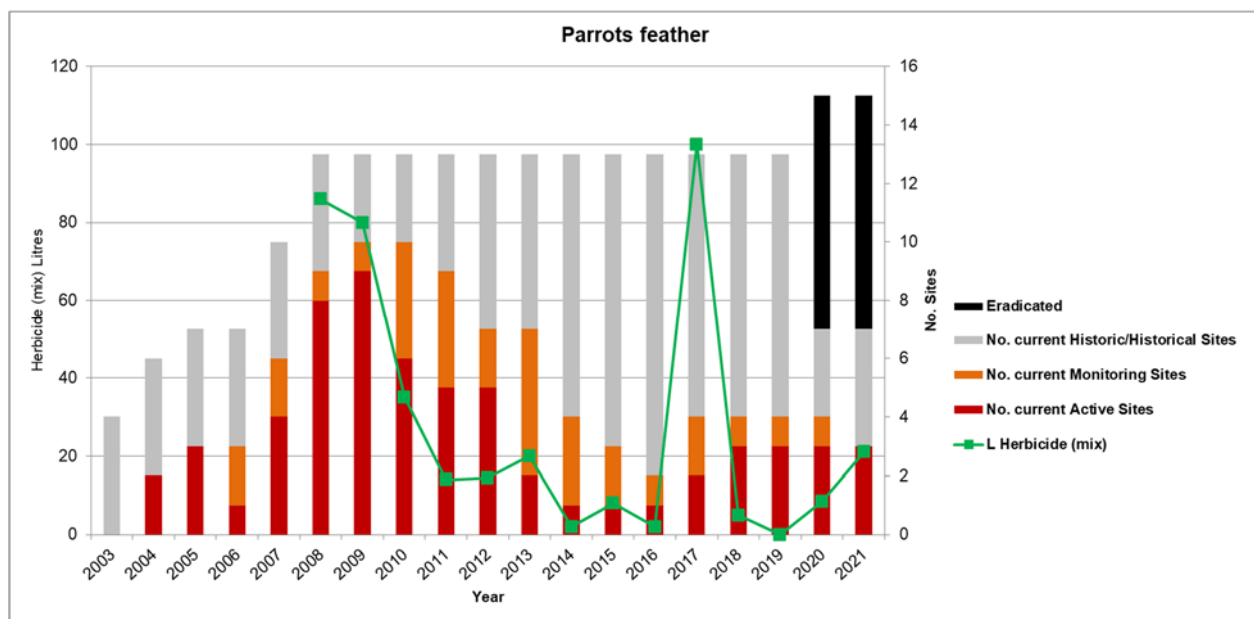
21. Parrots feather (*Myriophyllum aquaticum*)

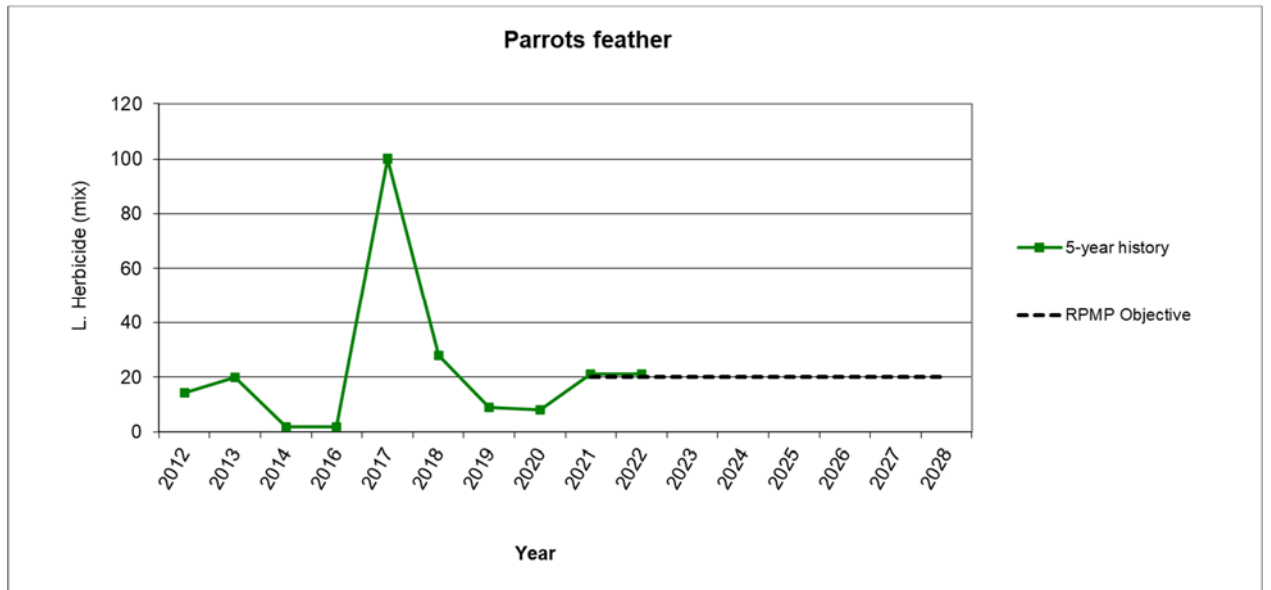
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	Over the duration of the Plan, control parrots feather (<i>Myriophyllum aquaticum</i>) in the Marlborough district to less than or equal to 2013 levels to minimise adverse effects on the environment and enjoyment of the natural environment.			
Operations overview	Council staff and/or contractors will carry out all operational activities.			
Target 21.1	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
2021/2022		100% of all active and monitoring sites were visited by biosecurity staff. Patches of parrots feather were found in Ruakankana Creek and the Opaoa Loop, and 21 litres of herbicide was used to control these plants.		
Target 21.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
2021/2022		Four out of the four historical sites were visited for surveillance activities, and no parrots feather was found.		

Programme trend:





Not meeting objective





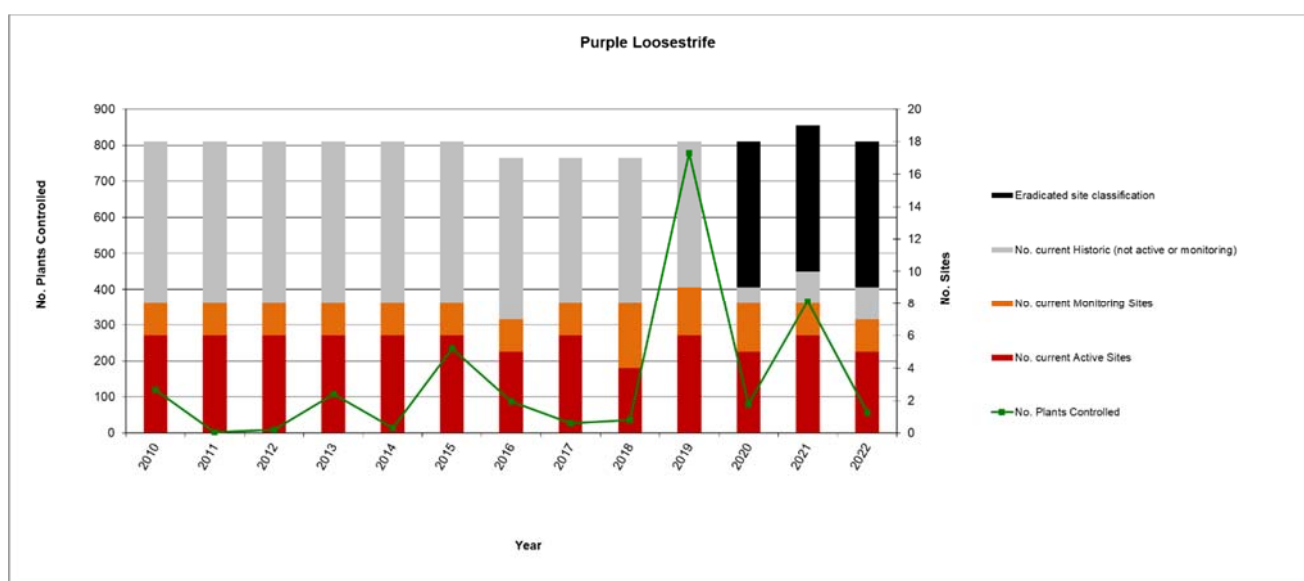
Patch of parrots feather near Ruakanakana Creek

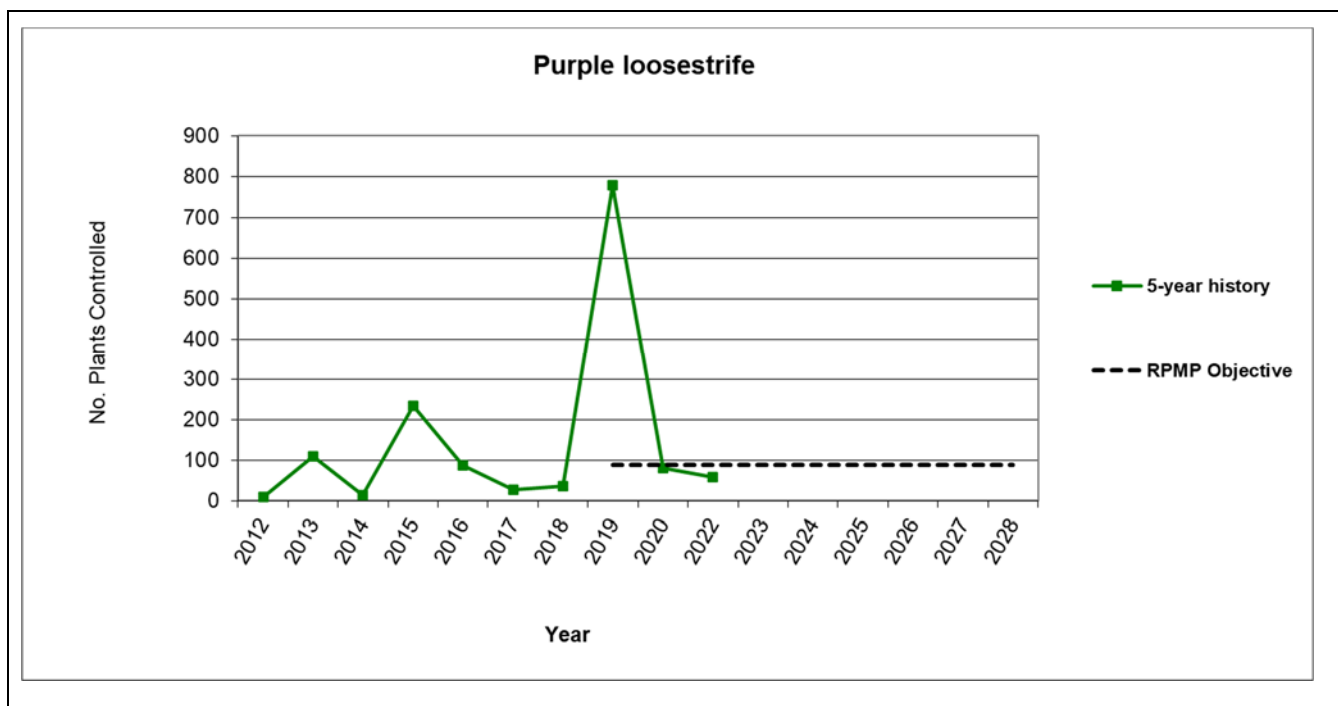
22. Purple loosestrife (*Lythrum salicaria*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective 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.				
Operations overview Council staff and/or contractors will carry out all operational activities.				
Target 22.1 Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.				
2021/2022		100% of 'active' and 'monitoring' sites were inspected and control undertaken. 57 plants were destroyed in 2021/2022.		
Target 22.2 Each year, 33% of sites that have a status of historical are visited for surveillance activities.				
2021/2022		One of the two historical sites was visited in 2021/2022, and no plants were found.		



Programme trend:

 On track





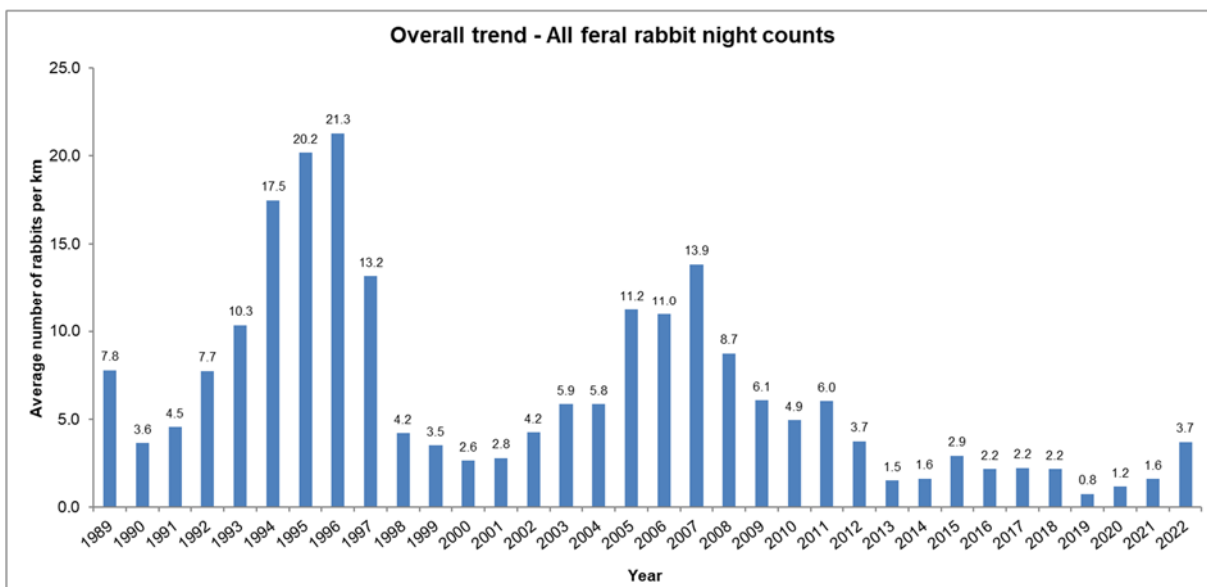
23. Rabbits - feral (*Oryctolagus cuniculus*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	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.			
Operations overview	<p>There are multiple facets to the rabbit programme delivered by Council. These are:</p> <ul style="list-style-type: none">• 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.• Supporting research initiatives that seek to continue to maintain the efficacy of biological control agents such as the Rabbit Haemorrhagic Disease Virus (RHDV).• Continue to deliver ongoing communication, education and awareness initiatives.			
Target 23.1	Each year, a schedule of sites is generated by 31 January outlining the coming season’s inspections.			
2021/2022		An inspection schedule was developed by 31 January 2022 targeting properties in rabbit prone areas.		
Target 23.2	Each year, 100% of sites identified on the inspection schedule are inspected to assess rabbit population levels.			
2021/2022		All sites targeted for inspection were visited during late summer/autumn 2022.		

Programme trend:




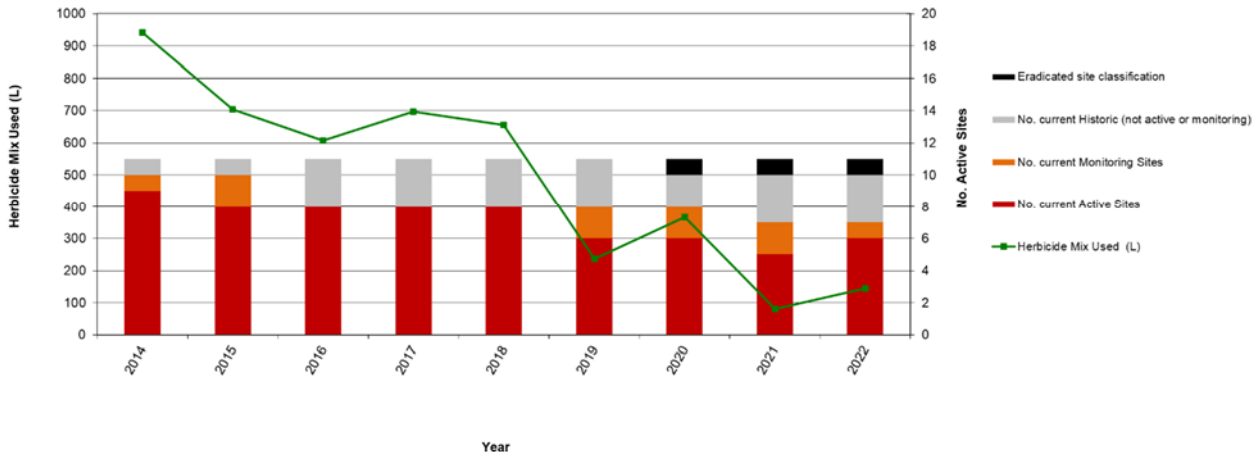
➡ On track

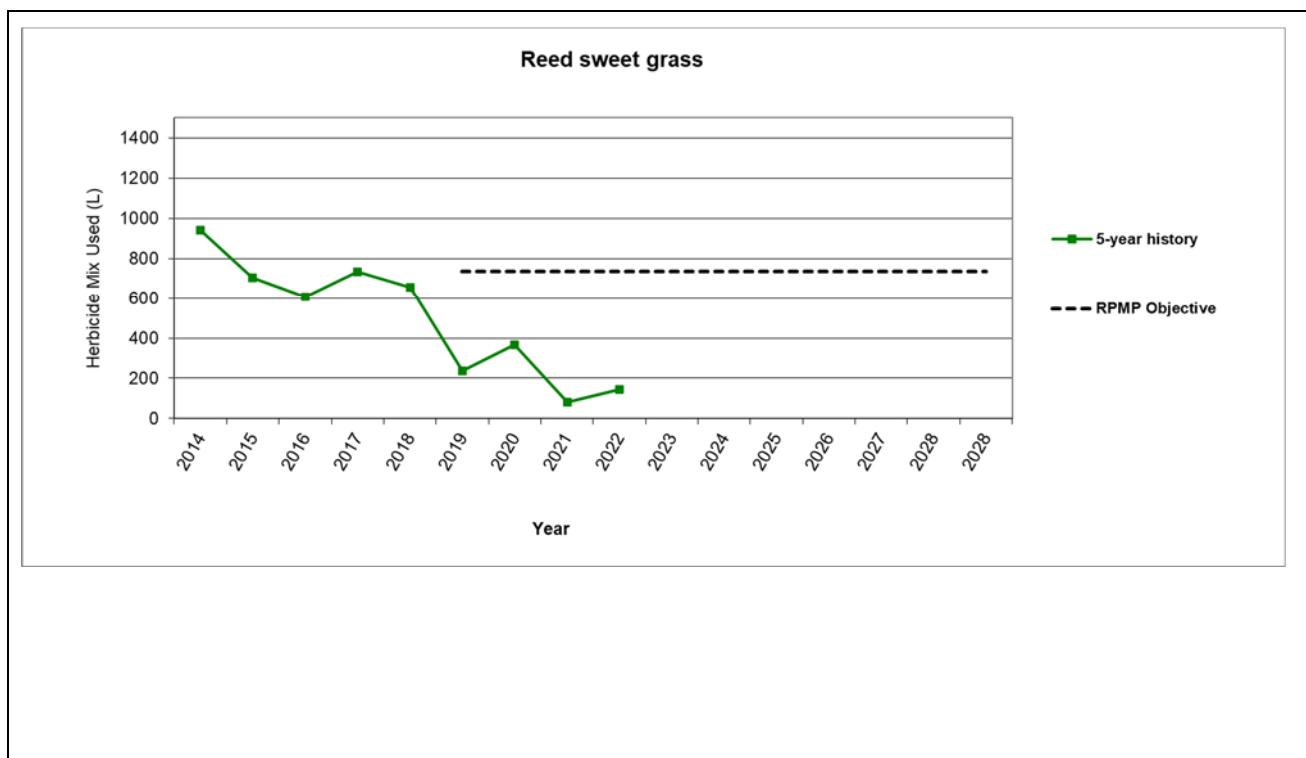
Rabbit numbers in the Upper Awatere and Waihopai appear to remain relatively low overall, however there was one night count that had a sharp increase in rabbit numbers which has shown a slight increase overall .





Inspecting rabbit ground sign on an Upper Awatere Valley property

24. Reed sweet grass (*Glyceria maxima*)




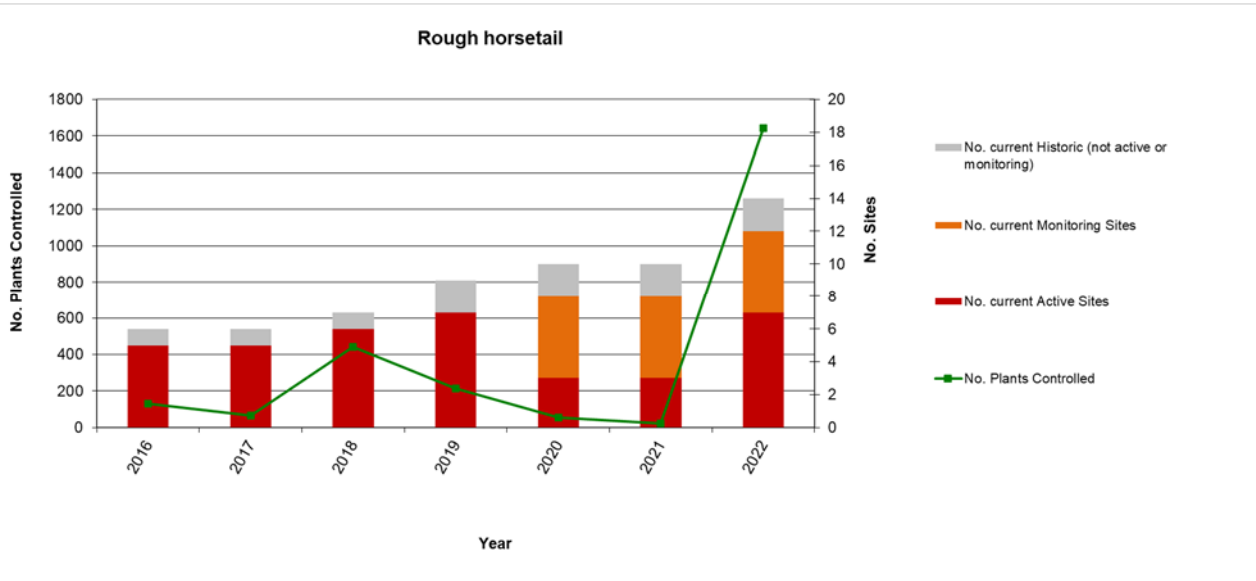
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led																																																												
Objective	Over the duration of the Plan, control reed sweet grass (<i>Glyceria maxima</i>) in the Marlborough district to less than or equal to 2017 levels to minimise adverse effects on economic wellbeing, the environment and enjoyment of the natural environment.																																																															
Operations overview	Council staff and/or contractors will carry out all operational activities.																																																															
Target 24.1	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.																																																															
2021/2022		All 'active and 'monitoring' sites were visited during the 2021/2022 season. The amount of herbicide used to control infestations this season was slightly higher than last season.																																																														
Target 24.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.																																																															
2021/2022		All three historical sites were visited, and no reed sweet grass was detected. One of these sites may be re-classified as 'eradicated' in the near future because the initial infestation was contained within a private pond with no link to any other waterway.																																																														
Programme trend:																																																																
 On track																																																																
<div><p>Reed Sweet Grass</p><table><thead><tr><th>Year</th><th>Herbicide Mix Used (L)</th><th>No. current Active Sites</th><th>No. current Monitoring Sites</th><th>No. current Historic (not active or monitoring)</th><th>Eradicated site classification</th></tr></thead><tbody><tr><td>2014</td><td>~950</td><td>~450</td><td>~100</td><td>~100</td><td>0</td></tr><tr><td>2015</td><td>~700</td><td>~400</td><td>~100</td><td>~100</td><td>0</td></tr><tr><td>2016</td><td>~600</td><td>~400</td><td>~100</td><td>~100</td><td>0</td></tr><tr><td>2017</td><td>~700</td><td>~400</td><td>~100</td><td>~100</td><td>0</td></tr><tr><td>2018</td><td>~650</td><td>~400</td><td>~100</td><td>~100</td><td>0</td></tr><tr><td>2019</td><td>~300</td><td>~300</td><td>~100</td><td>~100</td><td>0</td></tr><tr><td>2020</td><td>~400</td><td>~300</td><td>~100</td><td>~100</td><td>~100</td></tr><tr><td>2021</td><td>~100</td><td>~250</td><td>~100</td><td>~100</td><td>~100</td></tr><tr><td>2022</td><td>~150</td><td>~300</td><td>~100</td><td>~100</td><td>~100</td></tr></tbody></table></div>					Year	Herbicide Mix Used (L)	No. current Active Sites	No. current Monitoring Sites	No. current Historic (not active or monitoring)	Eradicated site classification	2014	~950	~450	~100	~100	0	2015	~700	~400	~100	~100	0	2016	~600	~400	~100	~100	0	2017	~700	~400	~100	~100	0	2018	~650	~400	~100	~100	0	2019	~300	~300	~100	~100	0	2020	~400	~300	~100	~100	~100	2021	~100	~250	~100	~100	~100	2022	~150	~300	~100	~100	~100
Year	Herbicide Mix Used (L)	No. current Active Sites	No. current Monitoring Sites	No. current Historic (not active or monitoring)	Eradicated site classification																																																											
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2017	~700	~400	~100	~100	0																																																											
2018	~650	~400	~100	~100	0																																																											
2019	~300	~300	~100	~100	0																																																											
2020	~400	~300	~100	~100	~100																																																											
2021	~100	~250	~100	~100	~100																																																											
2022	~150	~300	~100	~100	~100																																																											

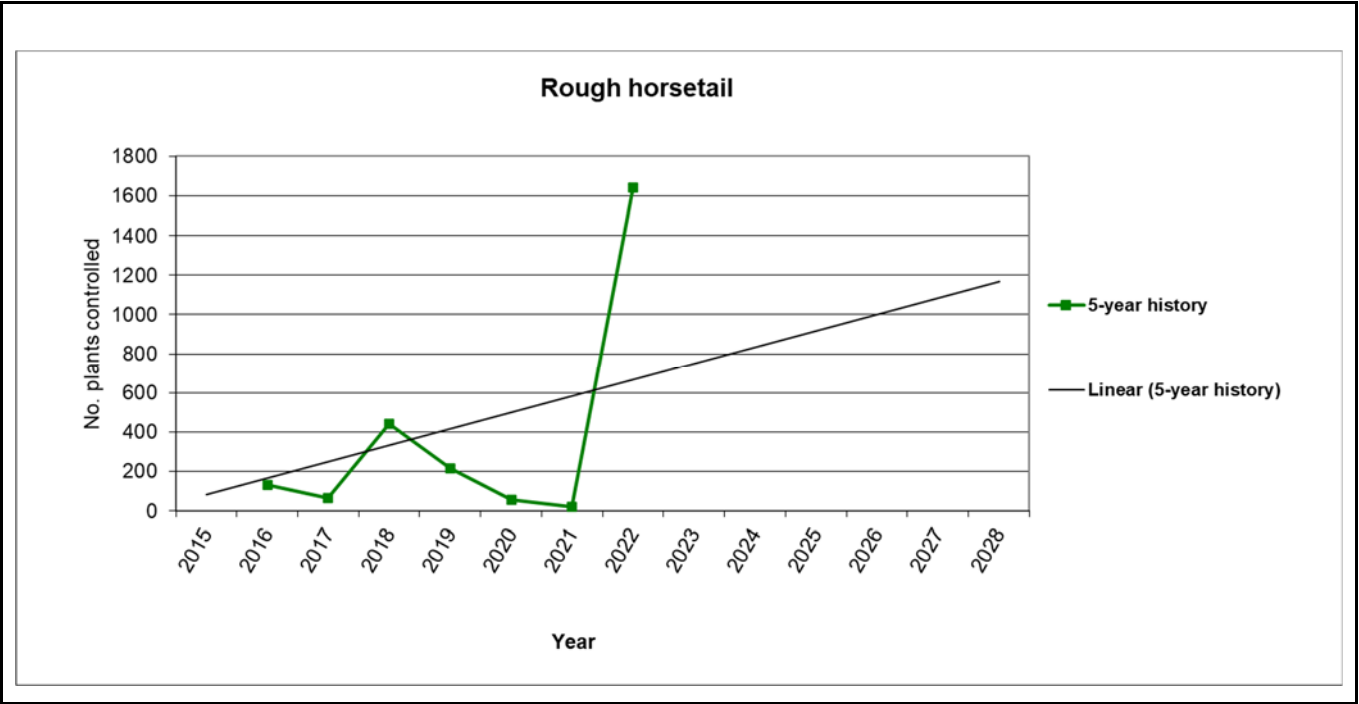


25. Rooks (*Corvus frugilegus*)



Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	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.			
Operations overview	Council staff and/or contractors will carry out all operational activities should rooks be detected in Marlborough.			
Target 25.1	Each year, undertake an appropriate awareness activity within the community to facilitate reporting of rooks if they are seen.			
2021/2022		The taxidermy rook was taken to a Biosecurity event held in Seddon.		
Target 25.2	Each year, respond to any report of rooks in Marlborough within 2 working days.			
2021/2022		One report of a lone rook was received this year on Stephens Island. No further confirmed sightings have been reported in Marlborough.		
Status of rooks in Marlborough: Not established Last detection was in March 2020 (Tetley Brook Road). One bird was destroyed.				

26. Rough horsetail (*Equisetum hyemale*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led																																								
Objective 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.																																												
Operations overview Council staff and/or contractors will carry out all operational activities.																																												
Target 26.1 Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.																																												
2021/2022		100% of active or monitoring sites were visited. In addition, four new rough horsetail sites were identified in 2021/2022. Each site contained a significant number of plants, and, because of this, there has been a large spike in the numbers of plants controlled.																																										
Target 26.2 Each year, 33% of sites that have a status of historical are visited for surveillance activities.																																												
2021/2022		All historical sites were visited, no rough horsetail was detected.																																										
Programme trend:  Not meeting objective This is a newer programme and there are still new sites being discovered associated to the historical use of the plant in landscaping features.																																												
<div><p>Rough horsetail</p><table><thead><tr><th>Year</th><th>No. current Historic (not active or monitoring)</th><th>No. current Monitoring Sites</th><th>No. current Active Sites</th><th>No. Plants Controlled</th></tr></thead><tbody><tr><td>2016</td><td>100</td><td>100</td><td>450</td><td>150</td></tr><tr><td>2017</td><td>100</td><td>100</td><td>450</td><td>100</td></tr><tr><td>2018</td><td>100</td><td>100</td><td>550</td><td>450</td></tr><tr><td>2019</td><td>100</td><td>100</td><td>650</td><td>250</td></tr><tr><td>2020</td><td>100</td><td>450</td><td>300</td><td>100</td></tr><tr><td>2021</td><td>100</td><td>450</td><td>300</td><td>100</td></tr><tr><td>2022</td><td>100</td><td>500</td><td>650</td><td>1650</td></tr></tbody></table></div>					Year	No. current Historic (not active or monitoring)	No. current Monitoring Sites	No. current Active Sites	No. Plants Controlled	2016	100	100	450	150	2017	100	100	450	100	2018	100	100	550	450	2019	100	100	650	250	2020	100	450	300	100	2021	100	450	300	100	2022	100	500	650	1650
Year	No. current Historic (not active or monitoring)	No. current Monitoring Sites	No. current Active Sites	No. Plants Controlled																																								
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2021	100	450	300	100																																								
2022	100	500	650	1650																																								



27. Saffron thistle (*Carthamus lanatus*)

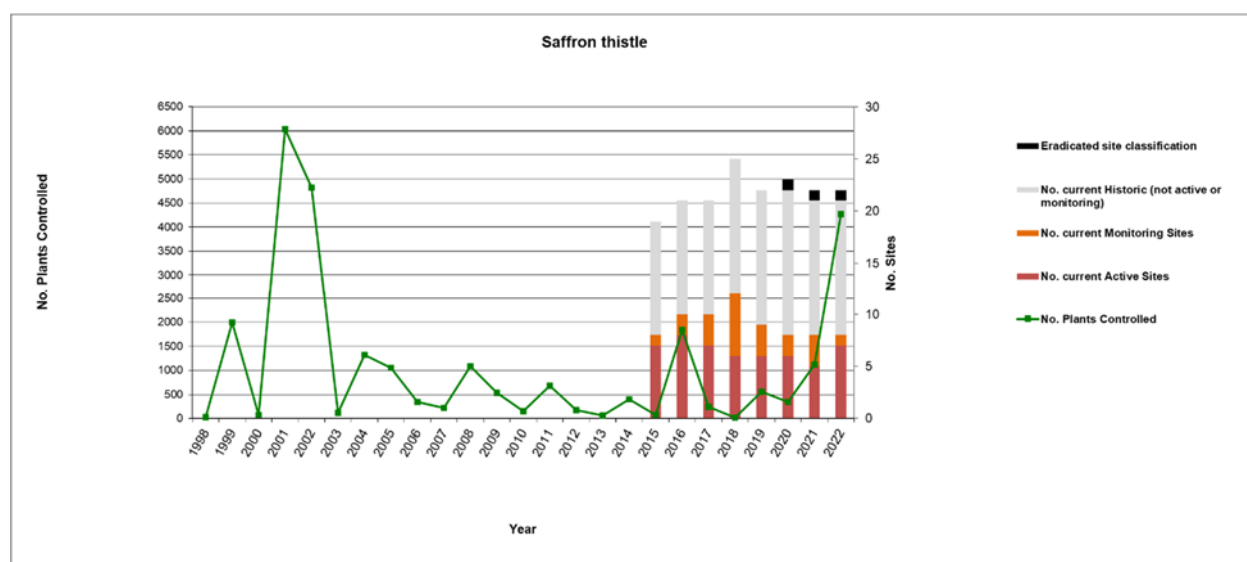
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective		Over the duration of the Plan, control saffron thistle (<i>Carthamus lanatus</i>) in the Marlborough district to less than or equal to 2016 levels to minimise adverse effects on economic wellbeing, the environment and enjoyment of the natural environment.		
Operations overview		Council staff and/or contractors will carry out all operational activities.		
Target 27.1		Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.		
2021/2022		All sites with a status of 'active' or 'monitoring' were visited in 2021/2022. There was a sharp increase in numbers this year which was largely attributable to the discovery of new infestations on two existing properties.		
Target 27.2		Each year, 33% of sites that have a status of historical are visited for surveillance activities.		
2021/2022		6 out of 13 historical sites (46%) were visited in 2021/2022 and no plants were found.		

Programme trend:



Not meeting objective

The seed of saffron thistle is known to be extremely long-lived. The new infestations found could well relate to an historical seeding event.







Biosecurity officer Brent Holms controlling saffron thistle

28. Senegal tea (*Gymnocoronis spilanthoides*)

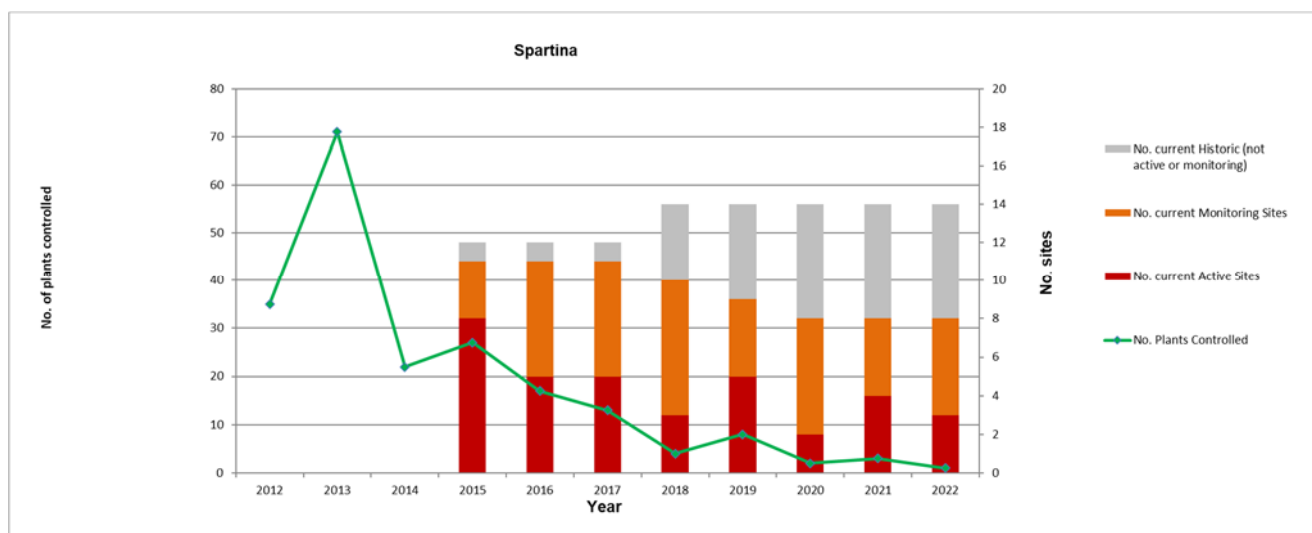
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	Over the term of the Plan, prevent the establishment of Senegal tea (<i>Gymnocoronis spilanthoides</i>) in the Marlborough district to prevent future impacts on environmental values and the enjoyment of the natural environment.			
Operations overview	Council staff and/or contractors will carry out all operational activities should Senegal tea be detected in Marlborough.			
Status of Senegal tea in Marlborough: Not established Historically eradicated				

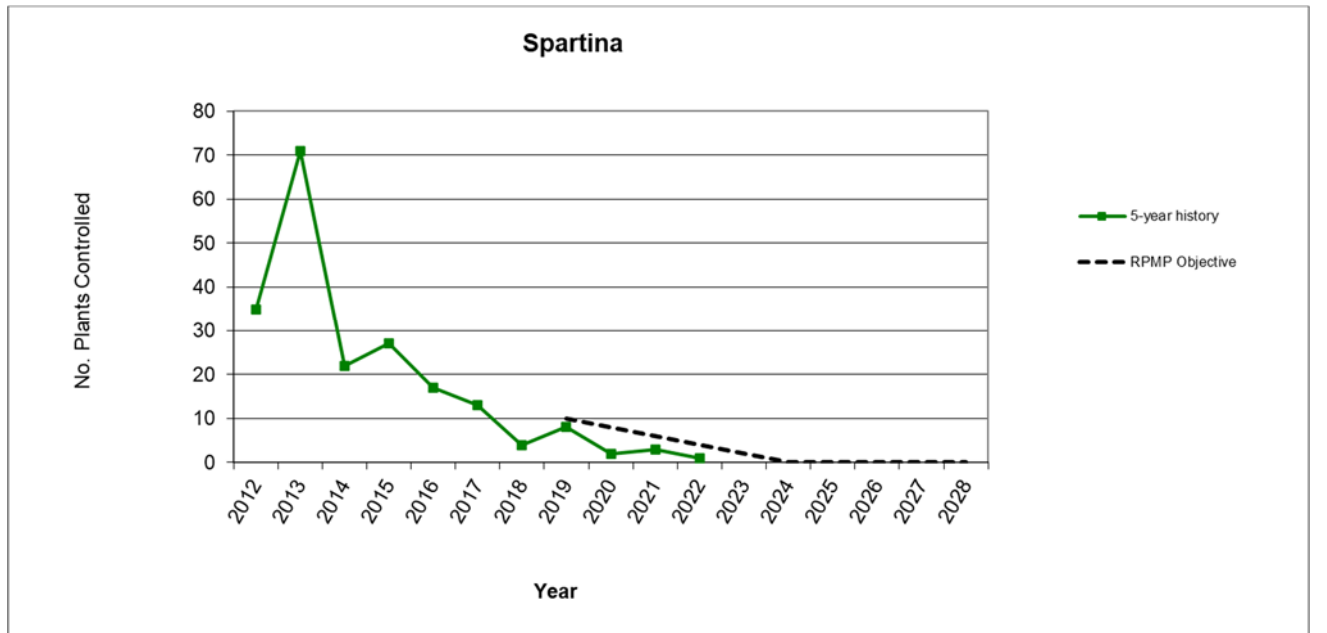
29. Spartina (*Spartina anglica*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	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.			
Operations overview	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.			
Target 29.1	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
2021/2022		100% of all ‘active’ and ‘monitoring’ sites (8 in total) were visited for control or surveillance activities for 2021/2022. Only 1 plant was found during 900 hours of searching. The number of plants found over the years has reduced, and this trend is following the RPMP objective for this pest programme.		
Target 29.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
2021/2022		Three out of 6 historical sites were visited for Spartina surveillance activities. This included Fairy Bay in the Pelorus, Okiwi Bay, and Double Bay in the Kenepuru. No plants were found.		




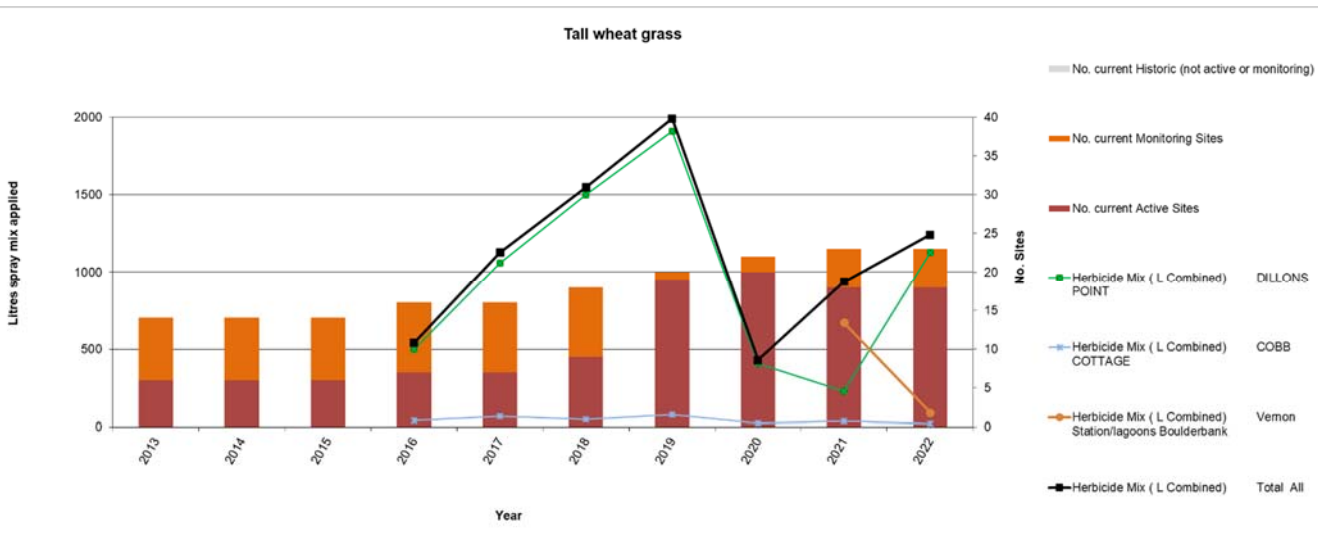
Programme trend:

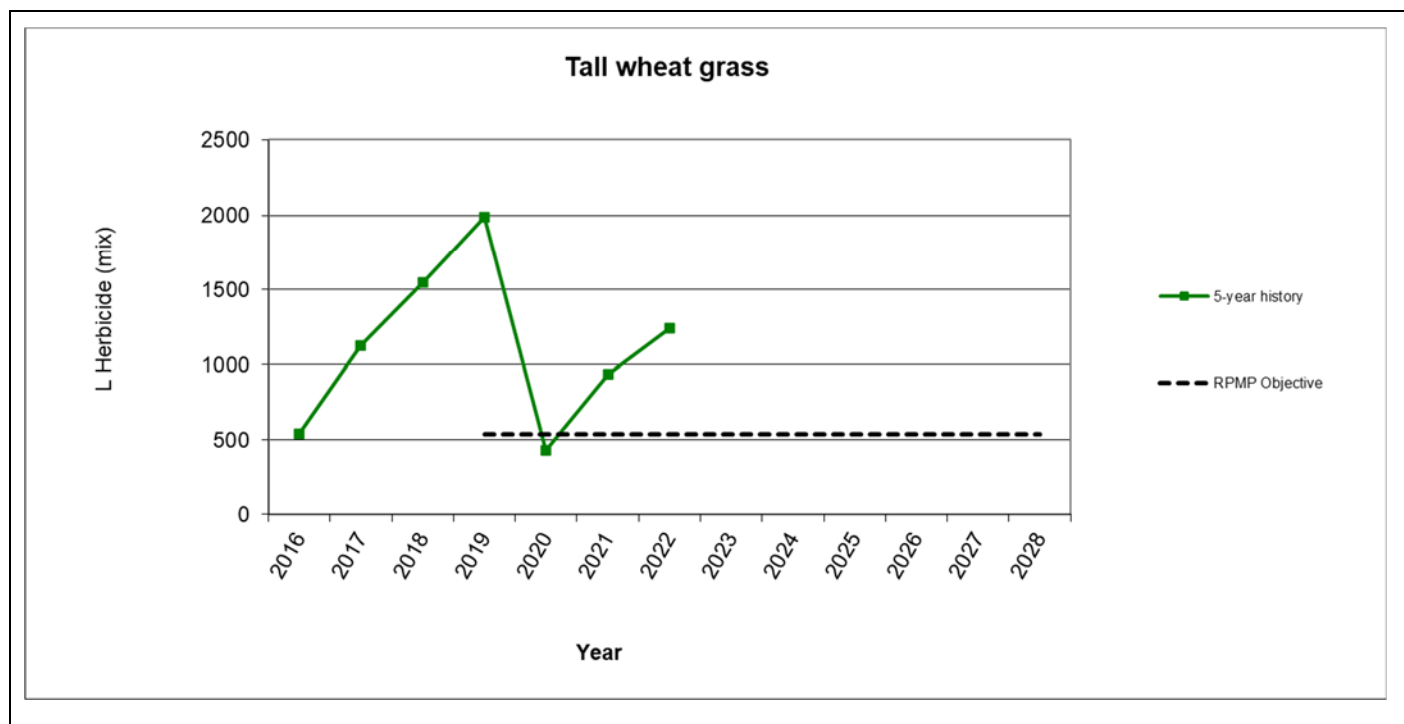
 On track






30. Tall wheat grass (*Thinopyrum ponticum*)




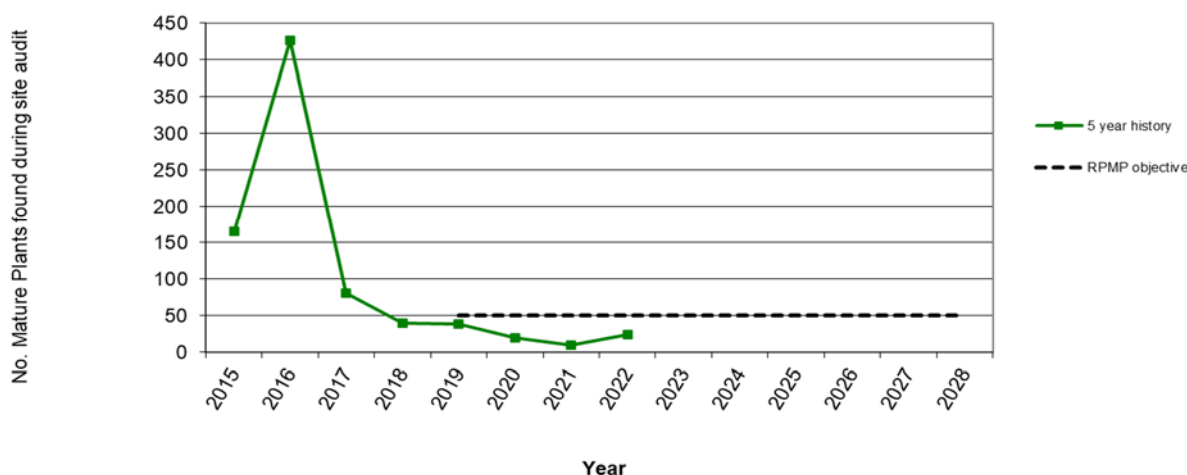
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	Over the duration of the Plan, control tall wheat grass (<i>Thinopyrum ponticum</i>) in the Marlborough district to less than or equal to 2016 levels to minimise adverse effects on economic wellbeing, the environment, and enjoyment of the natural environment.			
Operations overview	Council staff and/or contractors will carry out all operational activities.			
Target 30.1	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.			
2021/2022		<p>100% of all known sites were visited for surveillance or control activities.</p> <p>Additional surveillance activities were undertaken within the Vernon Lagoons area which resulted in one small infestation being found. An additional small site was also identified in the Taylor River Reserve.</p> <p>The amount of herbicide used in 2021/2022 exceeded the threshold of the RPMP objective to maintain herbicide use at, or below, 540 litres of spray mix.</p>		
Target 30.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.			
2021/2022		To date there are no sites with a historical status.		
<p>Programme trend:</p> <p> Not meeting objective</p> <p>This is a newer programme with baseline infestations still being progressively managed, including some new sites also being discovered.</p>				
<div><p>Tall wheat grass</p></div>				




31. Wallabies (Family *Macropodidae*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	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.			
Operations overview	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.			
Target 31.1	Each year, respond to any report of wallabies in Marlborough within 2 working days.			
2021/2022		One report of a wallaby sighting was received this year on the Canterbury and Marlborough Boundary. ECan lead the response with no evidence of wallabies found.		
Status of wallabies in Marlborough: Not established There continues to be periodic reports and sightings but no sign of a live wallaby has been found after thorough investigations.				

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

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led																																													
Objective	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.																																																
Operations overview	<p>There are multiple facets to the white-edged nightshade programme delivered by Council. These are:</p> <ul style="list-style-type: none">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.Continue to deliver ongoing communication, education and awareness initiatives.																																																
Target 32.1	Each year by 15 February, provide to all affected occupiers, communication reminding them of their obligation and include and a voluntary completion date.																																																
2021/2022		All affected land occupiers were sent letters in early 2022 to remind them of their obligation under the RPMP rule for white-edged nightshade. Land occupiers agreed to the advised Council inspection date.																																															
Target 32.2	Each year, an inspection is undertaken on the two sites adjacent to the Containment Area where White-edged nightshade is threatening susceptible land.																																																
2021/2022		Inspections were undertaken at all sites where land occupiers have an obligation to annually destroy all plants. Council Biosecurity staff destroyed 24 plants.																																															
Programme trend:																																																	
 On track																																																	
<div><p>White Edged Nightshade mature plants found during compliance inspections</p><table><caption>White Edged Nightshade mature plants found during compliance inspections</caption><thead><tr><th>Year</th><th>No. Mature Plants found during site audit (5 year history)</th><th>RPMP objective</th></tr></thead><tbody><tr><td>2015</td><td>165</td><td>50</td></tr><tr><td>2016</td><td>430</td><td>50</td></tr><tr><td>2017</td><td>80</td><td>50</td></tr><tr><td>2018</td><td>40</td><td>50</td></tr><tr><td>2019</td><td>40</td><td>50</td></tr><tr><td>2020</td><td>20</td><td>50</td></tr><tr><td>2021</td><td>10</td><td>50</td></tr><tr><td>2022</td><td>25</td><td>50</td></tr><tr><td>2023</td><td>-</td><td>50</td></tr><tr><td>2024</td><td>-</td><td>50</td></tr><tr><td>2025</td><td>-</td><td>50</td></tr><tr><td>2026</td><td>-</td><td>50</td></tr><tr><td>2027</td><td>-</td><td>50</td></tr><tr><td>2028</td><td>-</td><td>50</td></tr></tbody></table></div>					Year	No. Mature Plants found during site audit (5 year history)	RPMP objective	2015	165	50	2016	430	50	2017	80	50	2018	40	50	2019	40	50	2020	20	50	2021	10	50	2022	25	50	2023	-	50	2024	-	50	2025	-	50	2026	-	50	2027	-	50	2028	-	50
Year	No. Mature Plants found during site audit (5 year history)	RPMP objective																																															
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2017	80	50																																															
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2020	20	50																																															
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2026	-	50																																															
2027	-	50																																															
2028	-	50																																															

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

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective 1	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.			
Objective 2	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.			
Operations overview	Council staff and/or contractors will carry out all operational activities.			
Target 33.1	Each year, a control operation is undertaken on Rangitoto ki te Tonga/D'Urville in accordance with the project plan.			
2021/2022		A total of 1258.5 hours of control work was undertaken this season. Majority of the mature plants have now been located and destroyed. Work has started on controlling seedlings.		
Programme trend: The programme has just completed the initial control phase where the entire original mature infestation has been destroyed. It is now moving into the long mop-up phase to exhaust the seed bank. In partnership with the contractor, some seedling establishment plots have been established to assess what degree of germination is occurring and what % of those seedling survive. A suitable metric for programme trend monitoring has not yet been settled upon.				







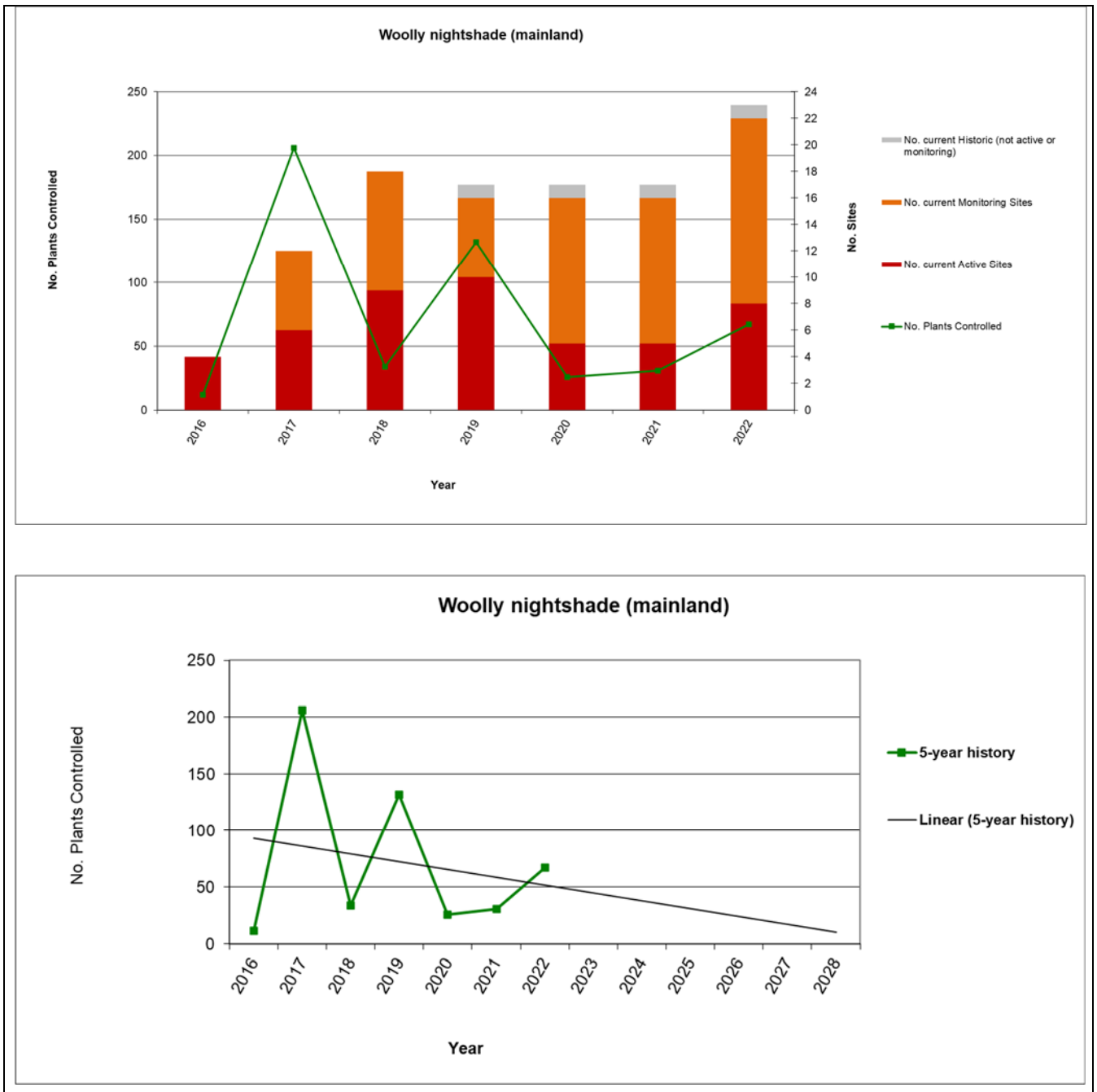
The main willow-leaved hakea infestation (yellow) as seen in October 2019 before control work commenced



The same main willow-leaved hakea infestation as seen in October 2021

34. Woolly nightshade (*Solanum mauritanium*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objectives Over the duration of the Plan, control woolly nightshade (<i>Solanum mauritianum</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.				
Operations overview Council staff and/or contractors will carry out all operational activities.				
Target 34.1 Each year, a control operation is undertaken on Rangitoto ki te Tonga/D'Urville in accordance with the project plan				
2021/2022		502.5 Hours of control work was undertaken to control plants as per the 5 year plan.		
Target 34.2 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.				
2021/2022		100% of 'active' and 'monitoring' sites were visited for control in 2021/2022. 67 plants were controlled this year, and three new sites were identified. One of the new sites is a extensive infestation discovered near Okiwi Bay. Control work hasn't begun at that site as yet. Initial surveillance work puts the number of plants present in the thousands. This will see a sharp increase in the number of plants controlled in coming years.		
Target 34.3 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.				
2021/2022		The only site with a historical site was searched and no plants were found		
Programme trend:  On track				






An example of the densities of woolly nightshade at the new site found in 2021/2022 near Okiwi Bay

Part Two - Other biosecurity services or initiatives

1. Education and awareness




Overview	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.
Operational Summary 2021/2022	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.

2. Investigation & analysis

Overview	<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>	
Target 35.1	Each year, undertake active surveillance activities for aquatic pest species at a minimum of 2 sites identified as being at risk from such threats.	
2021/2022		<p>During 2021/2022, 310 hours (compared to 109 hours and 128 hours in 2020 and 2021, respectively) were attributed to reed sweet grass operations across 4 key sites. This extra time resulted in greater coverage within those aquatic sites. Despite the extra time spent within those areas no other potential biosecurity threats were identified.</p> <p>Council staff also conducted surveillance in the Vernon Lagoon. Although a patch of tall wheat grass was found, no other aquatic pest species were identified.</p>

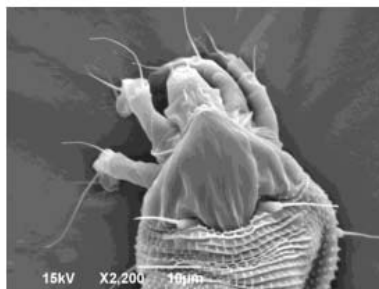
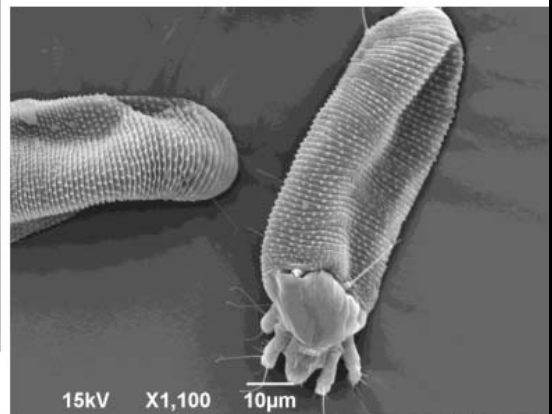
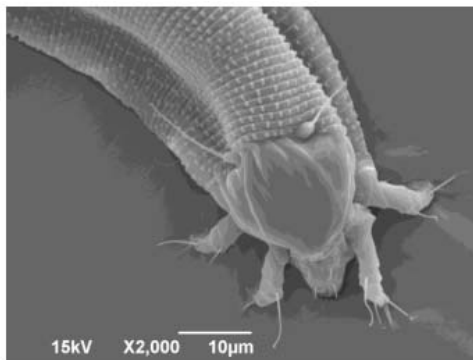
<p>Operational Summary 2021/2022</p>	<p>In addition to that outline against Target 35, the Biosecurity team was made aware of a bomarea infestation in Marlborough at Waitaria Bay in the Sounds. Biosecurity officers have since mapped out the area of infestation with control work planned to be undertaken in the spring.</p>  <p>Flower from a bomarea vine</p>
<p>Target 35.2</p>	<p>Each year, conduct a minimum of two inspections of parties selling or trading plants to determine adherence to the National Pest Plant Accord.</p>
<p>2021/2022</p>	<div data-bbox="451 1666 568 1783" data-label="Image"> </div> <p>Council biosecurity staff undertook 3 inspections of parties selling plants in 2021/2022. It was determined all 3 parties were adhering to the National Pest Plant Accord with no issues being identified.</p>

3. Biocontrol

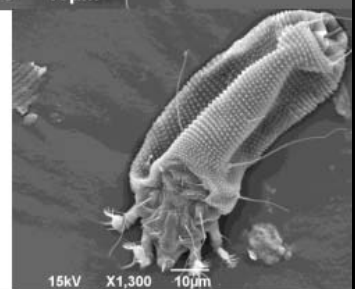
Overview	<p>For many invasive organisms that are well established in Marlborough (particularly invasive weed species), the only remaining intervention is control on an as needed basis by occupiers. What can assist that control is the introduction and movement where necessary of biological control agents.</p> <p>These biological control agents can also assist in the management of species managed under RPMP programmes.</p>	
Target 36.1	Each year, provide an annual contribution into the National Biological Control Initiative.	
2021/2022		A contribution of \$15,000 was made by Council towards the National Biocontrol Collective research programme.
Target 36.2	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).	
2021/2022		In 2021 the old man's beard mite was released in two separate locations in Marlborough. A total of 8 infected vines were planted, with locations selected following advice provided by Manaaki Whenua Landcare Research.
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.	
2021/2022		<p>Monitoring was carried out at the site where the original releases of the Honshu White Admiral Butterfly were made, but no evidence of establishment was found.</p> <p>Monitoring was also carried out for the yellow spot leaf fungus but, again, no evidence of establishment was found.</p>
Operational Summary	Council is working with Manaaki Whenua Landcare Research to receive an additional 3 releases of old man's beard mites (<i>Aceria vitalbae</i>). It is expected that these agents will be ready for release in spring 2022/2023.	
2021/2022	<p>In terms of monitoring and releasing biological agents, biosecurity staff surveyed the site where the initial release of the Honshu White Admiral Butterfly was made in 2018. The establishment of this agent has been limited to isolated sites around the country; establishment of releases has been slow, and at some sites the agents have failed to establish at all.</p> <p>No evidence of the agent has been found in Marlborough since its release in 2018 and because of this it was decided not to conduct any further releases in 2021/2022.</p>	



Aceria vitalba infested *Clematis vitalba* seedlings




Aceria vitalba





Images: Courtesy of Manaaki Whenua/Landcare Research – EPA application
October 2018

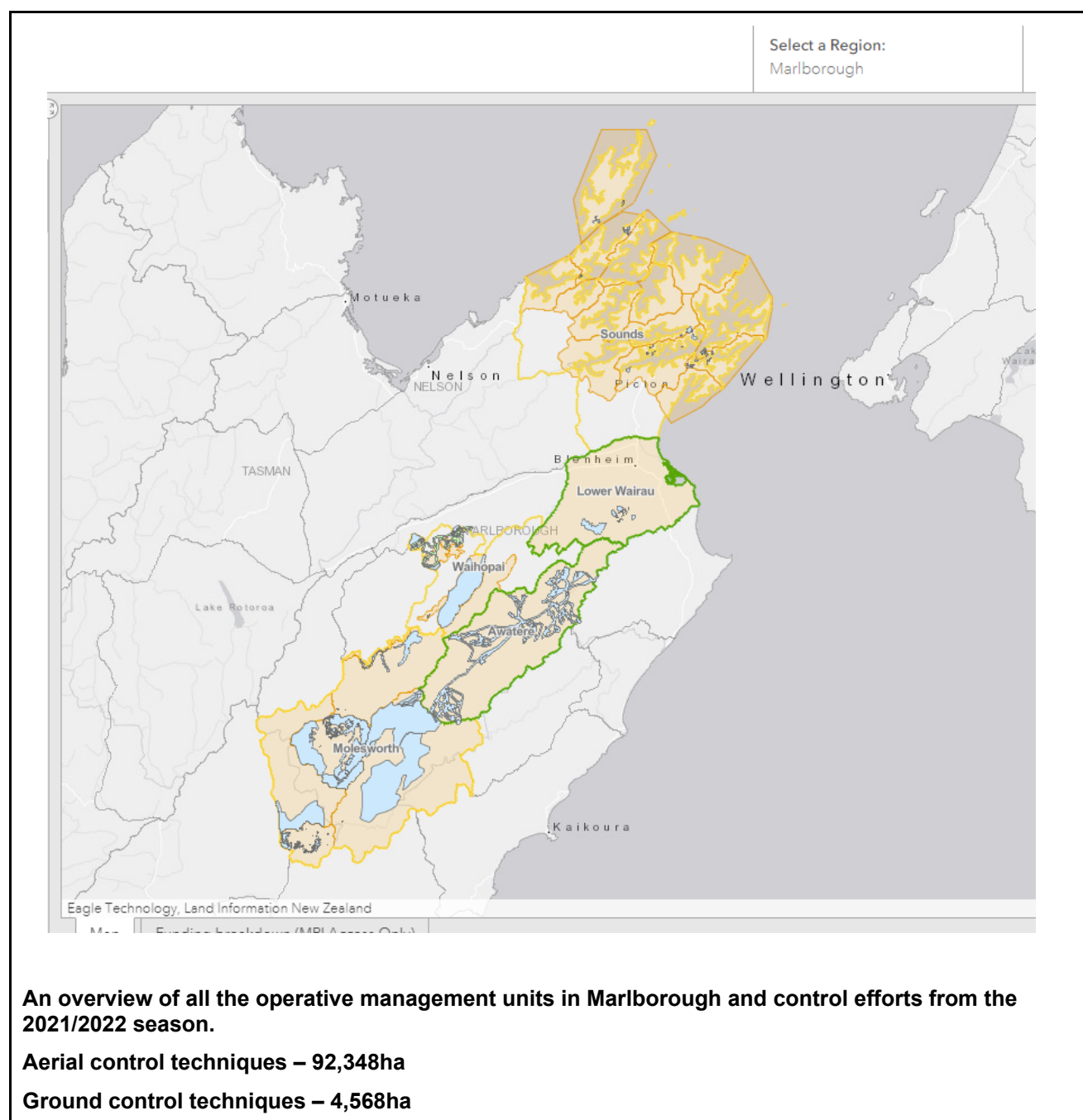
4. Supporting Community Organisations

Overview	<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>
Target 37	<p>Each year, provide an annual contribution into the following community organisations:</p> <ul style="list-style-type: none"> • Marlborough Sounds Restoration Trust • South Marlborough Landscape Restoration Trust • Chilean Needle Grass Action Group (by way of a dedicated budget)
2021/2022	<div data-bbox="555 981 715 1149">  </div> <p>Financial contributions by way of grants were made to the Marlborough Sounds Restoration Trust (\$30,000), South Marlborough Landscape Restoration Trust (\$30,000) and a specific budget managed on behalf of the Chilean Needle Grass Action Group (up to \$15,000).</p>
Operational Summary 2021/2022	<p>As outlined against Target 37, annual financial contributions were made to assist these key community organisations.</p> <p>In addition to this, Biosecurity staff have also provided a large amount of in-kind advice and support to all these community organisations.</p> <p>For the two community Trusts, this is primarily through fulfilling the ex-officio role on both Trust boards.</p>

5. Wilding Conifer Management

Overview	<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>
Target 38.1	<p>While it is agreed, fulfil the role of Regional Fundholder as part of the National Wilding Conifer Control Programme to the satisfaction of Biosecurity New Zealand (MPI).</p>

2021/2022		<p>Throughout the course of the year, Biosecurity staff facilitated the activities of the National Wilding Conifer Control Programme regionally in Marlborough.</p> <p>This continues to put a significant in-kind load on Council as the Regional Fundholder, but the role continues to be fulfilled to the satisfaction on Biosecurity New Zealand.</p>
Target 38.2	While it is in place, facilitate Marlborough Wilding Conifer Steering Group meetings to the satisfaction of all stakeholders involved.	
2021/2022		<p>Biosecurity staff facilitated a meeting of the Marlborough Wilding Conifer Steering Group on one occasions in 2021/2022. This was via Zoom on 9 March 2022 to focus on funding decisions for the coming 2022/23 year.</p>
Operational Summary 2021/2022	<p>In 2021/2022, Biosecurity staff continued to play a prominent role in ensuring the National Wilding Conifer Control Programme (NWCCP) was implemented smoothly and safely in Marlborough.</p> <p>Some of the major milestones achieved this year:</p> <ul style="list-style-type: none"> - A total of three programmes received core NWCCP investment in 2021/2022. This was the Molesworth, Wiahopai and Sounds programmes. - All of these core programmes were successfully delivered safety, efficiently and on budget. - In addition, the South Marlborough Landscape Restoration Trust (SMLRT) delivering both a number of standalone projects, and the NWCCP Community Partnership Project in the Ned/Te Hau landscape. - Council has been working with both the South Marlborough Landscape Restoration Trust and Marlborough Sounds Restorations Trusts in an ex officio role for both trusts. <p>The 2020 policy review process to amend the RPMP to incorporate a programme for pest conifers has largely been in a holding pattern over 2021/2022.</p> <p>An Appeal was made on the Council decision in July 2020 with mediation held in late 2021. An outcome was not reached during mediation so an Environment Court hearing is due in September 2022 to seek a resolution.</p>	



6. Research

Overview	<p>With all biosecurity programmes, a continual improvement in understanding relating to 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 being more direct.</p>
Operational Summary 2021/2022	<p>In 2021/2022, The Biosecurity team was involved or supported the follow areas of research:</p> <ul style="list-style-type: none"> • Sponsor and collaborator for the 'Tomorrow's Marine Biosecurity Toolbox' MBIE funded programme led by the Cawthron Institute; • Managing the product registration of Taskforce™ herbicide in NZ; • Ongoing support toward national research projects looking into the biological control of Vespula sp. wasps; • Support the SFF project exploring pathogenic biological control agents for nassella tussock. • Operational trial using UAV technology to quantify wattle infestations in the Picton vicinity while in flower. <p>The research budget for 2021/2022 was \$20,000.</p> <p>Actual 2021/2022 spend = \$22,500.</p>

7. Specific Projects

<p>Operational Summary 2021/2022</p>	<p>In 2021/2022, Biosecurity staff were involved in the following projects that align to the goals of Council's Biosecurity Strategy:</p>
	<ul style="list-style-type: none"> • Top of the South Marine Biosecurity Partnership <p>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.</p> <p>Contract management rotated to be undertaken by Tasman District Council from 2020/21.</p> <p><u>Budget:</u></p> <ol style="list-style-type: none"> 1. Financial contribution \$42,250; 2. Staff time and associated costs. <p><u>2021/2022 Actual:</u></p> <ol style="list-style-type: none"> 1. \$42,250.00 – shared funding for the coordination/projects contract; 2. Staff time attending Committee meetings and providing input into any TOS Partnership initiatives.
	<ul style="list-style-type: none"> • Response to plague skinks in Marlborough <p>The response to the Riverlands detection of plague skinks has been closed out given the large area they were found to be established across – linking up with the Cloudy Bay business park.</p> <p>However, the incursion at Havelock is still an active response led by Biosecurity New Zealand with specialist support from the Department of Conservation. Council is also involved at the governance group level.</p> <p>The Havelock response continues to have an elimination objective given the incursion point and timing is definitively known which is extremely rare.</p> <p><u>Budget:</u> Staff time and associated costs</p> <p><u>2021/2022 Actual:</u> Staff time involved in the response governance group.</p>

- Restoring and Protecting Flora (Jobs for Nature)

In August 2021 the Marlborough District Council signed a contract for service with The Nature Conservancy (TNC) to provide operational support to the Jobs for Nature funded 'Restoring And Protecting Flora Project' in Marlborough.

The initial purpose of the project was to roll out short term high impact weed control programmes at ecologically significant sites of various tenures. The Operational Liaison Support role (OPLS) was appointed out of Council's Biosecurity section and commenced on 4 October 2021.

The role would facilitate the operational objectives of the project and foster community engagement with community groups already undertaking restorative work at ecologically significant sites in Marlborough.

Since the commencement of the OPLS (and community engagement) role, the OPLS has surveyed and recommended 12 ecologically significant sites subsequently approved by the TNC Project Lead to receive benefit from the project.

From the commencement of weed control in late 2021, the OPLS has made the necessary connections between the project's delivery contractor and landowners/community group(s) to ensure safe access to the work sites.

During the 2021/2022 period, monthly and quarterly reports have been submitted to TNC's project lead as per the TNC/MDC contract requirements. Project reports were prepared to document FTE hours and conservation outcomes to help assist project planning for 2023/2024. These reports also included health and safety reports to ensure the delivery contractor was operating safely and that all operations were being carried out according to best practice.

Recent OPLS work has also included draft recommendations for planting proposals at current project sites, as project partners consider widening the project's scope to include restorative/enhancement planting.

Since the appointment of the OPLS role on 4 October 2021 1521.5 OPLS hours have been committed to the 'Restoring and Protecting Flora Project' up to 31 August 2022.

Budget: \$15,000 (over and above the \$75,000 funding received per annum).


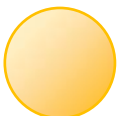

2021/2022 Actual (Since OPLS commencement 4 Oct 2021):

\$4,050.19 + \$451.32 of direct operational contributions.

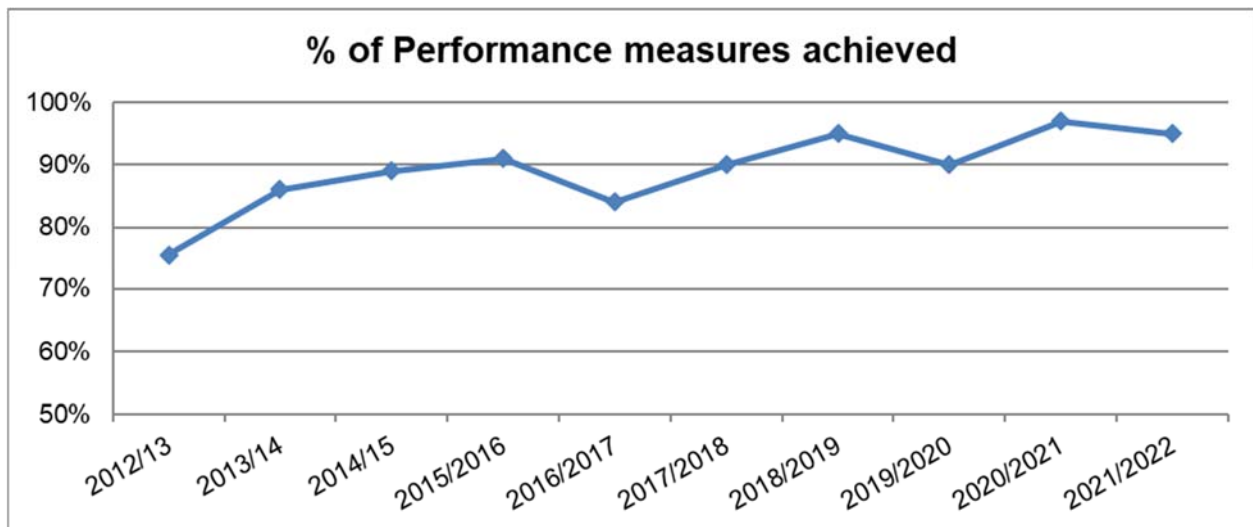
= \$4,501.51

Part Three – Performance Summary

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

Measure	2021/2022 Score
 Achieved	76 (95%)
 Almost Achieved	4 (5%)
 Not Achieved	0 (0%)
	80 (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 30 August 2022.

This review did not result in any proposed amendments to the current Operational Plan.