MARLBOROUGH DISTRICT COUNCIL

Biosecurity

Operational Plan Report 2022/2023

July 2023

Biosecurity

Operational Plan Report

2022/2023

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July 2023

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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 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.

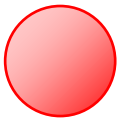
Part Two will report on various other biosecurity services and/or initiatives that Council has decided to implement or support.

Part Three details a summary of performance against targets for the 2022/2023 year and over time.

Part Four details the annual review of the Operational Plan 2018-2028 in accordance with section 100B(1)(b), 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 2022/2023 performance against the respective target.

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

Part One - Regional Pest Management Plan Programmes

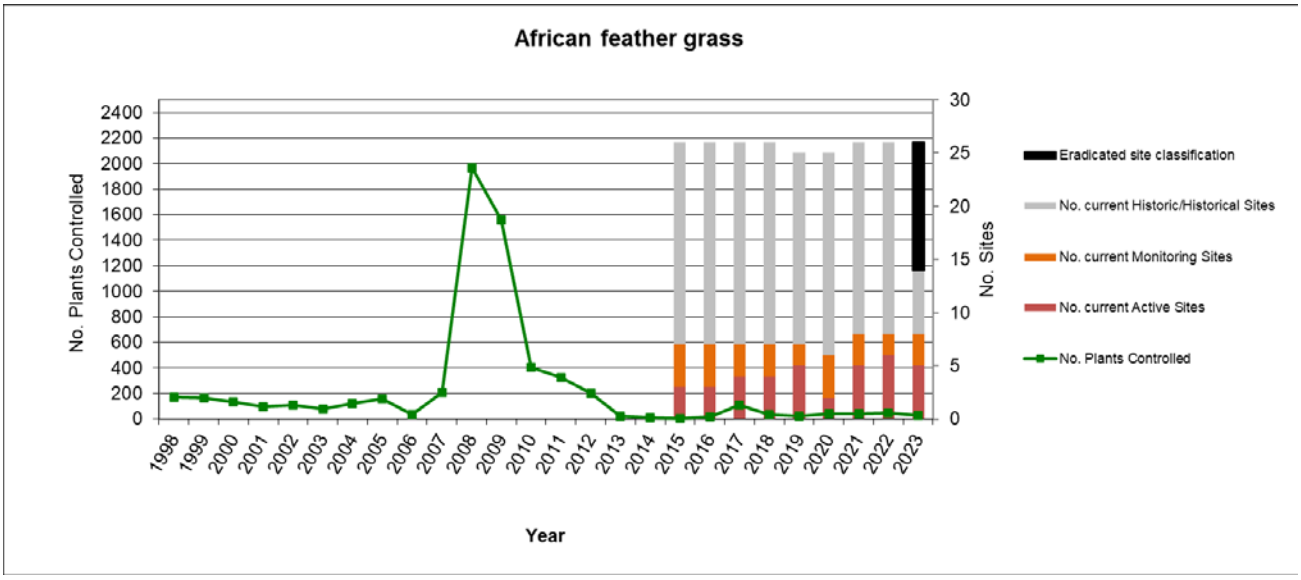
1. African feather grass *(Pennisetum macrourus)*

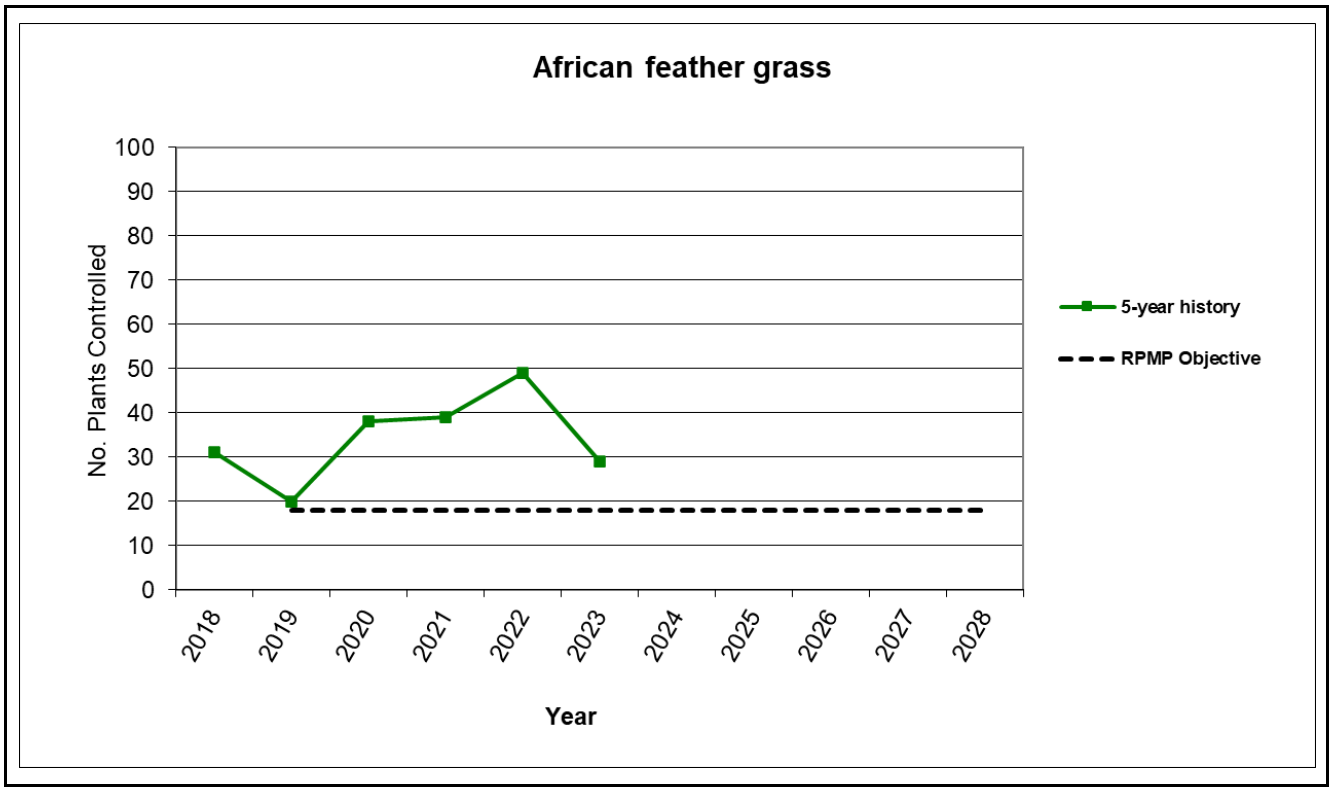
Exclusion	Eradication	Progressive Containment	**Sustained Control**	Site-led

Objective	Over the duration of the Plan, control African feather grass (*Cenchrus macrourus*) 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 1.1	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.	
2022/2023		All 8 (100%) high priority sites were visited. 29 plants were destroyed from 3 of those sites, compared to 49 plants found over 4 sites in 2021/2022.
Target 1.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.	
2022/2023		Of the 6 historical sites, 2 sites were visited for surveillance activities during the 2022/2023 season. No re-occurrence of African feather grass was found at those sites. Overall, the extent and density of Marlborough's African feather grass infestations remain small. However, the plant numbers found over the last several years have exceeded the threshold of the RPMP objective, to keep plant numbers at or below 2016 levels.

Programme trend:

Not meeting objective




African feather grass
No. Plants Controlled
100
90
80
70
60
50
40
30
20
10
0
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
Year
5-year history
RPMP Objective

2. Bathurst bur (*Xanthium spinosum*)

Exclusion	Eradication	Progressive Containment	**Sustained Control**	Site-led

Objective	Over the duration of the Plan, control bathurst bur (*Xanthium spinosum*) 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.

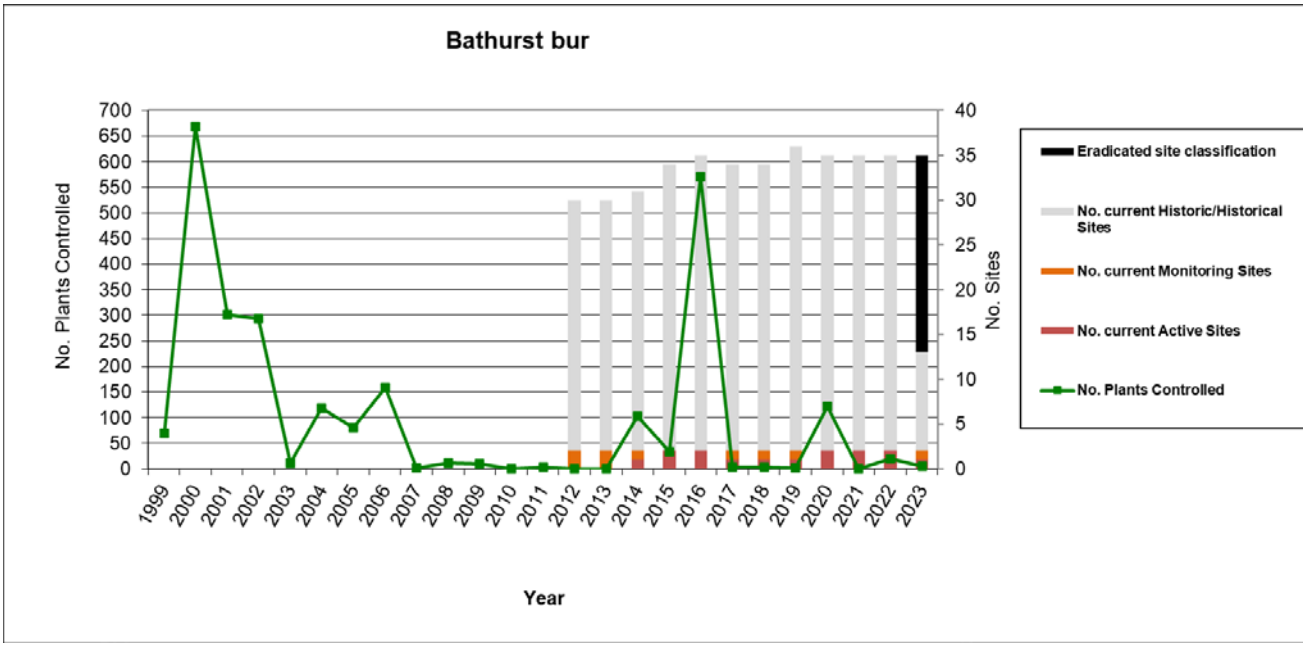
2022/2023		All 'active' and 'monitoring' Bathurst bur sites were visited for control activities for 2022/2023. Only 5 plants were found and destroyed, compared to 20 plants in 2021/2022.

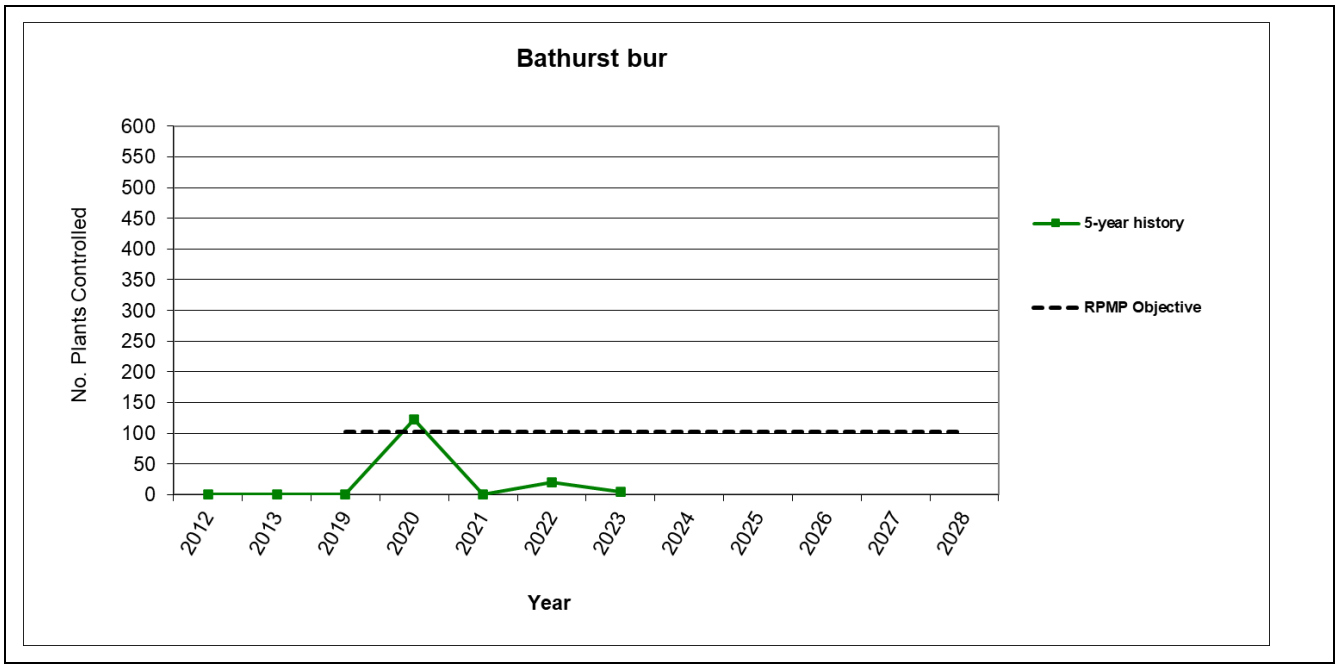
Target 2.2	Each year, 10% of sites that have a status of historical are visited for surveillance, plus any site known to have had soil disturbance within the last 12-month period.

2022/2023		11 out of 11 sites (100%) with a historical status were visited for surveillance activities during 2022/2023. 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




Bathurst bur
No. Plants Controlled
600
550
500
450
400
350
300
250
200
150
100
50
0
2012
2013
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
Year
5-year history
RPMP Objective

3. Boneseed (*Chrysanthemoides monilifera*)

Exclusion	Eradication	Progressive Containment	**Sustained Control**	Site-led

Objective	Over the duration of the Plan, control boneseed (*Chrysanthemoides monilifera*) 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.

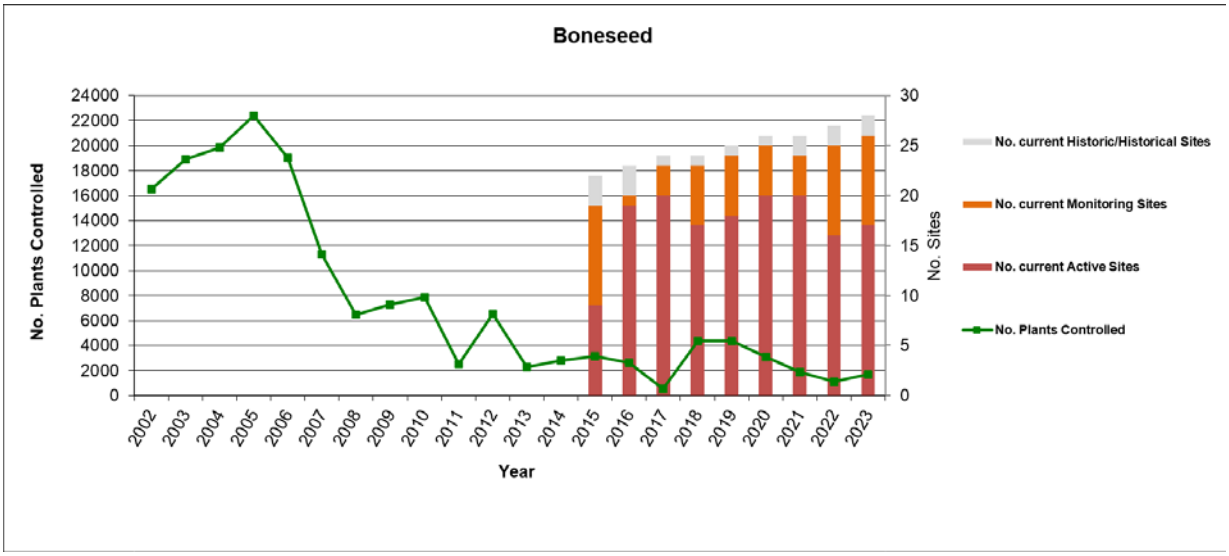
2022/2023		100% of sites with a status of ‘active’ or ‘monitoring’ were visited during 2022/2023 with a total of 1696 plants destroyed. Plant numbers found over the last several years have continued to be below the threshold of the RPMP objective, to keep plant numbers at or below 2015 levels.

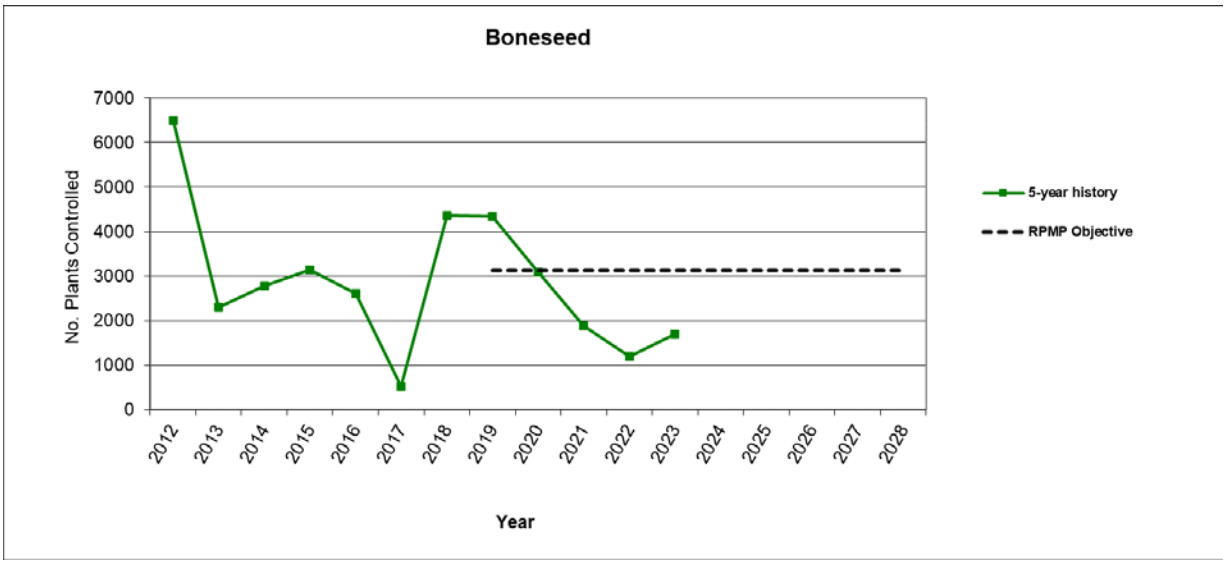
Target 3.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.

2022/2023		One of the two historical sites was visited in 2022/2023.

Programme trend:

On track





4. Broom (*Cytisus scoparius*)

Exclusion	Eradication	Progressive Containment	**Sustained Control**	Site-led
Objective 1	Over the duration of the Plan, control broom (*Cytisus scoparius*) 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 (*Cytisus scoparius*) 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			
2022/2023		No situations were identified requiring enforcement action.		
Target 4.2	Each year, undertake inspection and/or surveillance activities in all three zones.			
2022/2023		<u>Waima/Ure</u> Surveillance was undertaken in the Ure area, with a focus on areas disturbed by logging. Very few plants were found. <u>Upper Wairau</u> Inspections of land within this Zone were carried out. There is one area that require follow up in the 2023/2024 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 done in conjunction with property inspections assessing rabbit population abundance.		

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.	
2022/2023		No reports/complaints were received during the 2022/2023 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 (*Trichosurus vulpecula)* 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	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. In all instances, joint decision-making is to occur. 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. 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.			
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.			
2022/2023		There were no reports of possums on any of the Islands listed in the RPMP this year.		

Status of brushtail possums on designated islands:

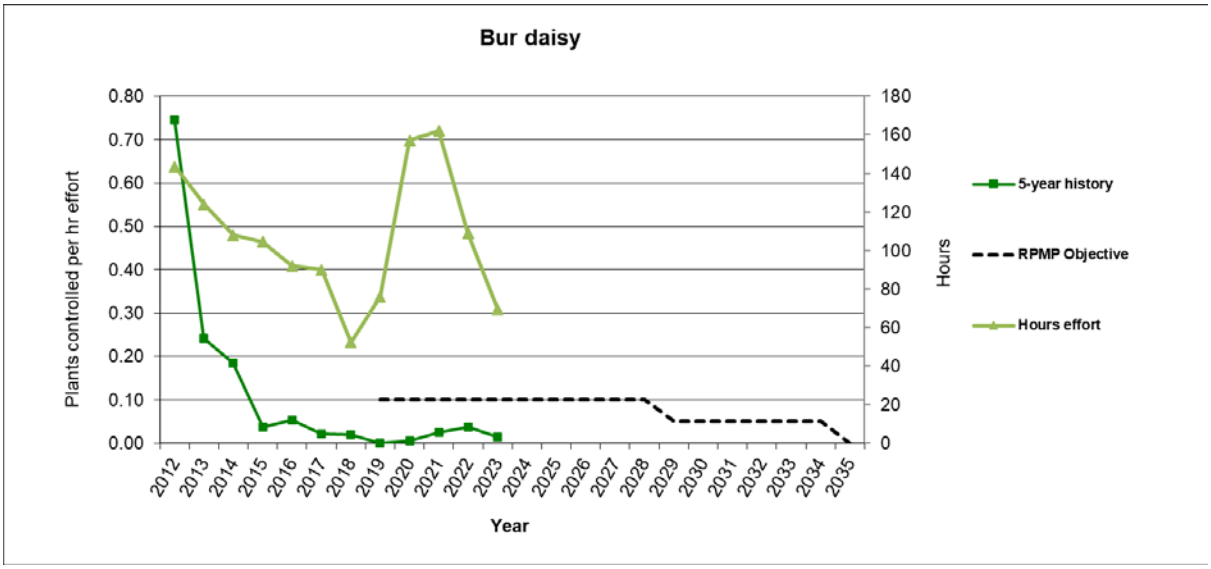
Not established

6. Bur daisy (*Calotis lappulacea*)

Exclusion	**Eradication**	Progressive Containment	Sustained Control	Site-led
Objective 1	By 2035, bur daisy (*Calotis lappulacea*) 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 (*Calotis lappulacea*) 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.			
2022/2023		69.5 hours of surveillance/control activities were undertaken at the only known Bur daisy site known to exist in Marlborough. One plant was found.		

Programme trend:

On track



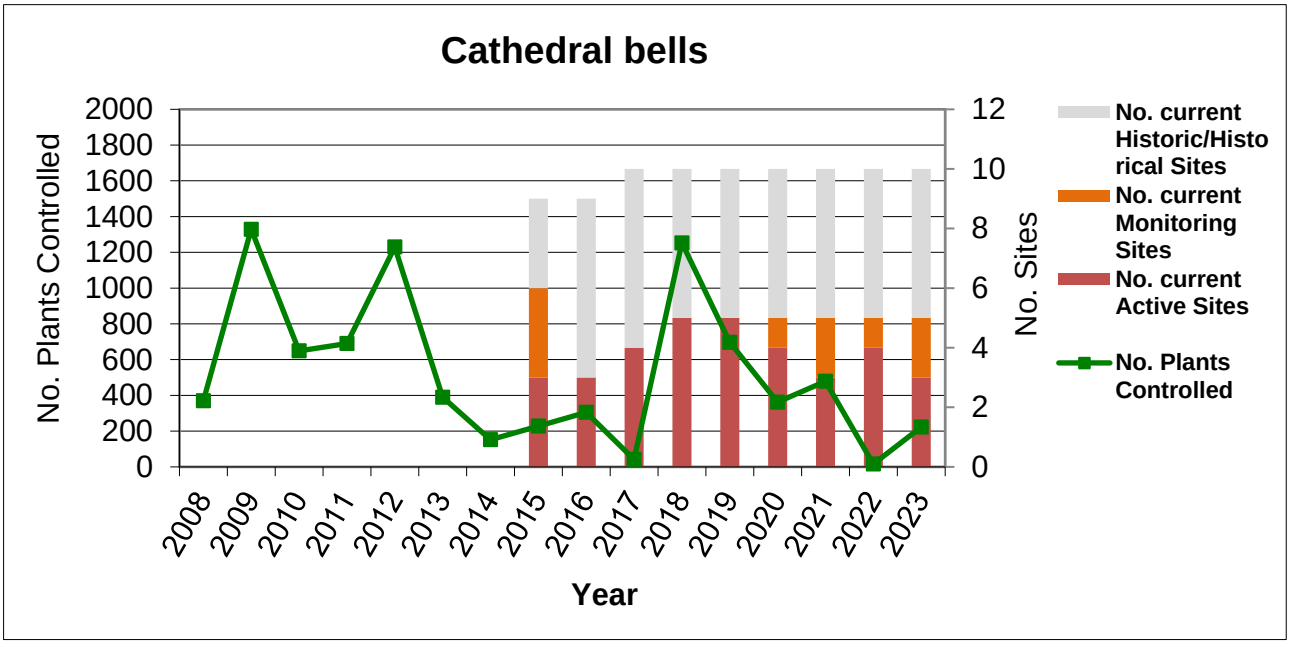
7. Cathedral bells (*Cobaea scandens*)

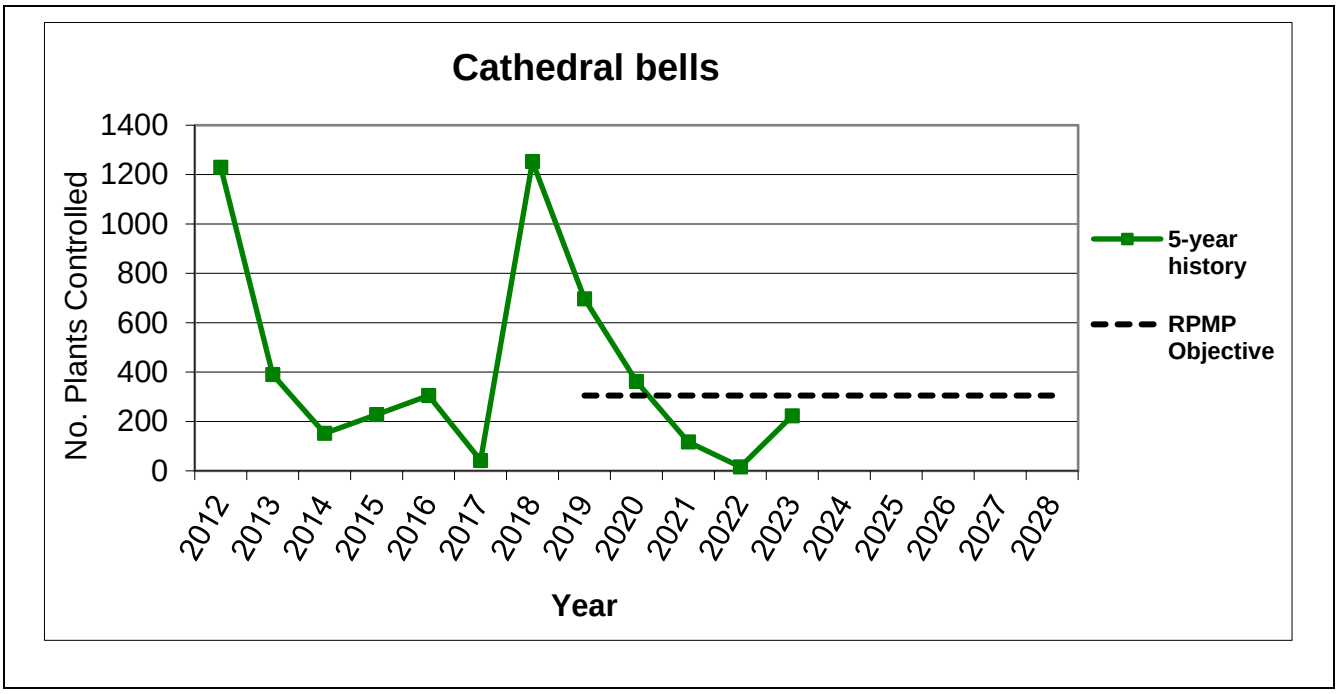
Exclusion	Eradication	Progressive Containment	**Sustained Control**	Site-led

Objective	Over the duration of the Plan, control cathedral bells (*Cobea scandens*) 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.	
2022/2023		All five sites with the status of 'active or 'monitoring' were visited in 2022/2023. 223 plants were found and destroyed – still below the threshold of the RPMP objective of 305.
Target 7.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.	
2022/2023		3 sites out of 5 sites (60%) with a historical status were visited for surveillance activities during 2022/2023. No plants were found.

Programme trend:


On track




Cathedral bells
No. Plants Controlled
1400
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
Year
5-year history
RPMP Objective

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 (*Nassella neesiana*) 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: • 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.
2022/2023	 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.
2022/2023	 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.
2022/2023	 Council received several reports of suspected Chilean needle grass in 2022/2023. All reports had an investigation started within two working days 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.

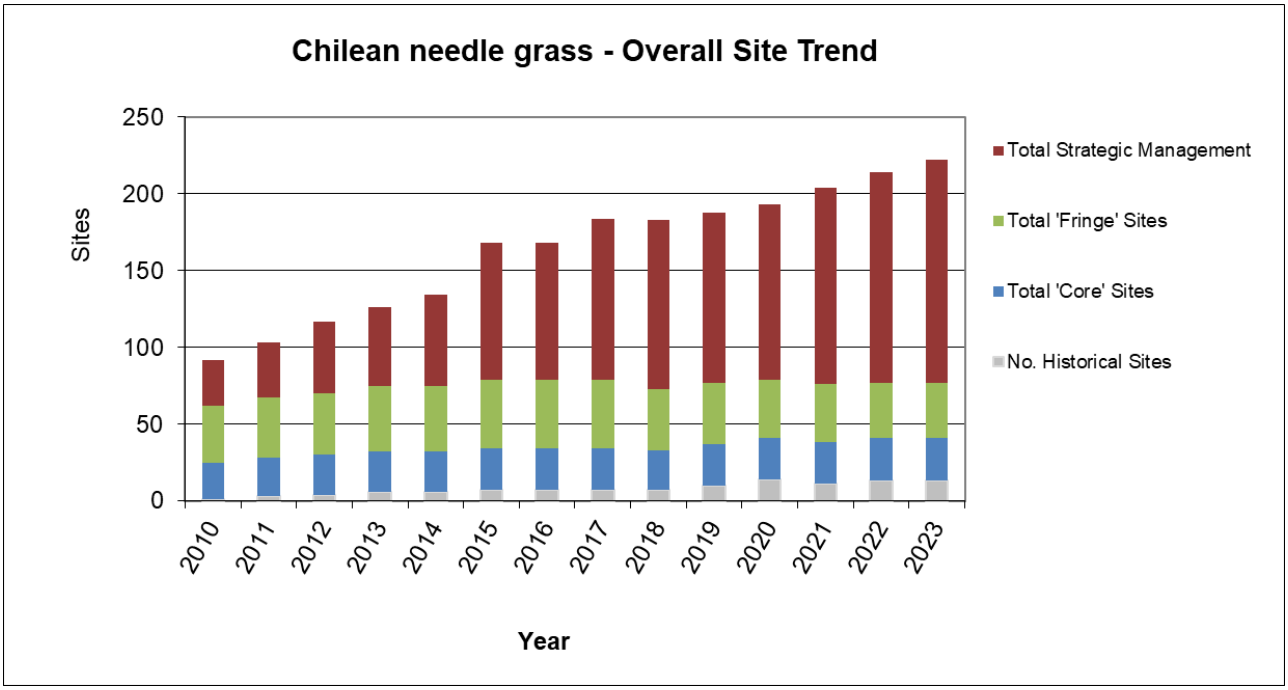
2022/2023		A calculated total of 2194 hours of staff and contractor time was spent on surveillance activities outside of previously known infested areas.
Target 8.5	Provide support to the Chilean Needle Grass Action Group or any other related project where there are shared outcomes.	
2022/2023		Council managed a specific budget on behalf of the Chilean Needle Grass Action Group in 2022/23. 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.	
2022/2023		A total of 41 sites without known populations of CNG were and checked throughout the flowering season.

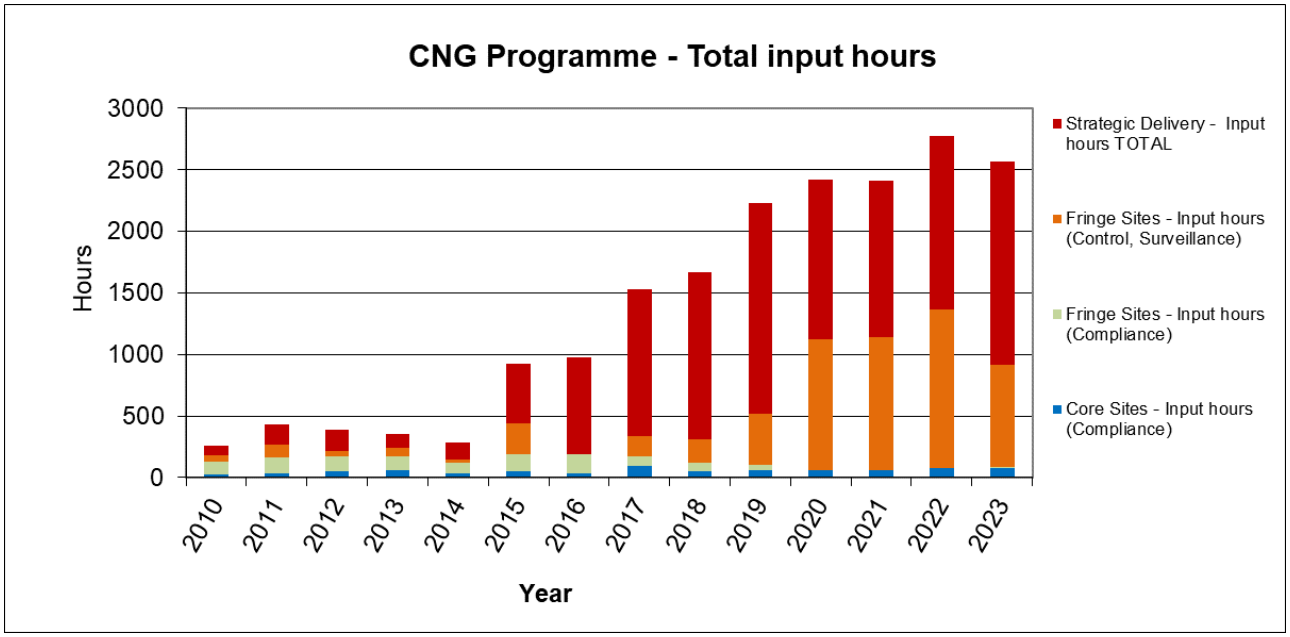
Programme trend:

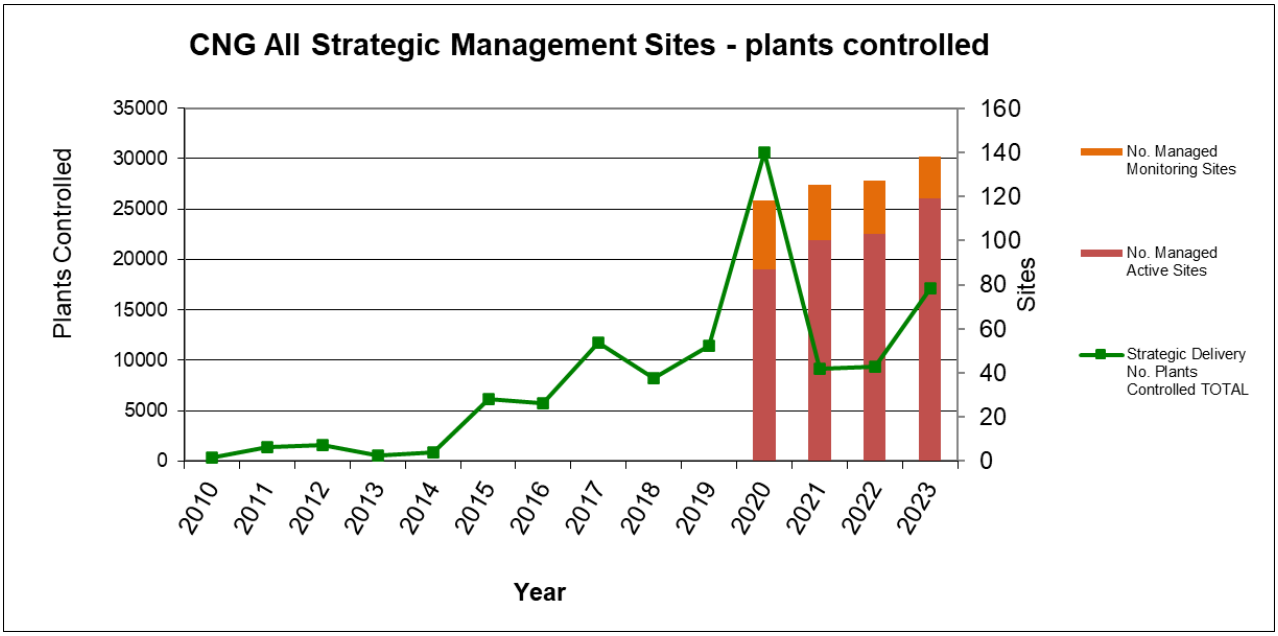
On track

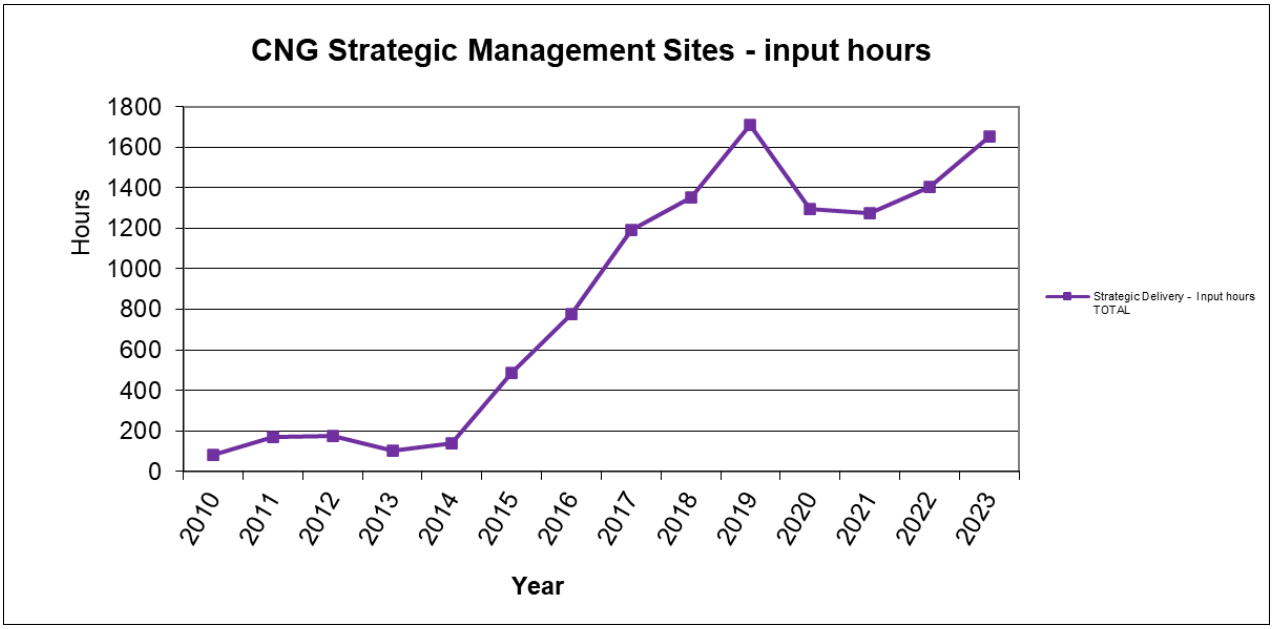
The following trend datasets are being used by Council to monitor the progress of the Chilean needle grass programme.

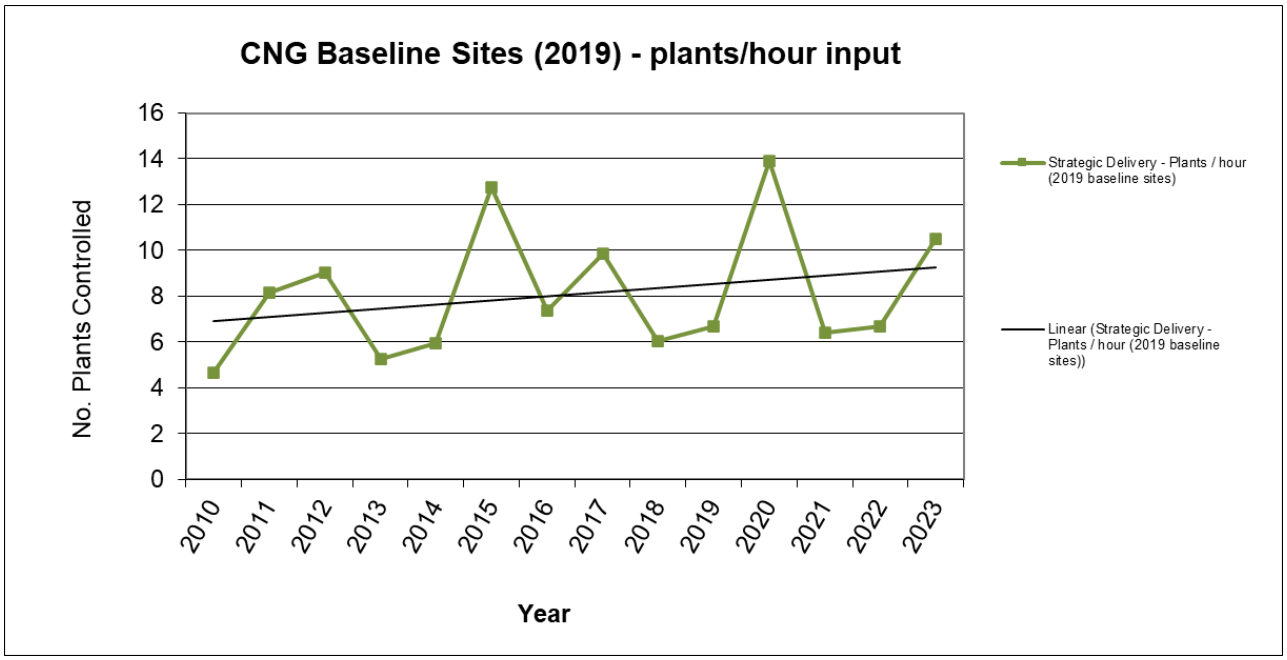
While the area affected is increasing, this is expected given this dataset is cumulative only. The number of plants controlled on strategic management sites is not trending upwards and the plants per unit effort is flat to marginally increasing on the baseline sites used for long term monitoring.




CNG Programme - Total input hours
Hours
3000
2500
2000
1500
1000
500
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
Year
Strategic Delivery - Input hours TOTAL
Fringe Sites - Input hours (Control, Surveillance)
Fringe Sites - Input hours (Compliance)
Core Sites - Input hours (Compliance)


CNG All Strategic Management Sites - plants controlled
Plants Controlled
35000
30000
25000
20000
15000
10000
5000
0
Sites
160
140
120
100
80
60
40
20
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
Year
No. Managed Monitoring Sites
No. Managed Active Sites
Strategic Delivery No. Plants Controlled TOTAL


CNG Strategic Management Sites - input hours
Hours
1800
1600
1400
1200
1000
800
600
400
200
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
Year
Strategic Delivery - Input hours TOTAL


CNG Baseline Sites (2019) - plants/hour input
No. Plants Controlled
16
14
12
10
8
6
4
2
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
Year
Strategic Delivery - Plants / hour (2019 baseline sites)
Linear (Strategic Delivery - Plants / hour (2019 baseline sites))

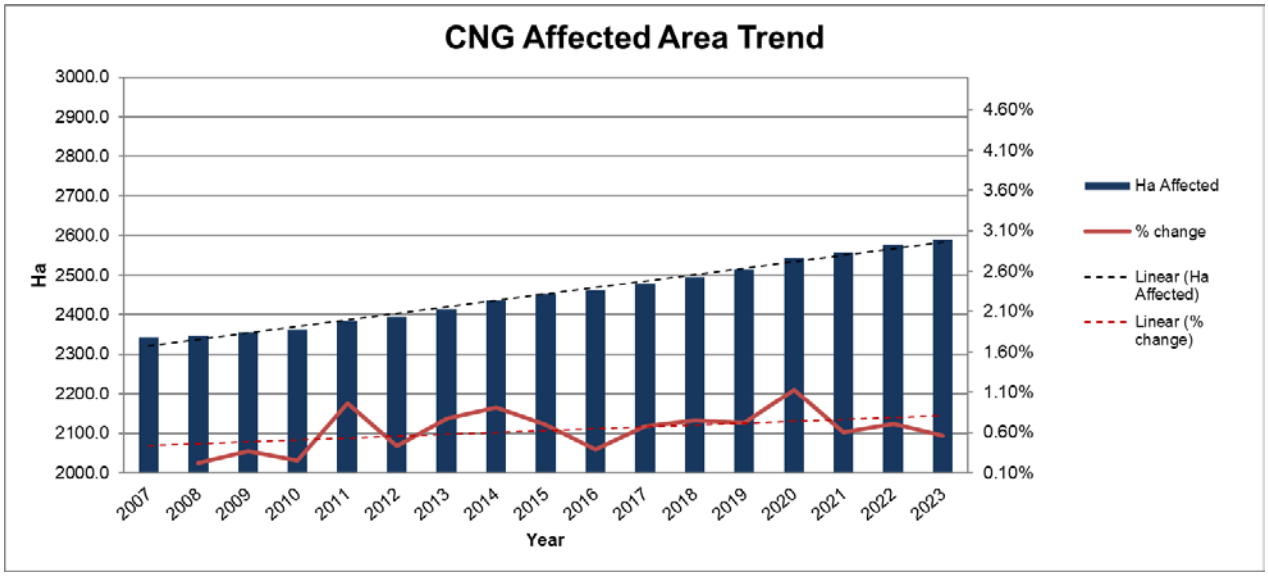

CNG Affected Area Trend
Ha
3000.0
2900.0
2800.0
2700.0
2600.0
2500.0
2400.0
2300.0
2200.0
2100.0
2000.0
4.60%
4.10%
3.60%
3.10%
2.60%
2.10%
1.60%
1.10%
0.60%
0.10%
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
Year
Ha Affected
% change
Linear (Ha Affected)
Linear (% change)

Figure 1: Chilean needle grass, adjacent to State Highway 1 in the Weld Pass area.

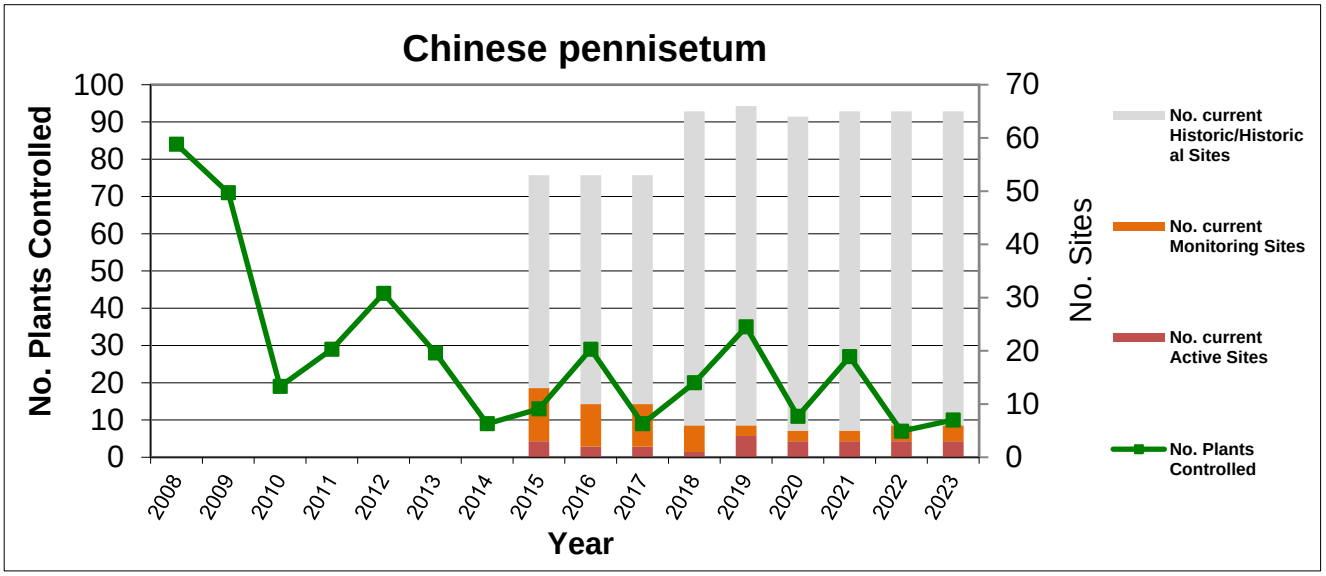
9. Chinese pennisetum (*Pennisteum alpecuroides*)

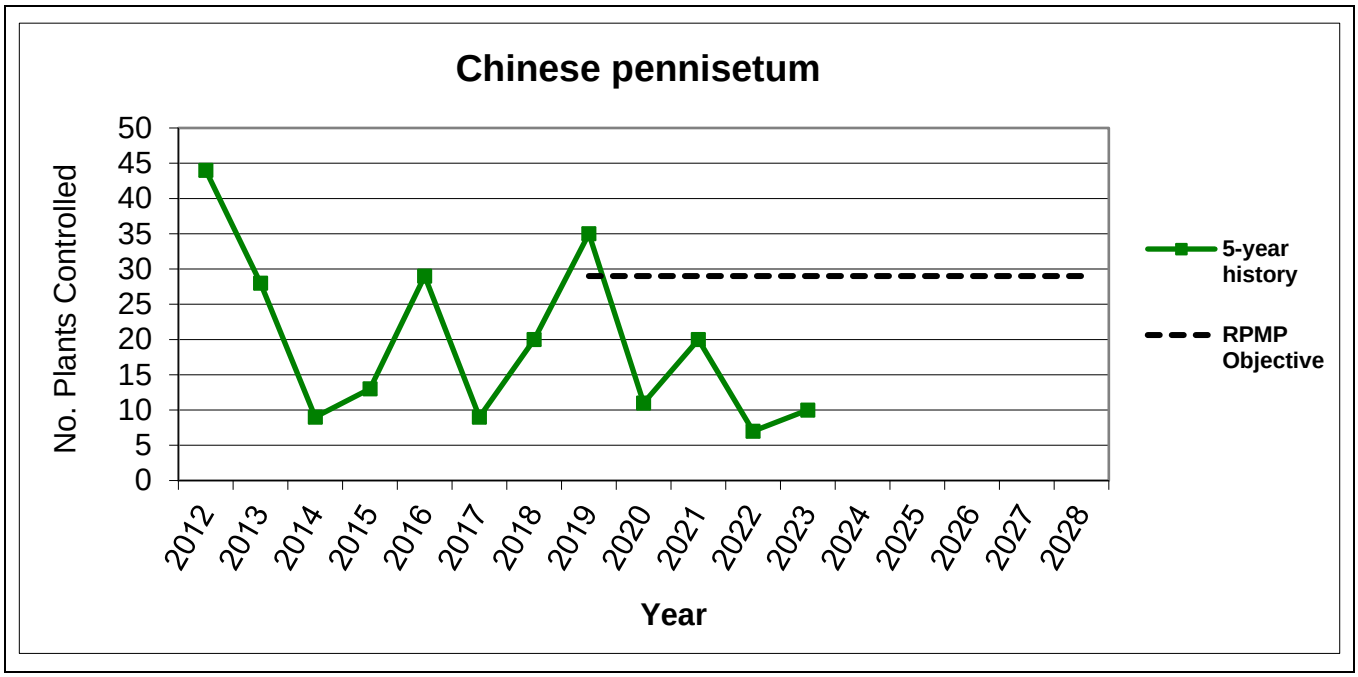
Exclusion	Eradication	Progressive Containment	**Sustained Control**	Site-led

Objective	Over the duration of the Plan, control Chinese pennisetum (*Pennisetum alpecuroides*) 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.	
2022/2023		All 'active' and 'monitoring' sites were visited for 2022/2023. A total of 10 plants were found at 2 sites. Overall, the annual plant numbers are trending to the RPMP objective, to keep plant numbers at or below 2016 levels.
Target 9.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.	
2022/2023		20 out of 60 historical sites were visited and no plants were found.

Programme trend:

On track




Chinese pennisetum
No. Plants Controlled
50
45
40
35
30
25
20
15
10
5
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
Year
5-year history
RPMP Objective

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 (*Celastrus orbiculatus*) 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.

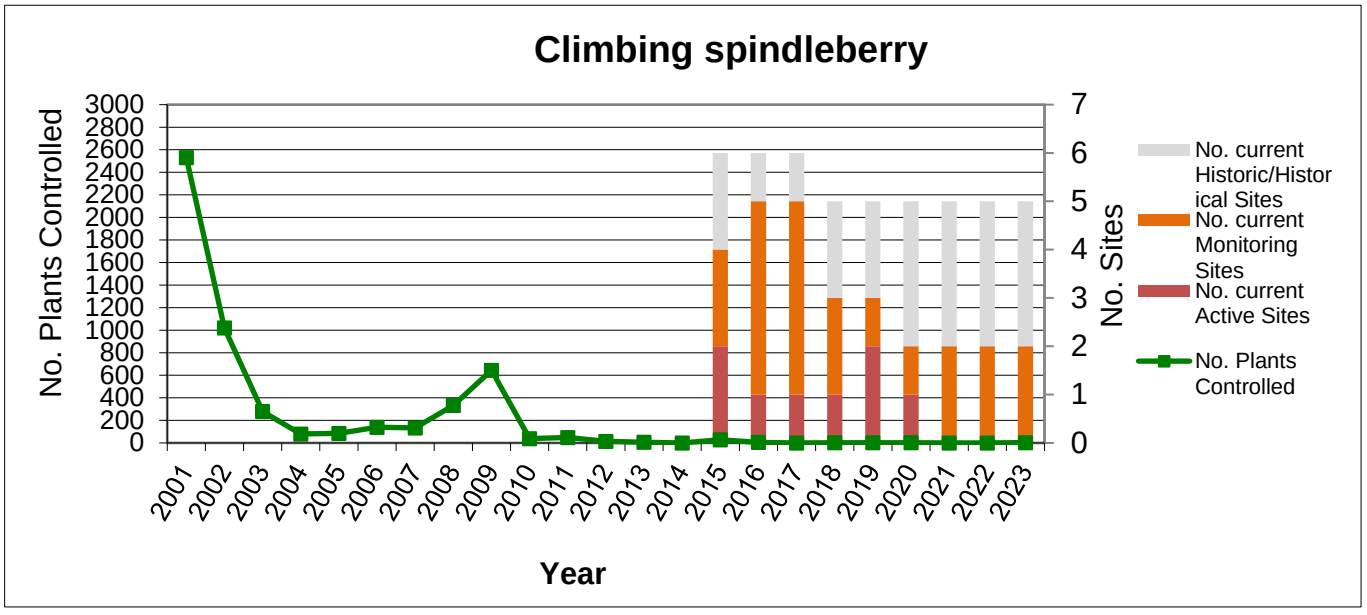
2022/2023		All 'active' and 'monitoring' sites were visited for 2022/2023. A total of 3 plants were found at 2 sites, up from 0 plants found last year. This is still below the RPMP objective to keep the number of plants being found each year below 5.

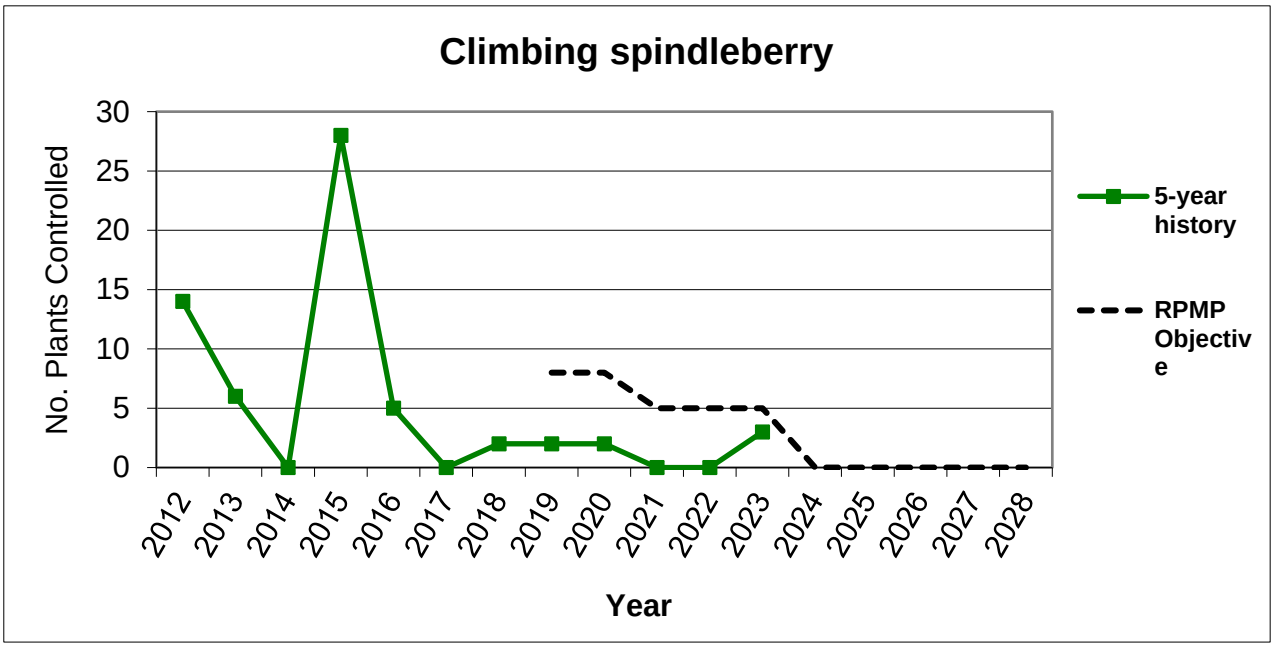
Target 10.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.

2022/2023		All historical sites were visited, with no plants were found.

Programme trend:

 On track




Climbing spindleberry
No. Plants Controlled
30
25
20
15
10
5
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
Year
5-year history
RPMP Objective

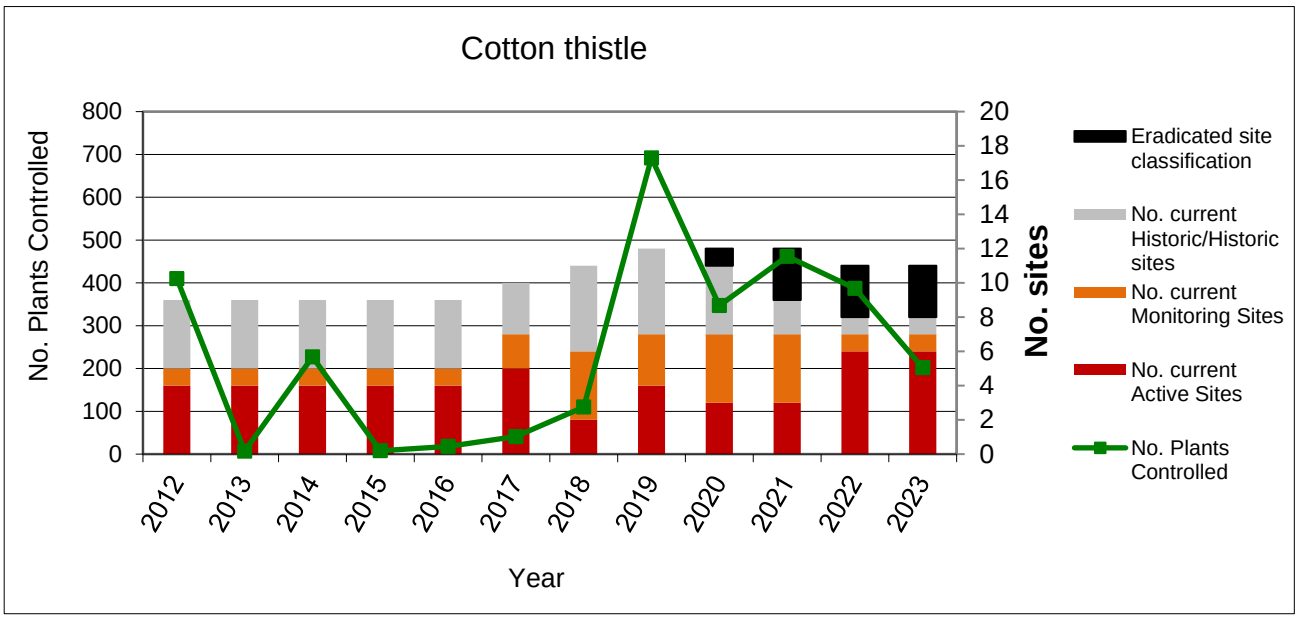
11. Cotton thistle (*Onopordum acanthium*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led

Objective	Over the duration of the Plan, control cotton thistle (*Onopordum acanthium*) 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.	
2022/2023		All sites with a status of 'active' or 'monitoring' were visited in 2022/2023. A total of 202 plants were destroyed this season which is well below the RPMP threshold of 692.
Target 11.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.	
2022/2023		The one historical site was visited for a surveillance inspection. No plants were found.

Programme trend:


On track



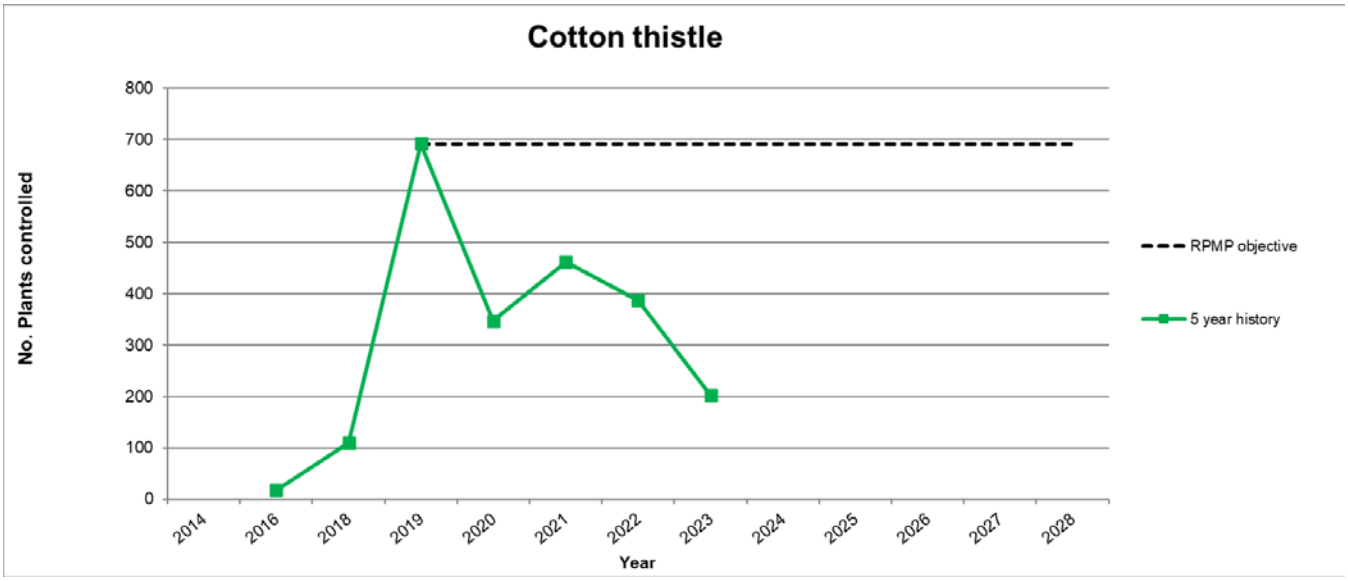


Figure 2: Cotton thistle plants found at Craiglochart.

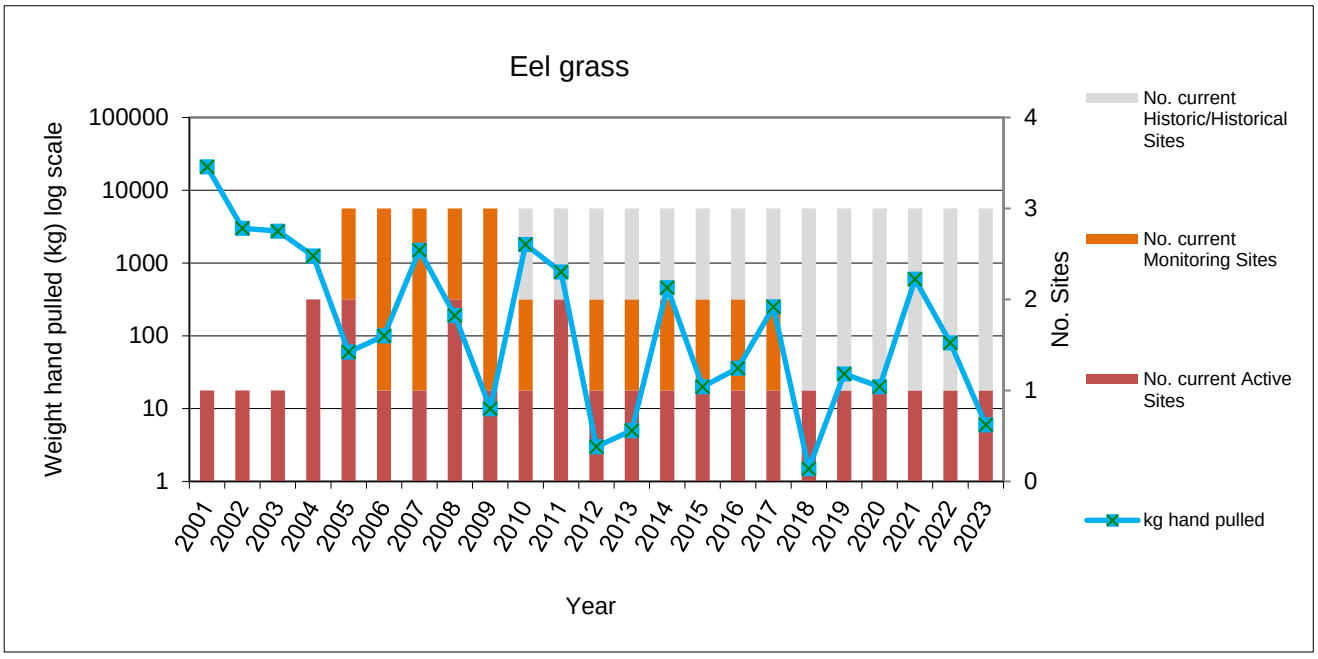
12. Eel grass (*Vallisneria australis*)

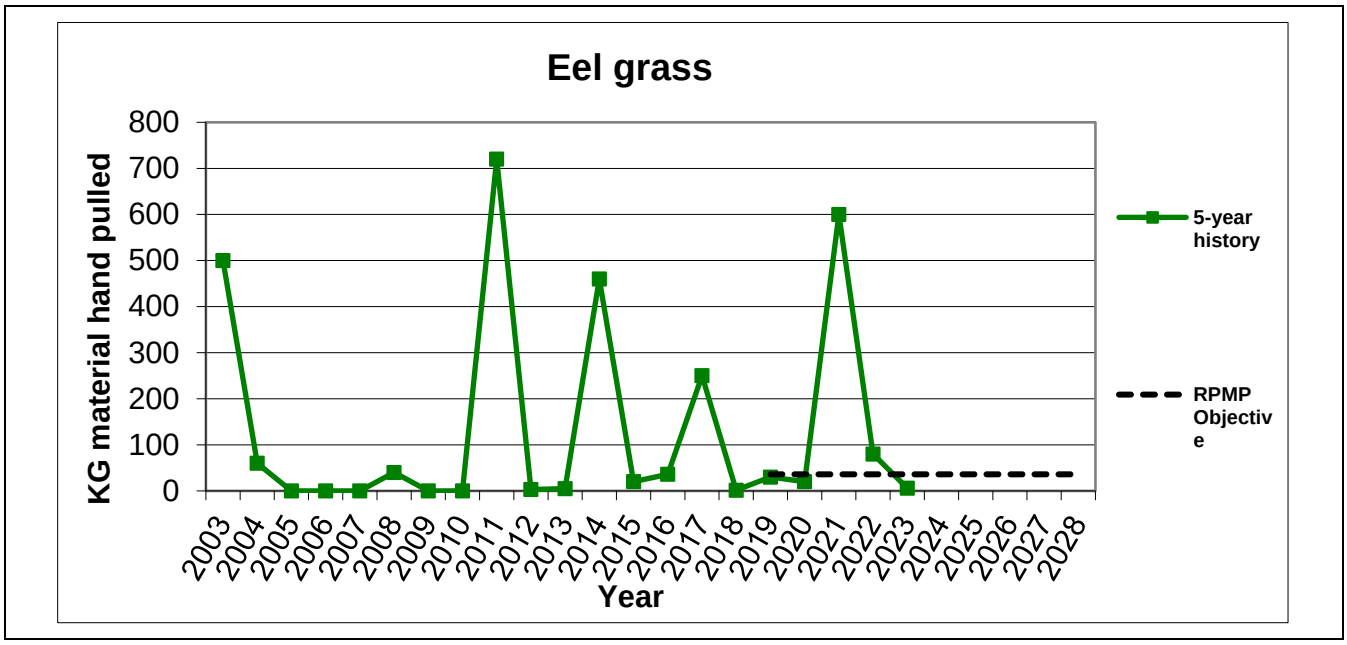
Exclusion	Eradication	Progressive Containment	**Sustained Control**	Site-led

Objective	Over the duration of the Plan, control eel grass (*Vallisneria australis*) 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.	
2022/2023		The one active eel grass site was visited twice in 2022/2023. A total of 5 kilograms of plant matter was removed. The Opaoa Loop, which is a historical site, was also searched with no eel grass being found.

Programme trend:


On track




Eel grass
KG material hand pulled
800
700
600
500
400
300
200
100
0
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
Year
5-year history
RPMP Objective

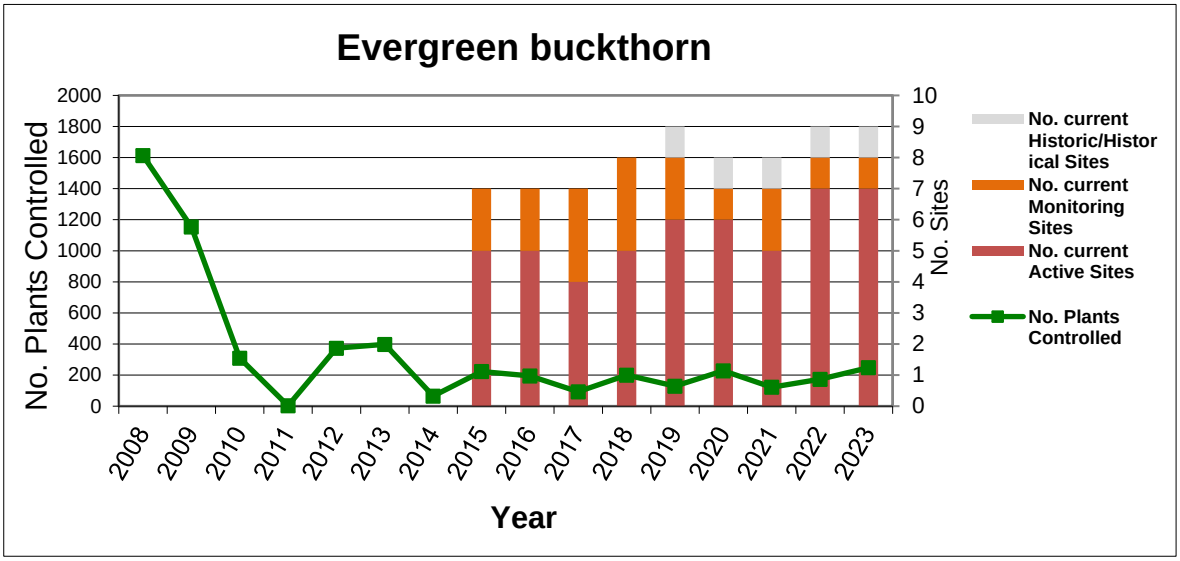
13. Evergreen buckthorn *(Rhamnus alaternus)*

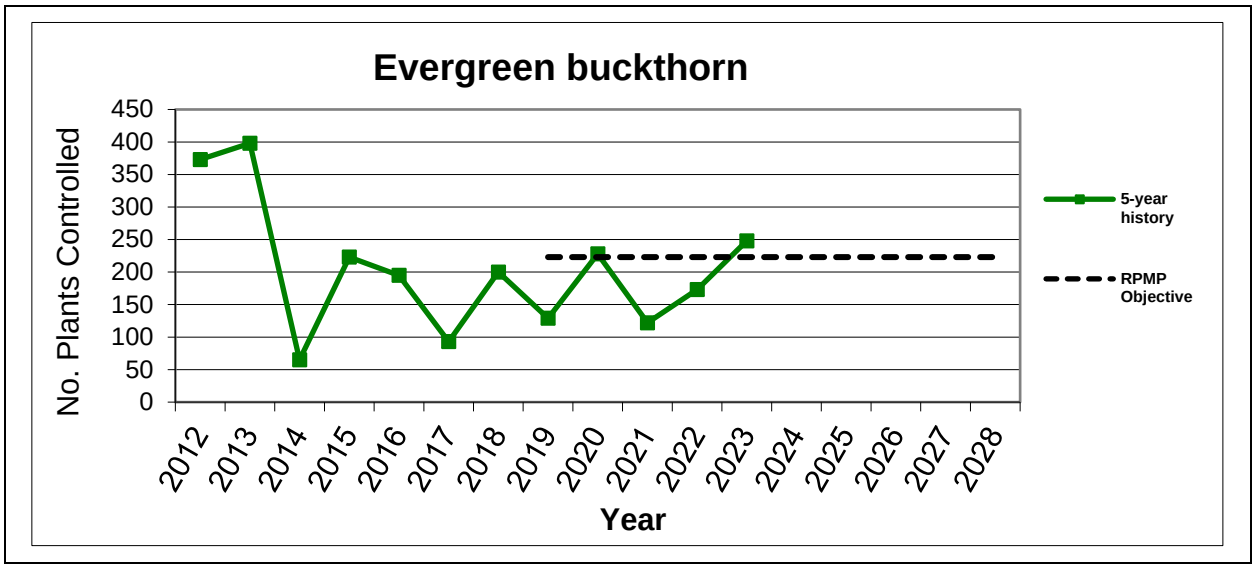
Exclusion	Eradication	Progressive Containment	**Sustained Control**	Site-led

Objective	Over the duration of the Plan, control of evergreen buckthorn (*Rhamnus alaternus*) 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.	
2022/2023		All active and monitoring evergreen buckthorn sites were visited in 2022/2023. A total of 248 plants were destroyed which slightly exceeds the RPMP objective of keeping numbers to 2019 levels of 223.
Target 13.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.	
2022/2023		The only historical evergreen buckthorn site was visited during 2022/2023. 18 plants were found this year meaning the site will be changed to active for next year.

Programme trend:

Not meeting objective




Evergreen buckthorn
No. Plants Controlled
450
400
350
300
250
200
150
100
50
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
Year
5-year history
RPMP Objective

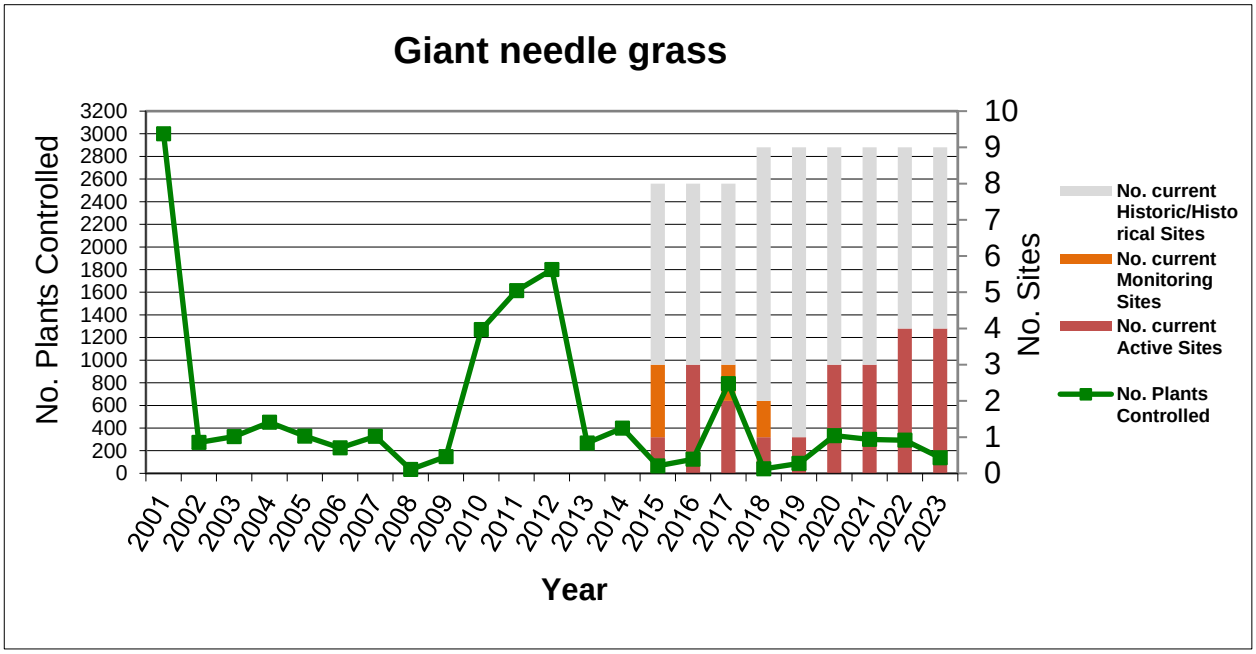
14. Giant needle grass *(Austrostipa rudis)*

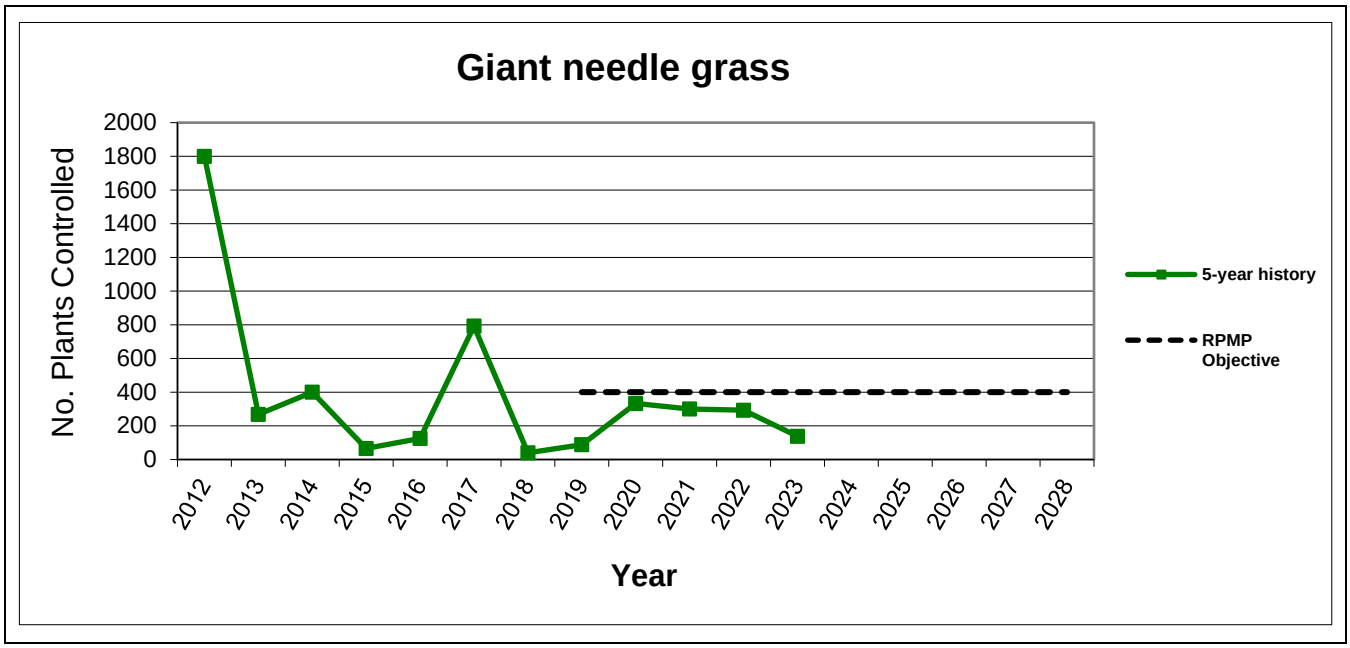
Exclusion	Eradication	Progressive Containment	**Sustained Control**	Site-led

Objective	Over the duration of the Plan, control giant needle grass *(Austrostipa rudis)* 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.	
2022/2023		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.	
2022/2023		2 out of 5 historical sites were visited for surveillance activities. No plants were found.

Programme trend:

 On track




Giant needle grass
No. Plants Controlled
2000
1800
1600
1400
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
Year
5-year history
RPMP Objective

15. Gorse (*Ulex europaeus*)

Exclusion	Eradication	Progressive Containment	**Sustained Control**	Site-led

Objective 1	Over the duration of the Plan, control gorse (*Ulex europaeus*) 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 (*Ulex europaeus*) 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	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. 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.	
Target 15.1	No more than 1 instance of non-compliance needing enforcement action is identified within the three Control Zones.	
2022/2023		No instances requiring enforcement action were identified this season.
Target 15.2	Each year, undertake inspection and/or surveillance activities in all three zones.	
2022/2023		<u>Waima/Ure</u> Surveillance was undertaken in the Ure area, with a focus on areas disturbed by logging. Very few plants were found. <u>Upper Wairau</u> Inspections of land within this Zone were carried out. There is one area that require follow up in the 2023/2024 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 done in conjunction with property inspections assessing rabbit population abundance.
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.	
2022/2023		No reports of Gorse were received on boundaries this year.

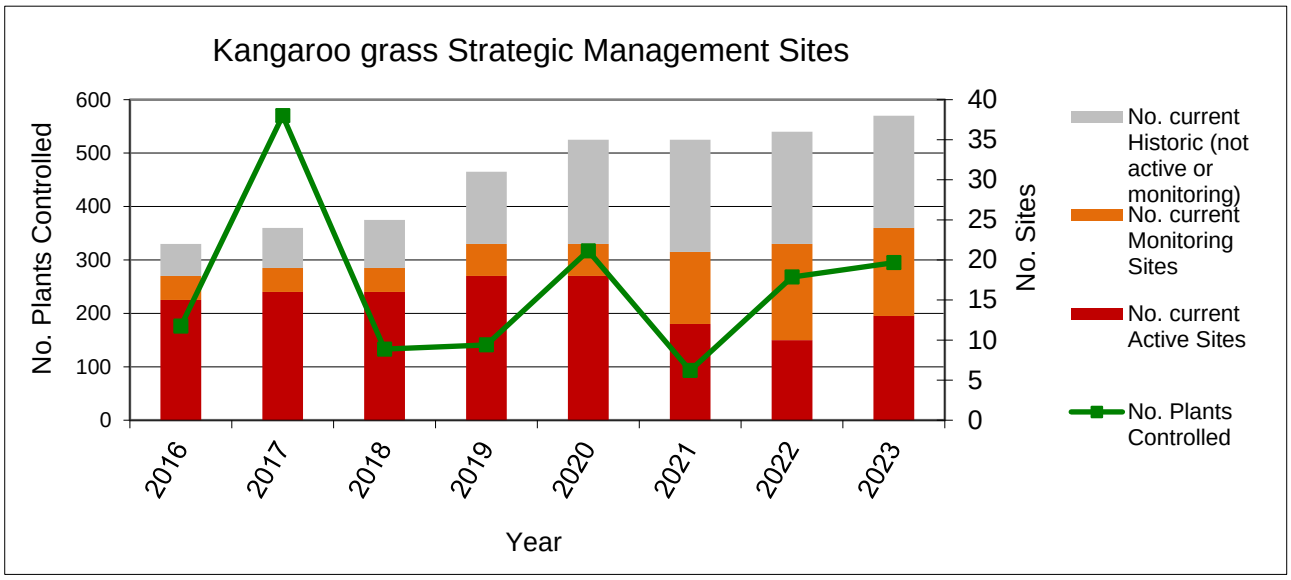
16. Kangaroo grass (*Themeda triandra*)

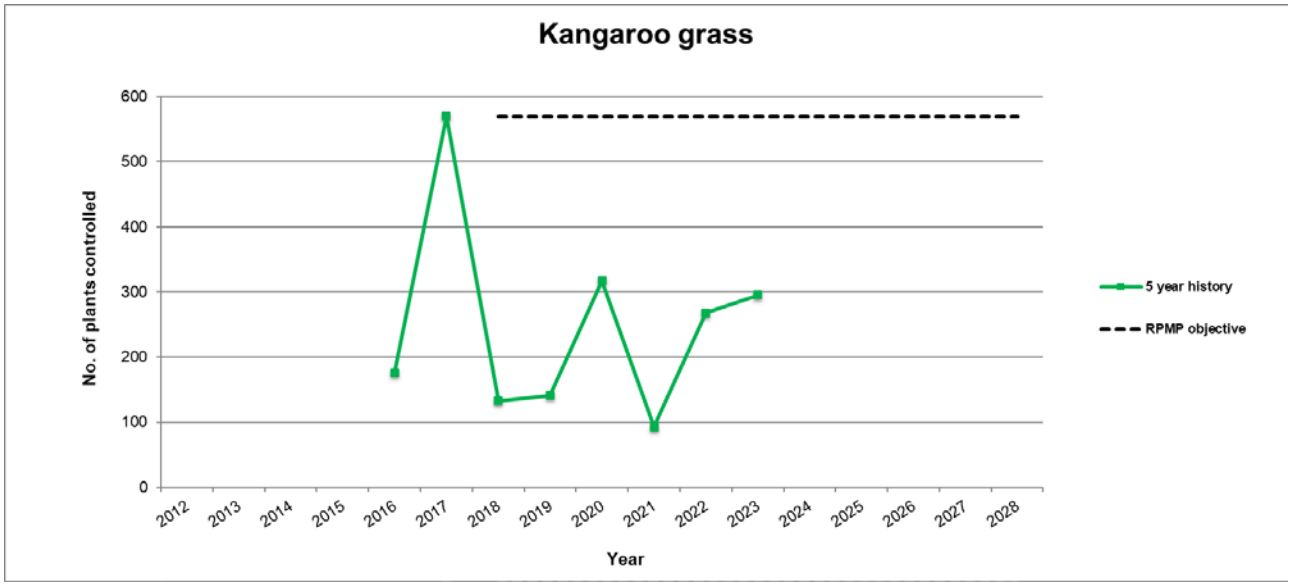
Exclusion	Eradication	Progressive Containment	**Sustained Control**	Site-led

Objective	Over the duration of the Plan, control kangaroo grass (*Themeda triandra*) 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: • 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.	
2022/2023		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.	
2022/2023		100% percent of sites subject to a programme where Council undertakes strategic management were visited and control undertaken if required.
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.	
2022/2023		A calculated total of 147 hours of staff and contractor time was spent on surveillance activities outside of previously known infested areas.

Programme trend:

On track





17. Madeira vine (*Andredera cordifolia*)

Exclusion	Eradication	Progressive Containment	**Sustained Control**	Site-led

Objective	Over the duration of the Plan, control madeira vine (*Andredera cordifolia*) 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	A Memorandum of Understanding has been agreed to by DOC and Council that includes the management of madeira vine. Operational activities are pre-planned each year and are delivered by either: a) Council staff and/or contractors (Blenheim, Seddon, Ward sites), or; b) DOC staff (Marlborough Sounds sites). 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.
Target 17.1	Each year, 100% of sites that have a status of active or monitoring are visited for control and/or surveillance activities.

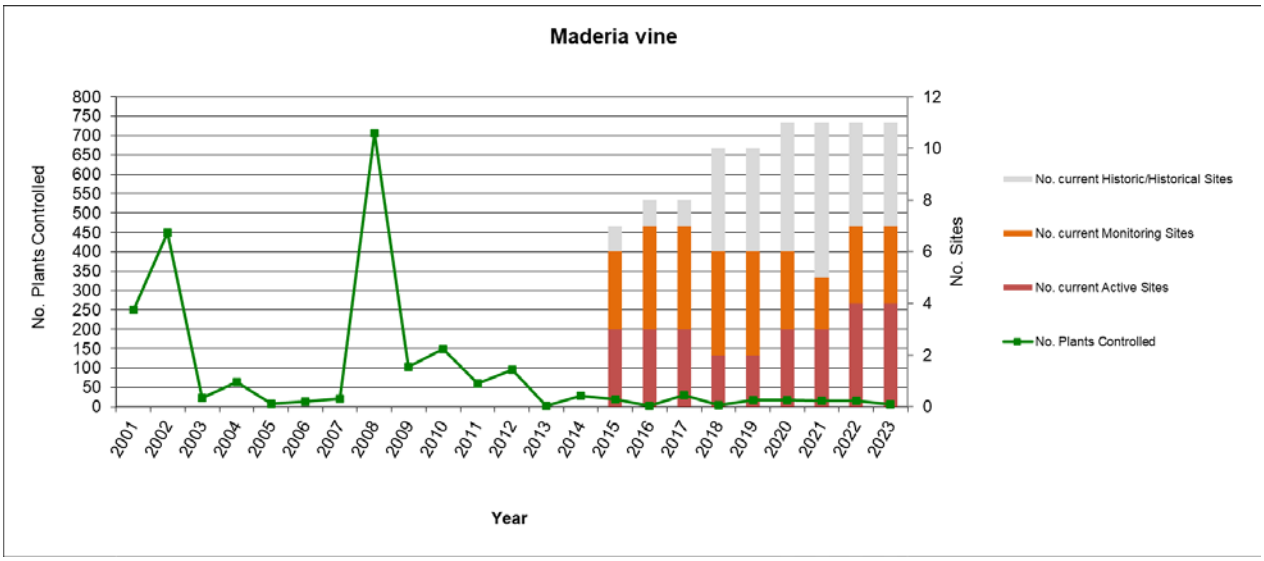
2022/2023		All ‘active’ and ‘monitoring’ sites were visited for control in 2022/2023. This resulted in the destruction of 7 plants. This included the discovery of one new site on Wither Road where two plants were destroyed. No plants have been found at three of the monitoring sites for the last 5 years, 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.

2022/2023		All historical sites were visited, and no plants were found.

Programme trend:

On track



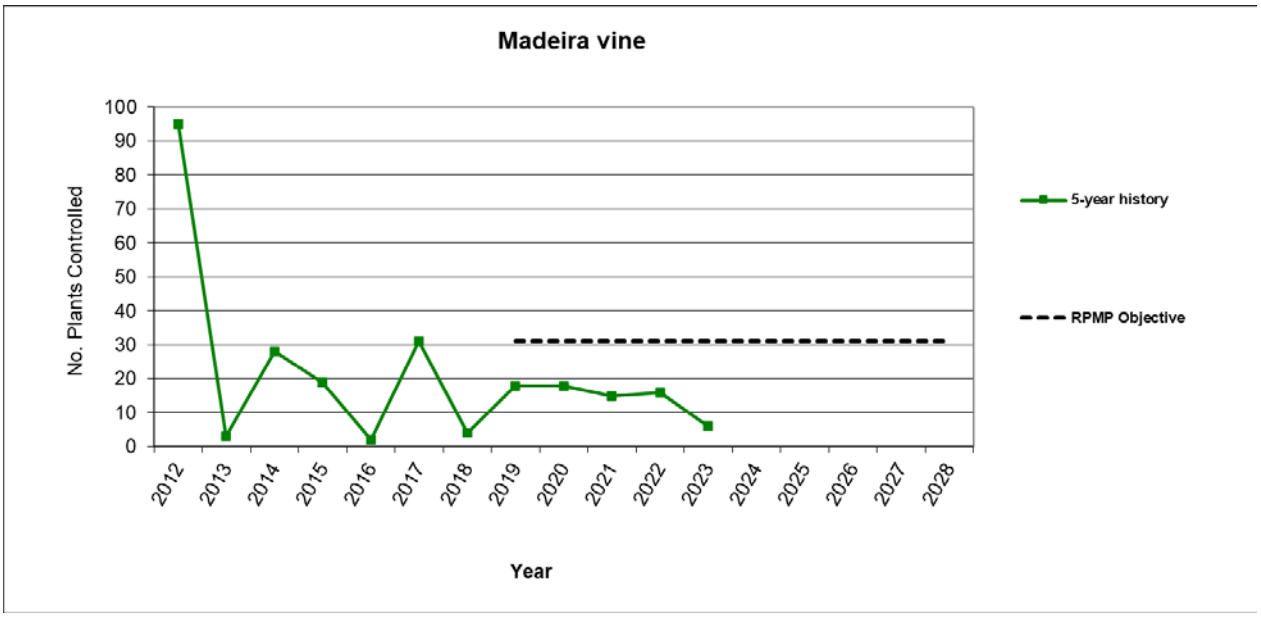
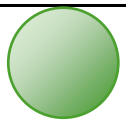


Figure 3: One of the plants found at a new madeira vine site on Wither Road

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 (*Sabella spallanzanii*) in Marlborough to eliminate adverse effects on economic wellbeing, the environment and enjoyment of the natural environment.			
Operations overview	There are multiple facets to the Mediterranean fanworm programme delivered by Council. These are: • 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 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).			
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).			
2022/2023		Contracted divers undertook surveillance and removal operations in Picton and Waikawa Marina over Nov/Dec 2022 and in March/April 2023. No fanworm were found 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.			
2022/2023		Two dive surveillance operations were undertaken with no fanworm 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.			
2022/2023		Dive surveillance was undertaken across all sites with no fanworm found		

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		Three vessels were notified to Council via Marlborough Sounds Marinas that may have been a risk to the programme. All vessels of these vessels were able to be assessed and snorkelled by the Biosecurity team with no fanworm found. All reports of fanworm had an investigation started within 24hrs.

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.

Dectected on vessels arrived from out of region – no evidence of establishment after response actions.

Figure 4: Biosecurity Divers inspecting Waikawa Marina

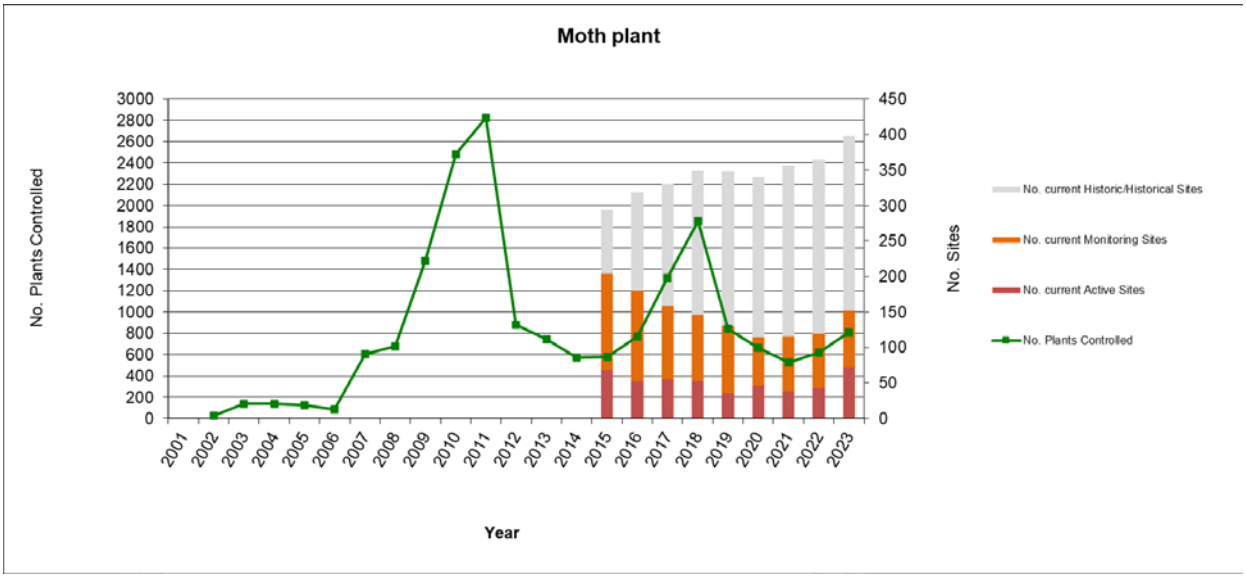
19. Moth plant (*Araujia hortorum*)

Exclusion	Eradication	Progressive Containment	**Sustained Control**	Site-led

Objective	Over the duration of the Plan, control moth plant (*Araujia hortorum*) 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.	
2022/2023		All 'active' and 'monitoring' sites (152 in total) were visited in 2022/2023. Overall, the annual plant numbers destroyed (806) was slightly above the RPMP objective, to keep plant numbers at or below 2016 levels.
Target 19.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.	
2022/2023		103 of the 246 historical sites (41%) were inspected in 2022/2023.

Programme trend:

Not meeting objective



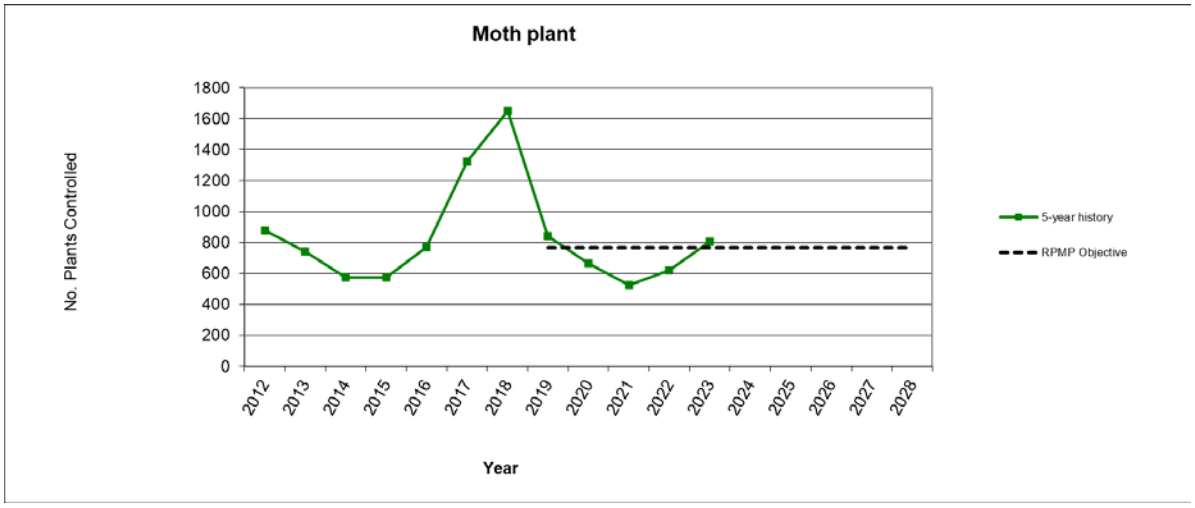
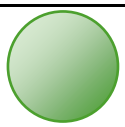


Figure 5: One of the new moth plants sites identified this year. Here a mature plant can be seen growing through a camellia bush.

20. Nassella tussock (*Nassella trichotoma*)

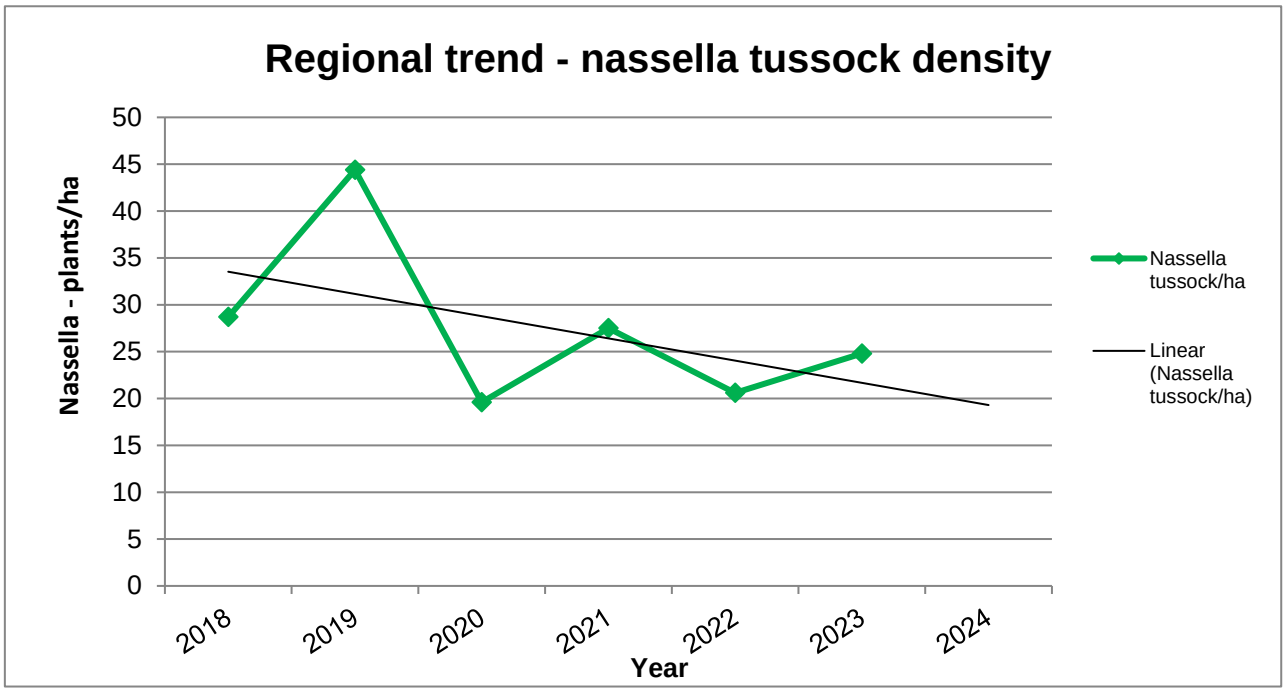
Exclusion	Eradication	Progressive Containment	**Sustained Control**	Site-led

Objective	Over the duration of the Plan, control nassella tussock (*Nassella trichotoma*) 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	There are multiple facets to the nassella tussock programme delivered by Council. These are: • 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. 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.	
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.	
2022/2023		For the 2022 active compliance programme 380 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.	
2022/2023		322 sites (85% 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.	
2022/2023		Surveillance activities were carried out at 75 out of 221 sites (34%) 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.	

2022/20223		A total of 681 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



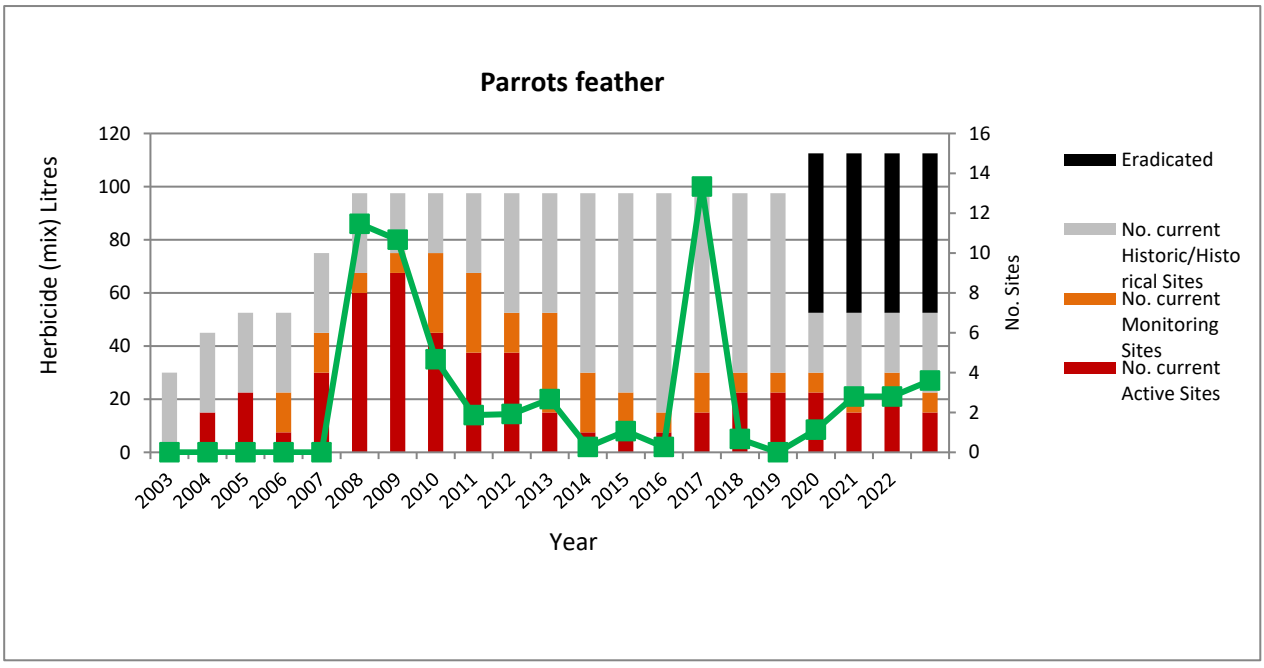
21. Parrots feather (*Myriophyllum aquaticum*)

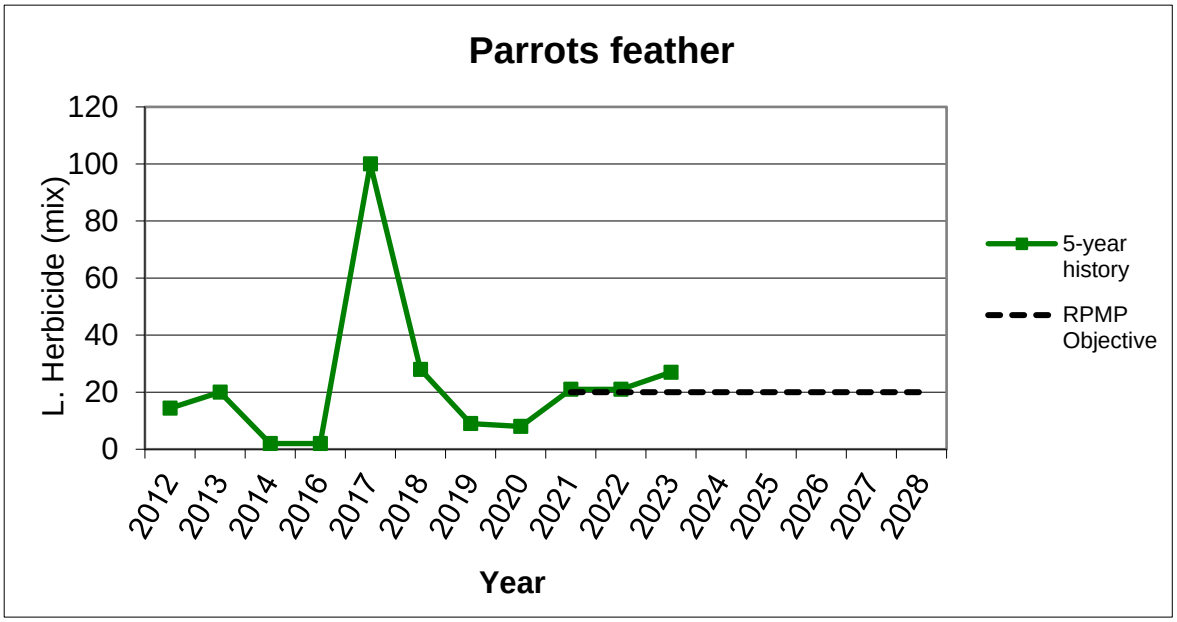
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led

Objective	Over the duration of the Plan, control parrots feather (*Myriophyllum aquaticum*) 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 27 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 of the four historical sites were visited for surveillance activities, and no parrots feather was found.

Programme trend:

Not meeting objective




Parrots feather
L. Herbicide (mix)
120
100
80
60
40
20
0
2012
2013
2014
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
Year
5-year history
RPMP Objective

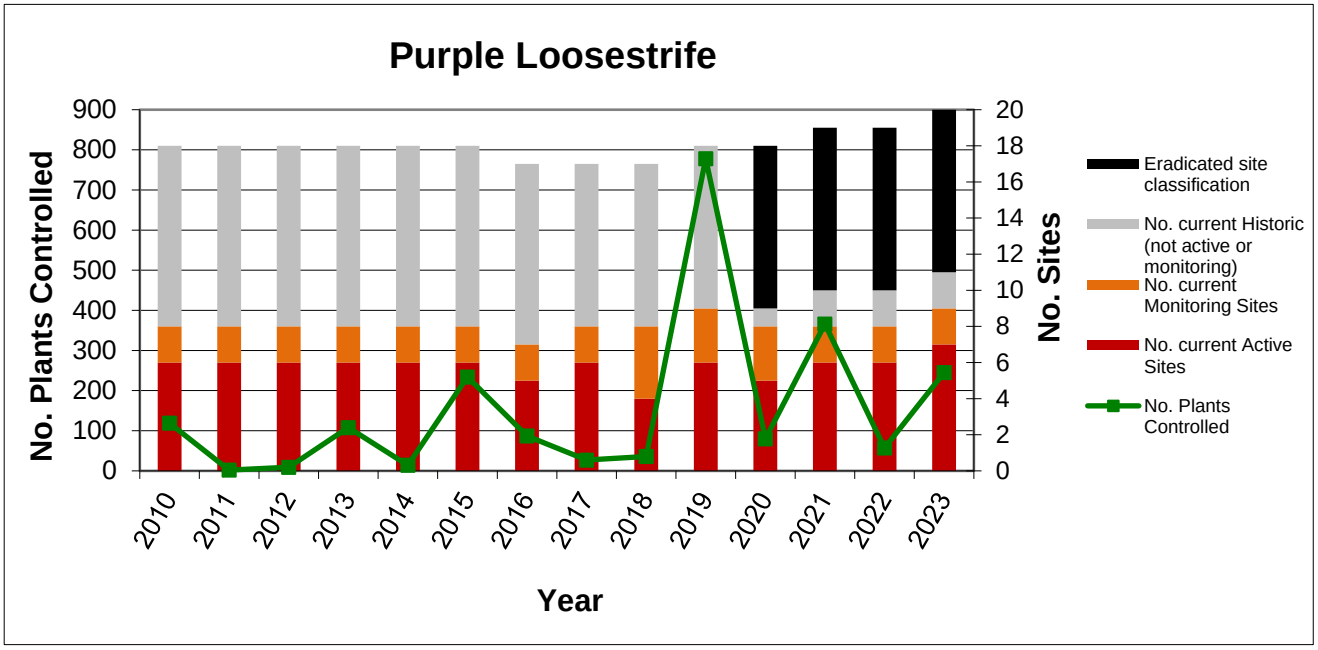
22. Purple loosestrife *(Lythrum salicaria)*

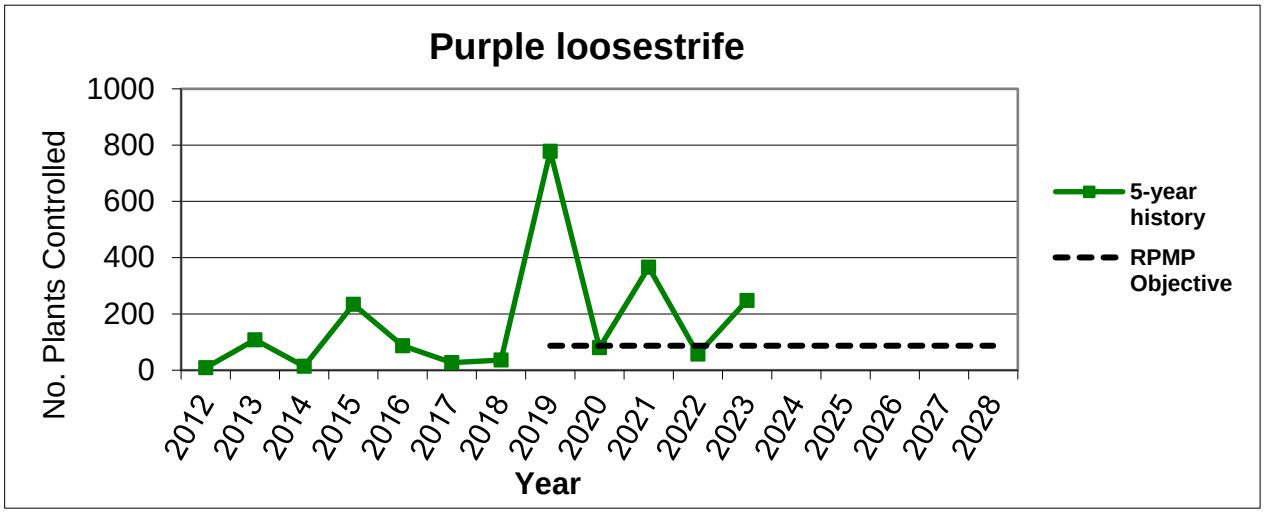
Exclusion	Eradication	Progressive Containment	**Sustained Control**	Site-led

Objective	Over the duration of the Plan, control purple Loosestrife *(Lythrum salicaria)* 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. 248 plants were destroyed in 2022/2023 which exceeds the RPMP objective of keeping numbers to 2016 levels
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 2022/2023, and no plants were found.

Programme trend:

Not meeting objective




Purple loosestrife
No. Plants Controlled
1000
800
600
400
200
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
Year
5-year history
RPMP Objective

23. Rabbits - feral (*Oryctolagus cuniculus*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led

Objective	Over the duration of the Plan, control feral rabbits (*Oryctolagus cuniculus*) 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	There are multiple facets to the rabbit programme delivered by Council. These are: • 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.	
2022/2023		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.	
2022/2023		All sites targeted for inspection were visited during late Summer/Autumn 2023.

Programme trend:

On track

Rabbit numbers across the rgion appear to remain relativly low overall.

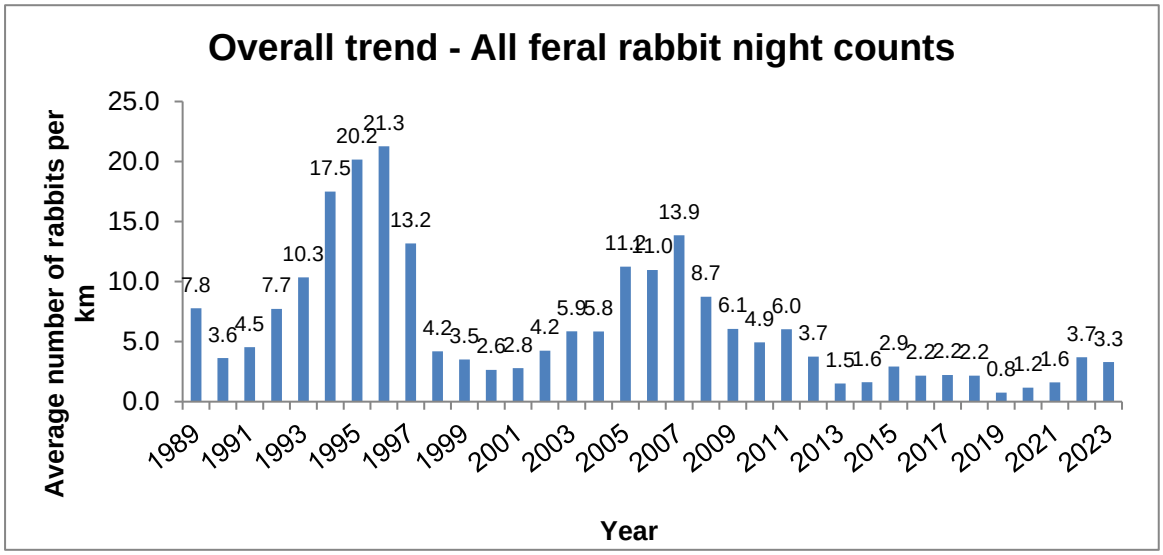


Figure 6: Upper Awatere Valley night count route

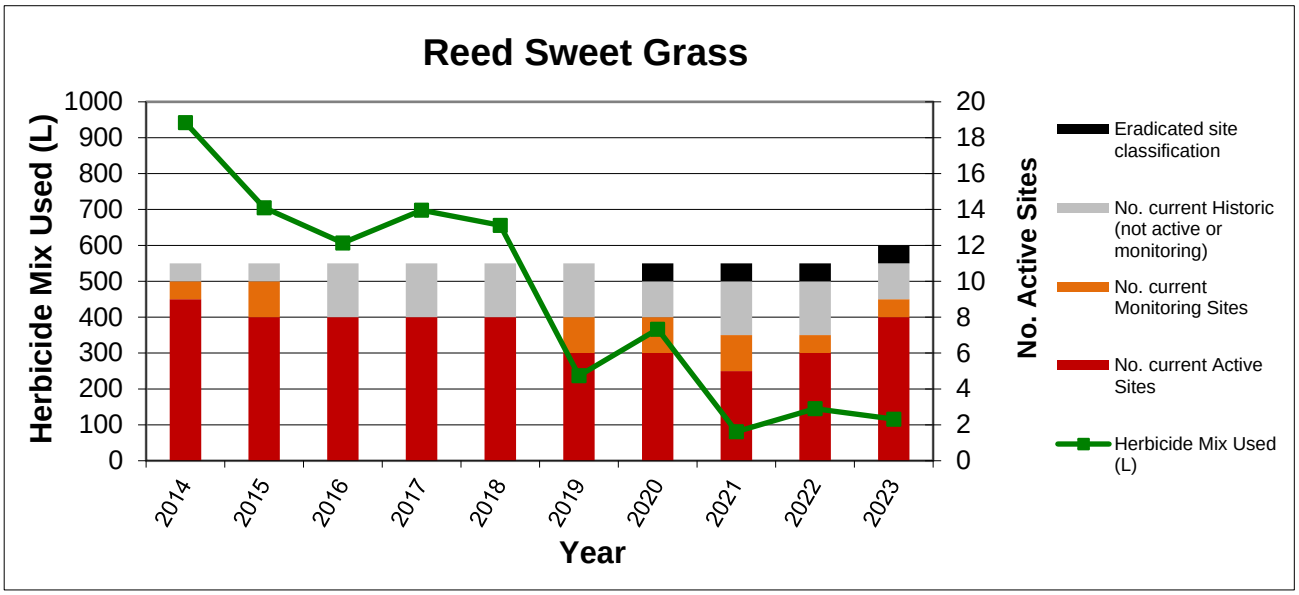
24. Reed sweet grass *(Glyceria maxima)*

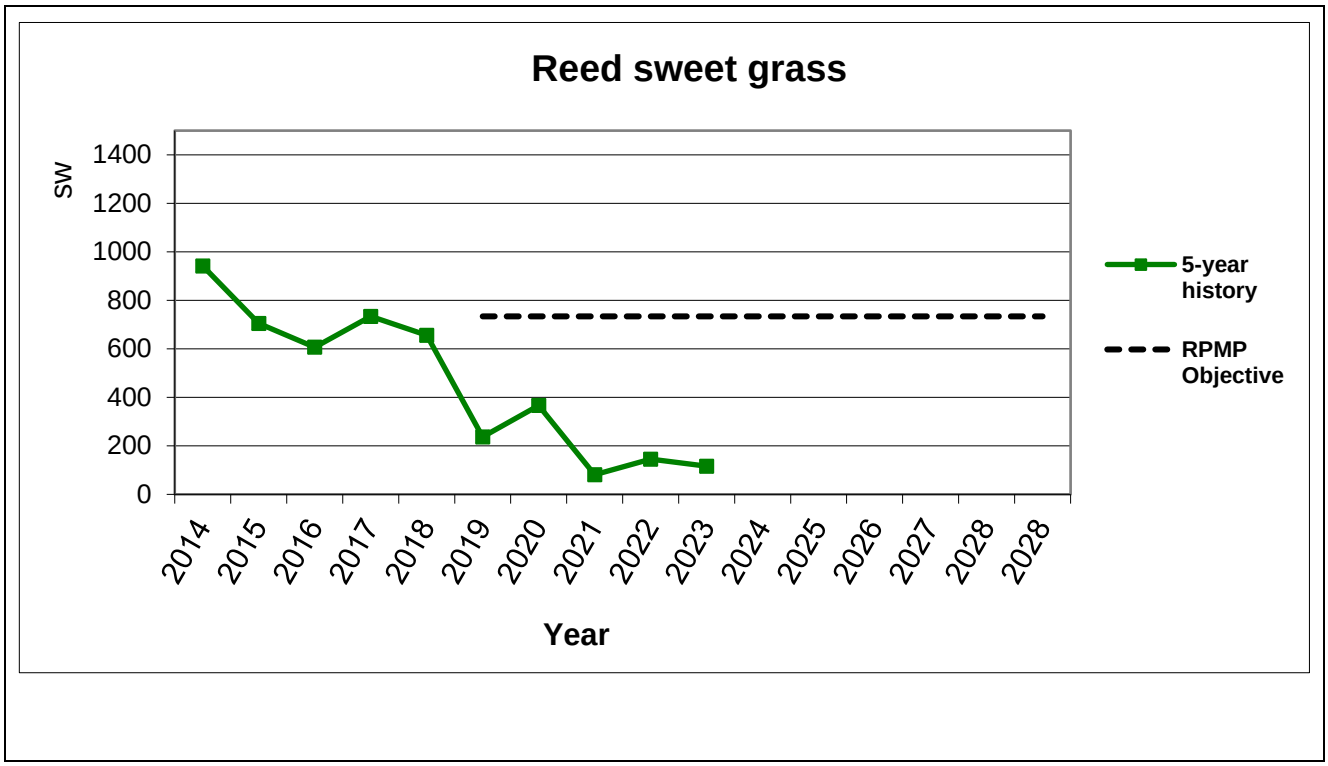
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led

Objective	Over the duration of the Plan, control reed sweet grass (*Glyceria maxima*) 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.	
2022/2023		All 'active and 'monitoring' sites were visited during the 2022/2023 season. The amount of herbicide used to control infestations this season was slightly lower than last season and well below the below the threshold of the RPMP objective of 734 litres.
Target 24.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.	
2022/2023		All three historical sites were visited, with reed sweet grass being found at one site. This site will be re-classified as 'active' for next season.

Programme trend:

 On track




Reed sweet grass
SW
1400
1200
1000
800
600
400
200
0
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2028
Year
5-year history
RPMP Objective

25. Rooks (*Corvus frugilegus*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	Over the duration of the Plan, prevent the establishment of rooks (*Corvus frugilegus*) 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.			
2022/2023		Advertising was undertaken via the MDC facebook page		
Target 25.2	Each year, respond to any report of rooks in Marlborough within 2 working days.			
2022/2023		No reports were received this year.		
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*)

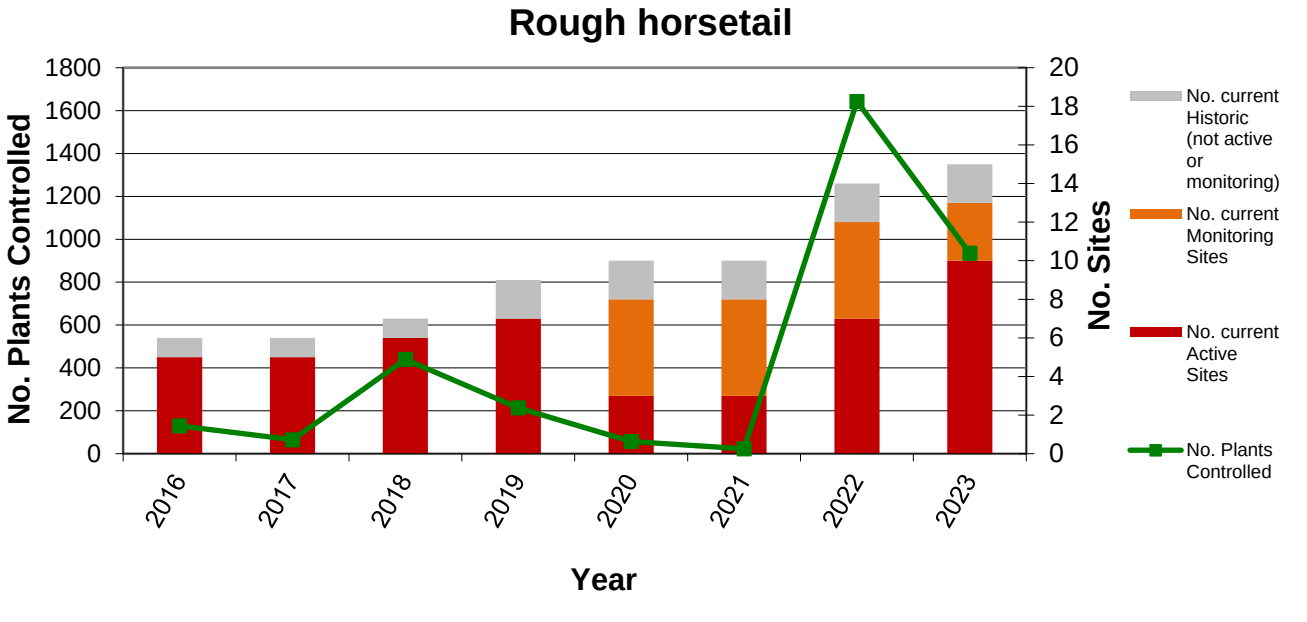
Exclusion	Eradication	Progressive Containment	**Sustained Control**	Site-led

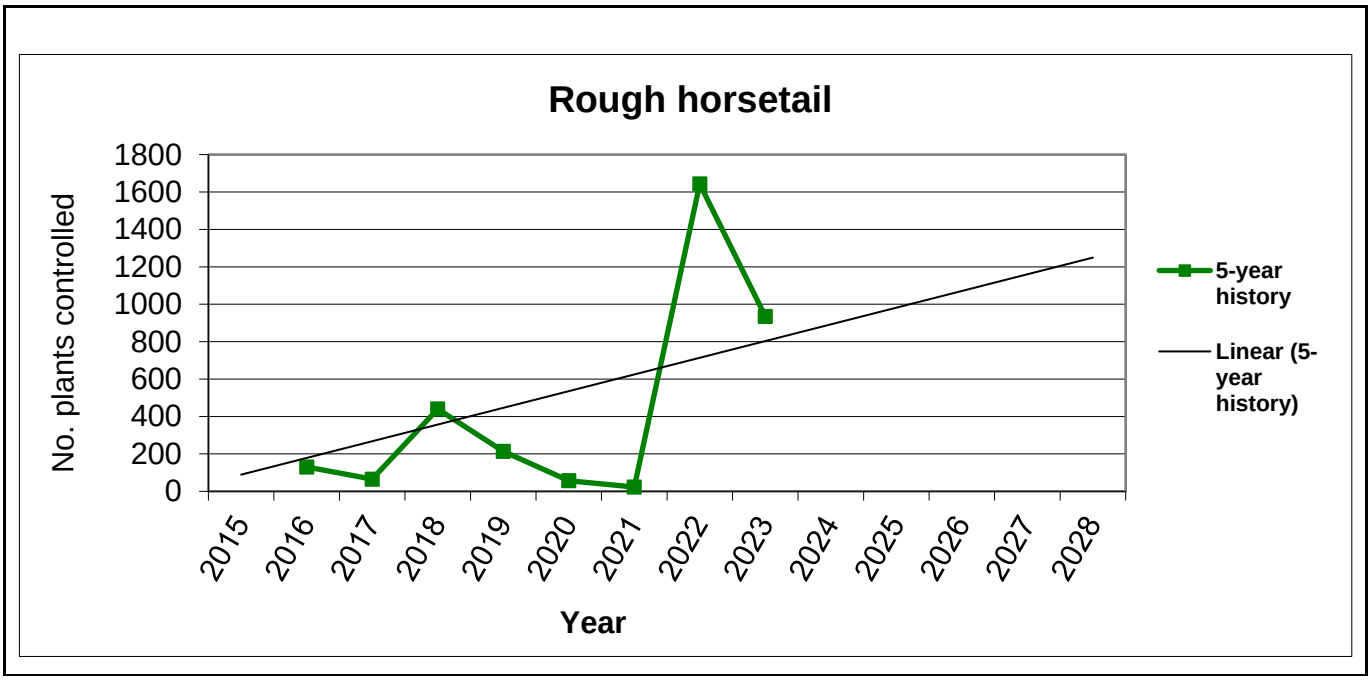
Objective	Over the duration of the Plan, control rough horsetail (*Equisetum hymale*) in the Marlborough district to a population trend that is level or reducing, to minimise adverse effects on economic wellbeing, the environment, and enjoyment of the natural environment.	
Operations overview	Council 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.	
2022/2023		100% of active or monitoring sites were visited with a total of 935 plants destroyed. In addition, one new rough horsetail site was identified in 2022/2023.
Target 26.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.	
2022/2023		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.




Rough horsetail
No. plants controlled
1800
1600
1400
1200
1000
800
600
400
200
0
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
Year
5-year history
Linear (5-year history)

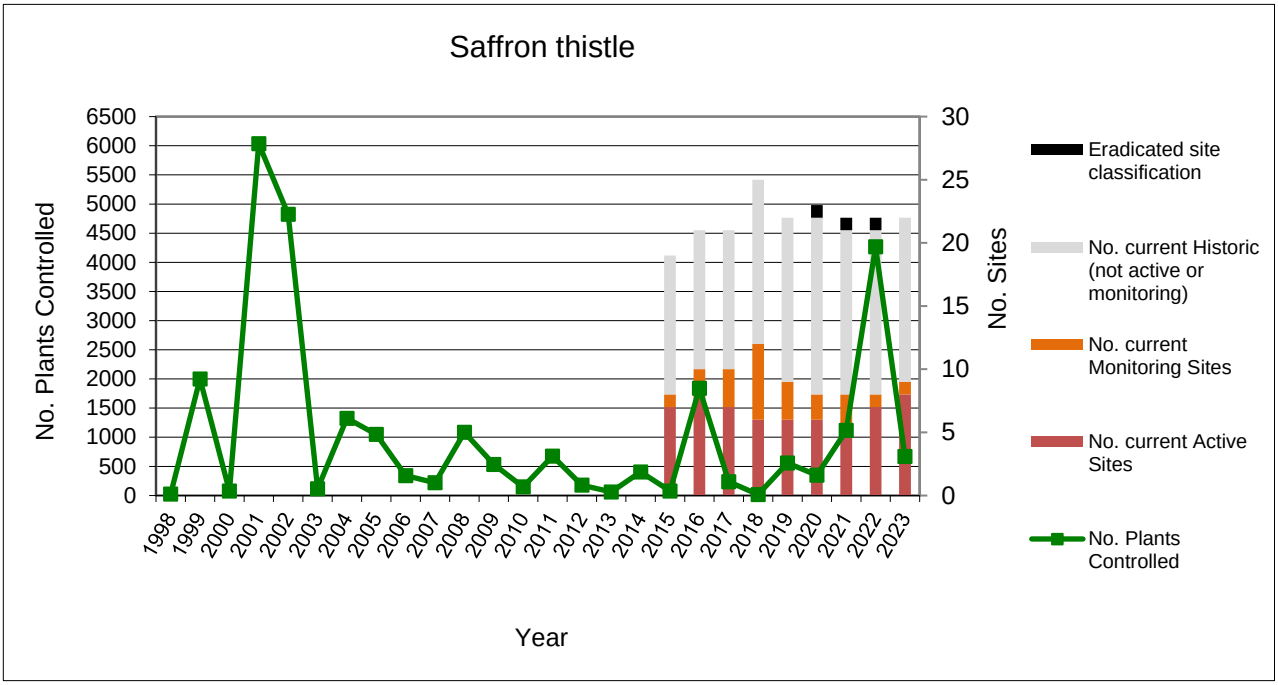
27. Saffron thistle (*Carthamus lanatus*)

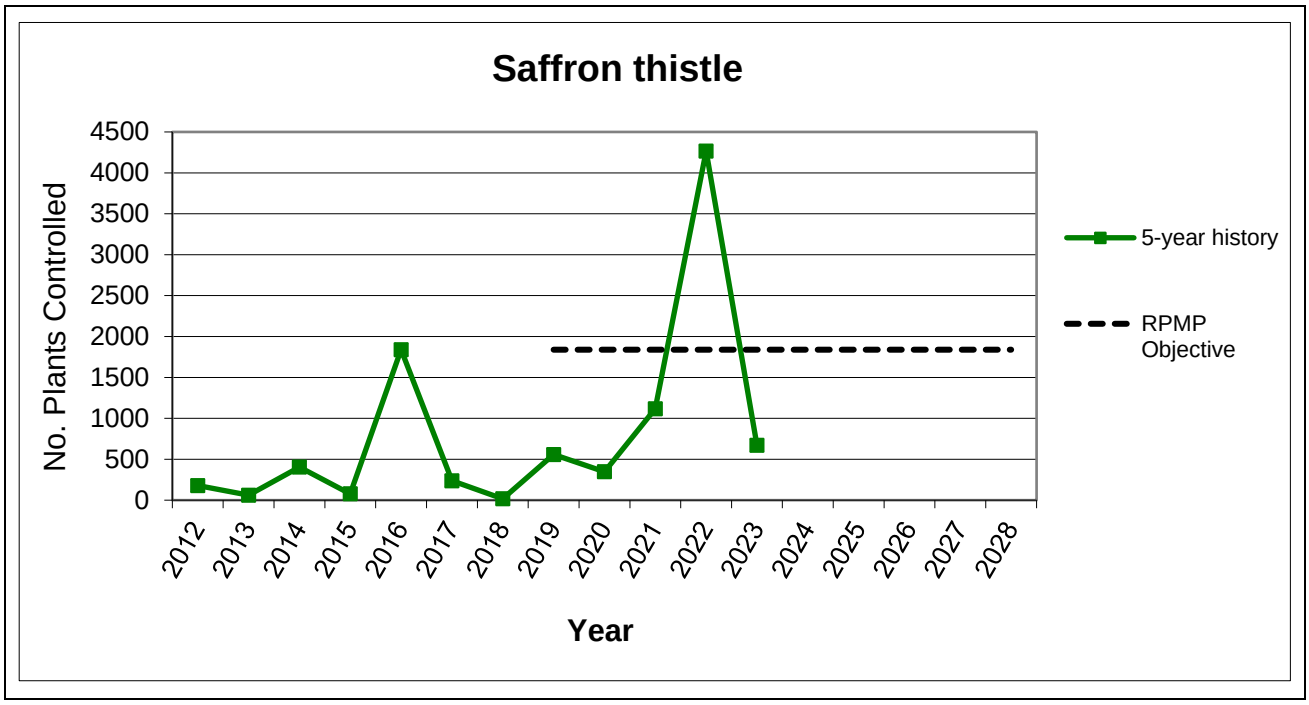
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led

Objective	Over the duration of the Plan, control saffron thistle (*Carthamus lanatus*) 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.
2022/2023	All sites with a status of 'active' or 'monitoring' were visited in 2022/2023. A total of 670 plants were destroyed this season which is below the RPMP threshold of 1839.
Target 27.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.
2022/2023	5 out of 13 historical sites (38%) were visited in 2022/2023 and no plants were found.

Programme trend:

On track




Saffron thistle
No. Plants Controlled
4500
4000
3500
3000
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
Year
5-year history
RPMP Objective

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 (*Gymnocoronis spilanthoides*) 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				

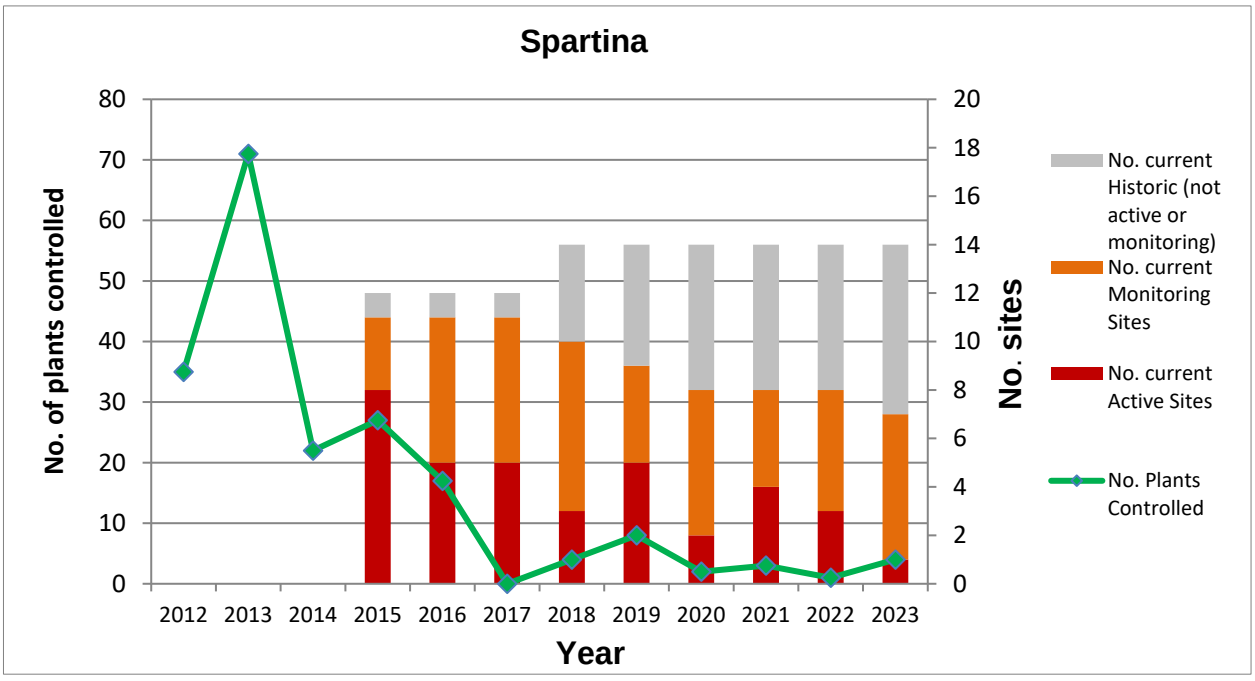
29. Spartina (*Spartina anglica*)

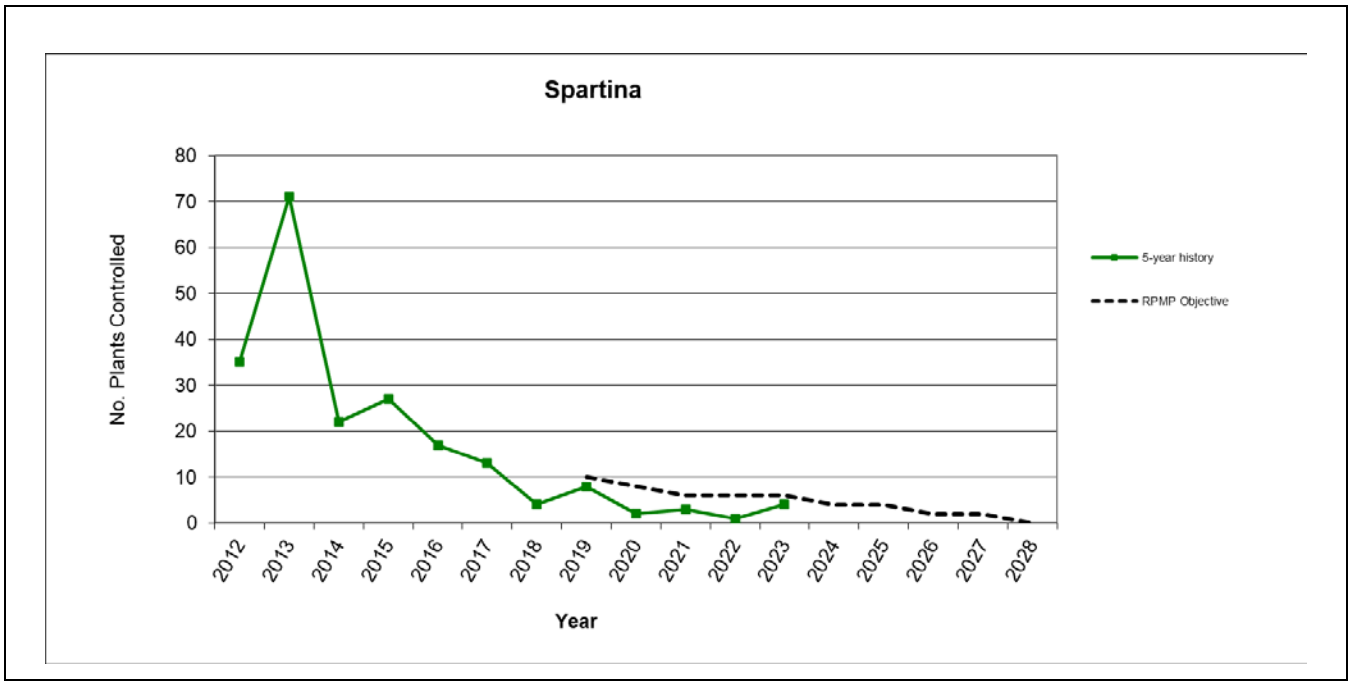
Exclusion	**Eradication**	Progressive Containment	Sustained Control	Site-led

Objective	By the end of the term of this Plan, spartina *(Spartina anglica)* 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.	
2022/2023		100% of all 'active' and 'monitoring' sites (7 in total) were visited for control or surveillance activities for 2021/2022. 4 plants were found during 1240 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.	
2022/2023		Three out of 7 historical sites were visited for Spartina surveillance activities. This included Double Bay, Vernon Lagoon and Tennyson Inlet. No plants were found.

Programme trend:

 On track




Spartina
No. Plants Controlled
80
70
60
50
40
30
20
10
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
Year
5-year history
RPMP Objective

30. Tall wheat grass (*Thinopyrum ponticum*)

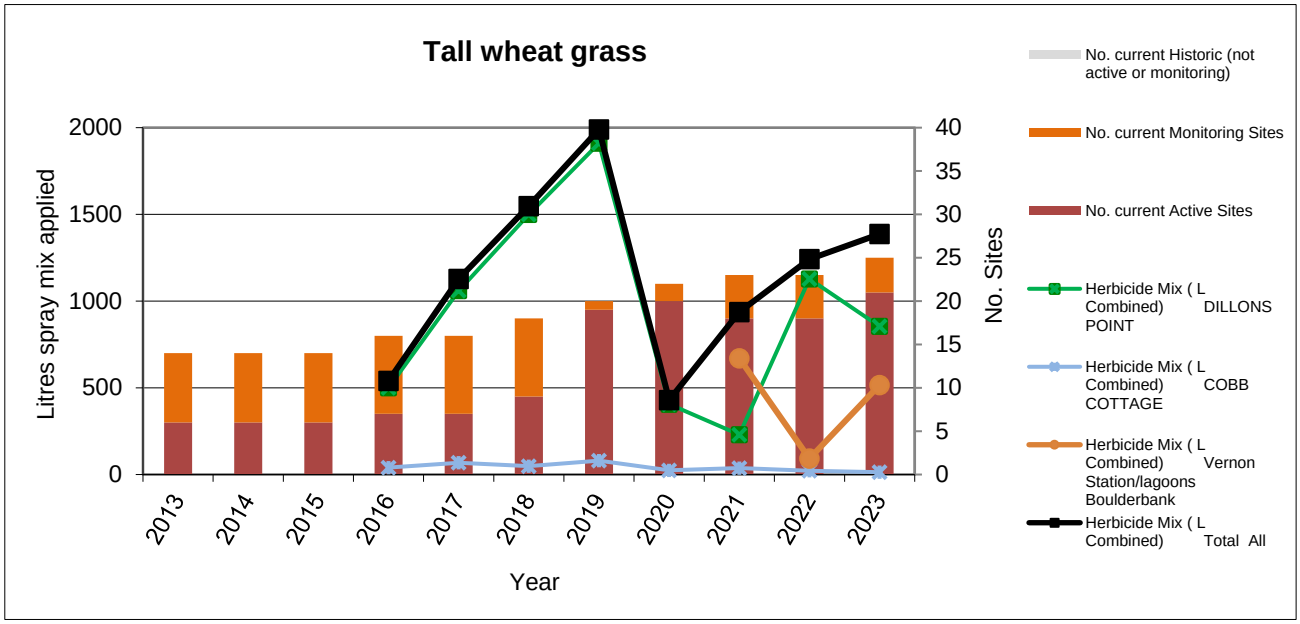
Exclusion	Eradication	Progressive Containment	**Sustained Control**	Site-led

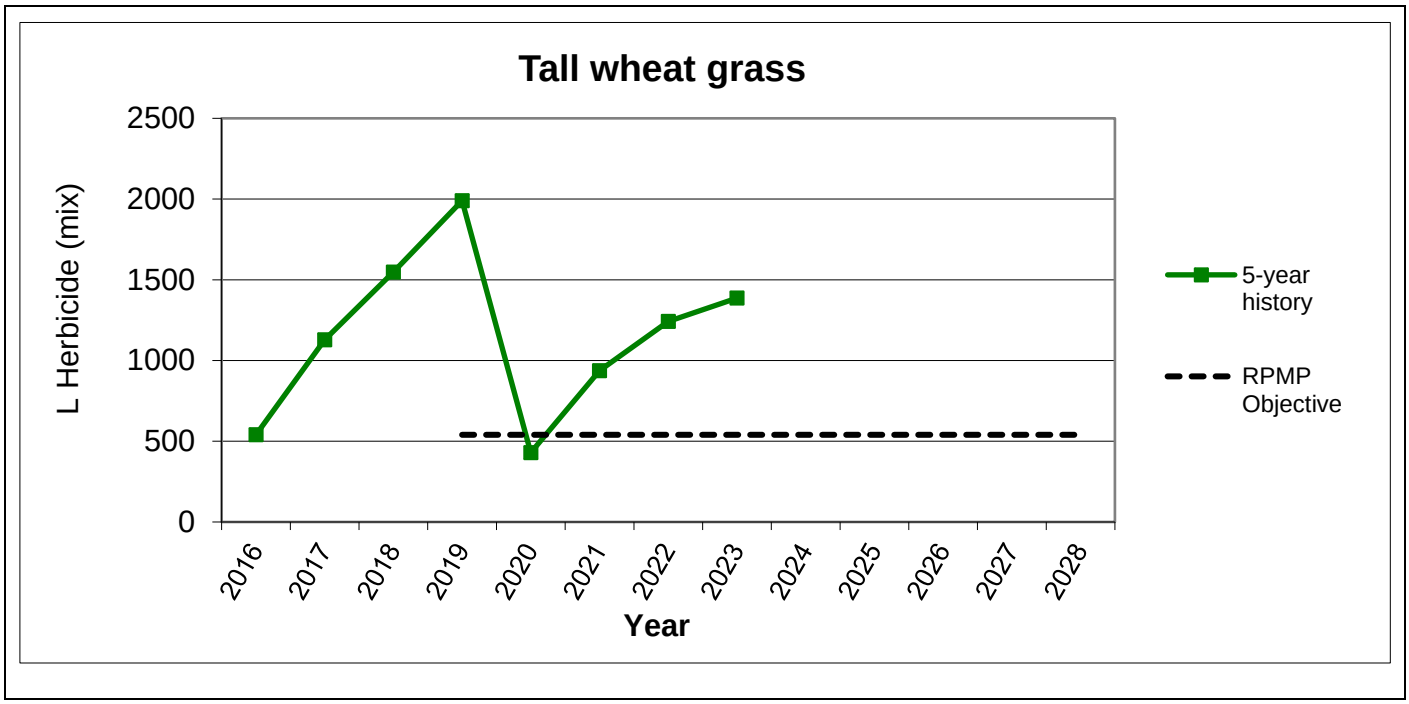
Objective	Over the duration of the Plan, control tall wheat grass (*Thinopyrum ponticum*) in the Marlborough district to less than or equal to 2016 levels to minimise adverse effects on economic wellbeing, the environment, and enjoyment of the natural environment.	
Operations overview	Council staff and/or 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.	
2022/2023		100% of all known sites were visited for surveillance or control activities. Additional surveillance activities were undertaken within the Vernon Lagoons area with no new plants being found. The amount of herbicide used in 2022/2023 exceeded the threshold of the RPMP objective to maintain herbicide use at, or below, 540 litres of spray mix.
Target 30.2	Each year, 33% of sites that have a status of historical are visited for surveillance activities.	
2022/2023		To date there are no sites with a historical status.

Programme trend:

 Not meeting objective

This is a newer programme with baseline infestations still being progressively managed, including some new sites also being discovered.




Tall wheat grass
L Herbicide (mix)
2500
2000
1500
1000
500
0
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
Year
5-year history
RPMP Objective

31. Wallabies (Family *Macropodidae*)

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led
Objective	Over the duration of the Plan, prevent the establishment of wallabies (*Family: Macropodidae)* 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.			
2022/2023		Three reports of a wallaby sightings were received this year. Thorough investigations were undertaken, all commencing within 24hrs, 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.

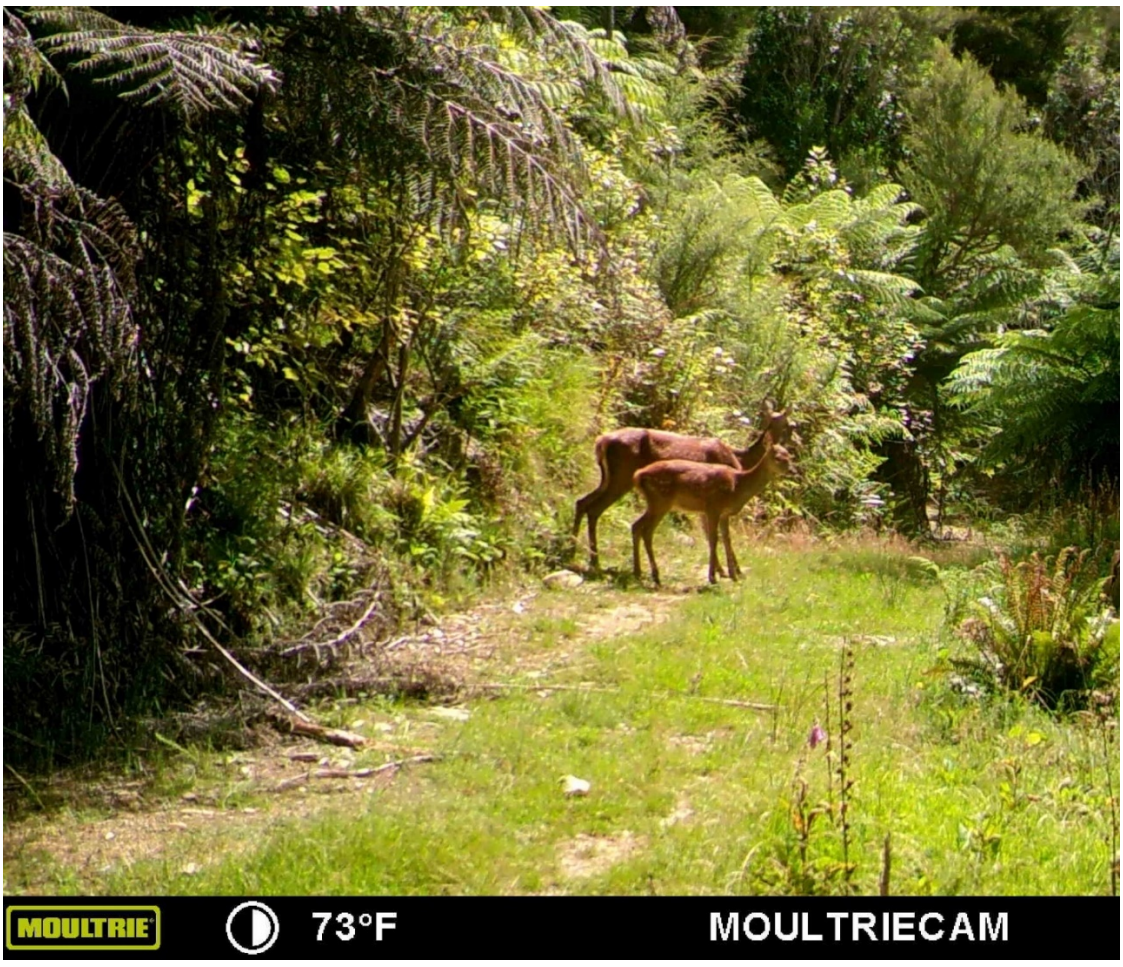


Figure 7: Deer in the bush

Figure 8: Deer and Goats were present in the areas monitored, no wallaby sign was seen or captured.

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 (*Solanum marginatum*) 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	There are multiple facets to the white-edged nightshade programme delivered by Council. These are: • 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 2023 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. A spike in numbers was observed at the Ohoka farm. This was a result of several slips where soil disturbance resulted in the emergence of a significant number of seedlings. Council Biosecurity staff destroyed 312 plants.

Programme trend:

On track

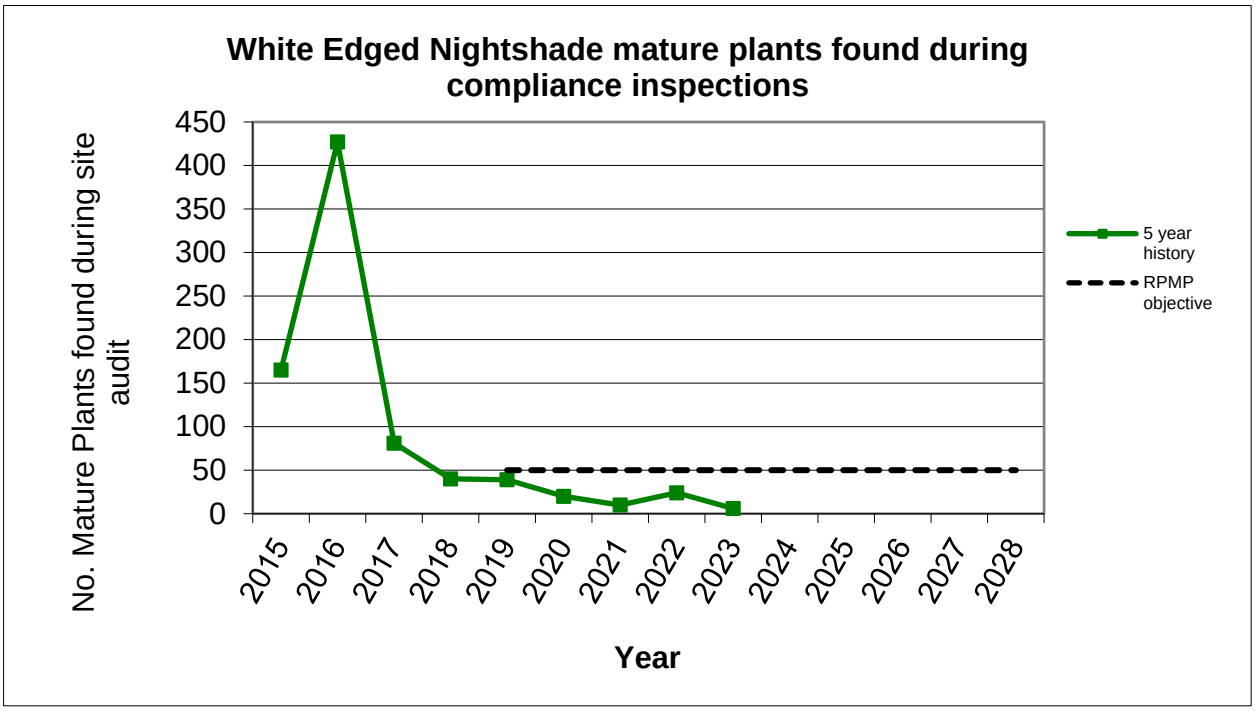


Figure 9: Fruiting white-edged nightshade plant found at Anakoha Bay

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

Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led

Objective 1	By 2035, willow-leaved hakea (*Hakea salicifolia*) 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 (*Hakea salicifolia*) 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.	
2022/2023		A total of 1409 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 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.

Figure 10: Young Willow leaved hakea plants being controlled.

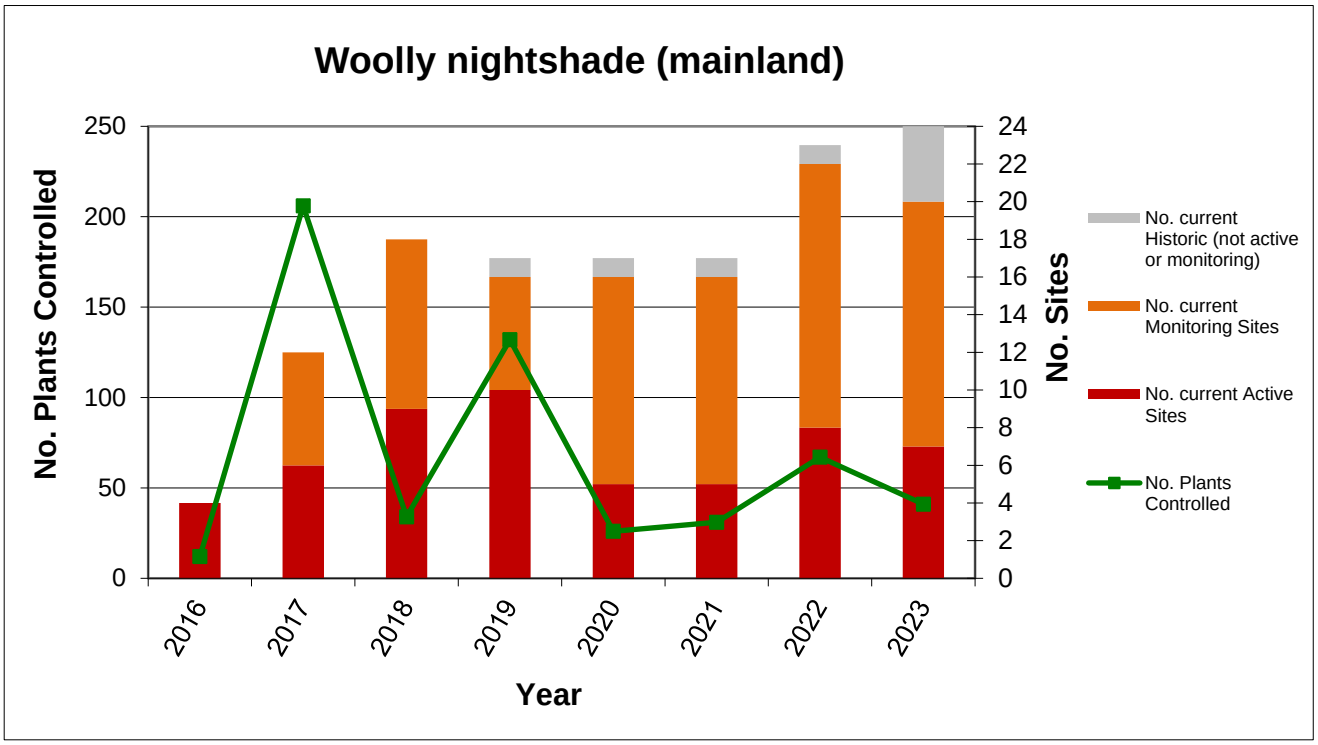
34. Woolly nightshade (*Solanum mauritanium*)

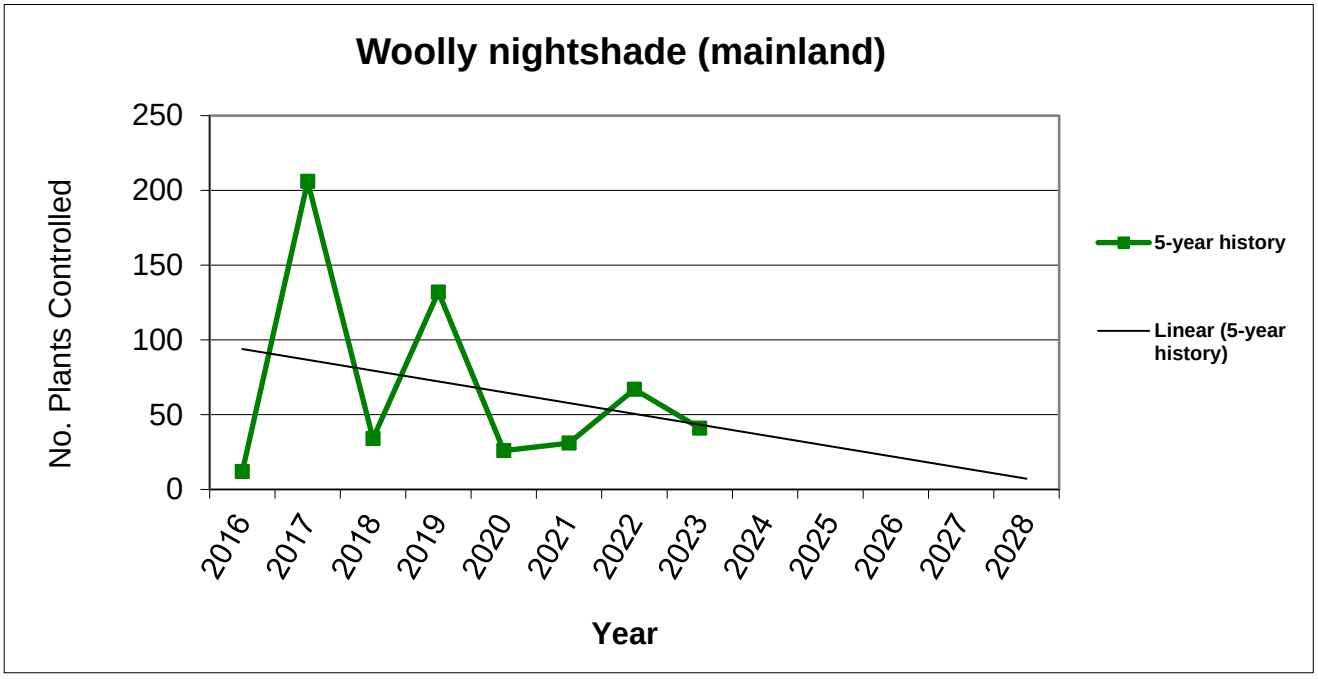
Exclusion	Eradication	Progressive Containment	Sustained Control	Site-led

Objectives	Over the duration of the Plan, control woolly nightshade (*Solanum mauritianum*) 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	
2022/2023		573.5 Hours of control work was undertaken to control plants as per the 5 year project 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.	
2022/2023		100% of 'active' and 'monitoring' sites were visited for control and surveillance in 2022/2023. 41 plants were controlled this year. The number of 'active' and 'monitoring' sites also increased this year due to subdivision of an existing site on Batty's Road.
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.	
2022/2023		Five of the seven (71%) historical sites were visited with no plants being found.

Programme trend:

On track



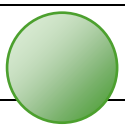


Part Two - Other Biosecurity Services or Initiatives

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 **2022/2023**	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	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. The process used is outlined in further detail within the Marlborough District Council Biosecurity Strategy.	
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.	
2022/2023		During 2022/2023, 246.75 hours were attributed to reed sweet grass operations across ten 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. Council staff also conducted surveillance in the Vernon Lagoon. Although a new patch of tall wheat grass was found, no other aquatic pest species were identified.
Operational Summary **2022/2023**	In addition to that outline against Target 35, the Biosecurity team twice visited a bomarea infestation at Waitaria Bay in the Sounds that was identified in early 2022. A total of 46 hours of control work was undertaken with approximately 728 plants destroyed. Various control methods were employed including digging the plants out, cut and pasting and spot spraying with herbicide.	
Target 35.2	Each year, conduct a minimum of two inspections of parties selling or trading plants to determine adherence to the National Pest Plant Accord.	
2022/2023		Council biosecurity staff undertook 6 inspections of parties selling plants in 2022/2023. It was determined all 6 parties were adhering to the National Pest Plant Accord with no issues being identified.

3. Biocontrol

Overview	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. These biological control agents can also assist in the management of species managed under RPMP programmes.	
Target 36.1	Each year, provide an annual contribution into the National Biological Control Initiative.	
2022/2023		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).	
2022/2023		In December 2022 the old man's beard mite was released in three separate locations in Marlborough. A total of 12 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.	
2022/2023		Monitoring was carried out at the two sites where the old man's beard mite was released in 2021. Samples of old man's beard were taken from each site and sent to Manaaki Whenua Landcare Research for dissection. Mites were found in samples from one of the sites.
Operational Summary **2022/2023**	Council is working with Manaaki Whenua Landcare Research to receive a release of old man's beard sawfly (*Monophadnus spinolae*). It is expected that these agents will be ready for release in spring 2023.	

Figure 11: Old man's beard mites being released in the Awatere Valley

4. Supporting Community Organisations

Overview		On occasions, a community can come together to address concerns relating to harmful organisms within an area of interest. 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. 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.
Target 37		Each year, provide an annual contribution into the following community organisations: • Marlborough Sounds Restoration Trust (MSRT) • South Marlborough Landscape Restoration Trust (SMLRT) • Chilean Needle Grass Action Group (by way of a dedicated budget)
2022/2023		Financial contributions by way of grants were made to the Marlborough Sounds Restoration Trust ($30,000), South Marlborough Landscape Restoration Trust ($30,000). A specific budget was managed on behalf of the Chilean Needle Grass Action Group (up to $15,000).
Operational Summary **2022/2023**		As outlined against Target 37, annual financial contributions were made to the two community Trusts – MSRT and SMLRT. Staff have also provided a large amount of in-kind support through fulfilling the ex-officio role on both Trust boards. The activities of the Chilean Needle Grass Action Group tapered off significantly in 2022/23. While Council again funded NZ Landcare Trust to provide facilitation services, it became apparent that there seemed to no longer be the same level of community 'energy' to come together as a group and struggled to convene meetings. While Council is absolutely committed to its regional programme for CNG, should the community wish to again come together and operate a group or forum, the support can be provided as and when that occurs.

5. Wilding Conifer Management

Overview	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. 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. As part of this role in Marlborough, helping establish and maintain collaborative wilding conifer management programmes is integral to achieve positive outcomes.	
Target 38.1	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).	
2022/2023		Throughout the course of the year, Biosecurity staff facilitated the activities of the National Wilding Conifer Control Programme regionally in Marlborough. 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.
Target 38.2	While it is in place, facilitate Marlborough Wilding Conifer Steering Group meetings to the satisfaction of all stakeholders involved.	
2022/2023		Biosecurity staff facilitated a meeting of the Marlborough Wilding Conifer Steering Group on two occasions in 2022/2023. This was via Zoom on 2 November 2022 and 1 March 2023 to focus on programme updates and funding decisions for the coming 2023/24 year respectively.
Operational Summary **2022/2023**	In 2022/2023, Biosecurity staff continued to play a prominent role in ensuring the National Wilding Conifer Control Programme (NWCCP) was implemented smoothly and safely in Marlborough. Some of the major milestones achieved this year: - A total of three programmes received core NWCCP investment in 2022/2023 with the total programme expenditure (all sources) of those three totalling $5.6M. - The largest programme was that at Molesworth ($4.5M) where a significant amount of initial control work continuing in the Alma Tarndale area in accordance with the long term Strategy. - While the Waihopai ($680k) and Sounds ($415k) programmes were more modest in size, there was still a large amount of work delivered to provide long term gains. - 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	

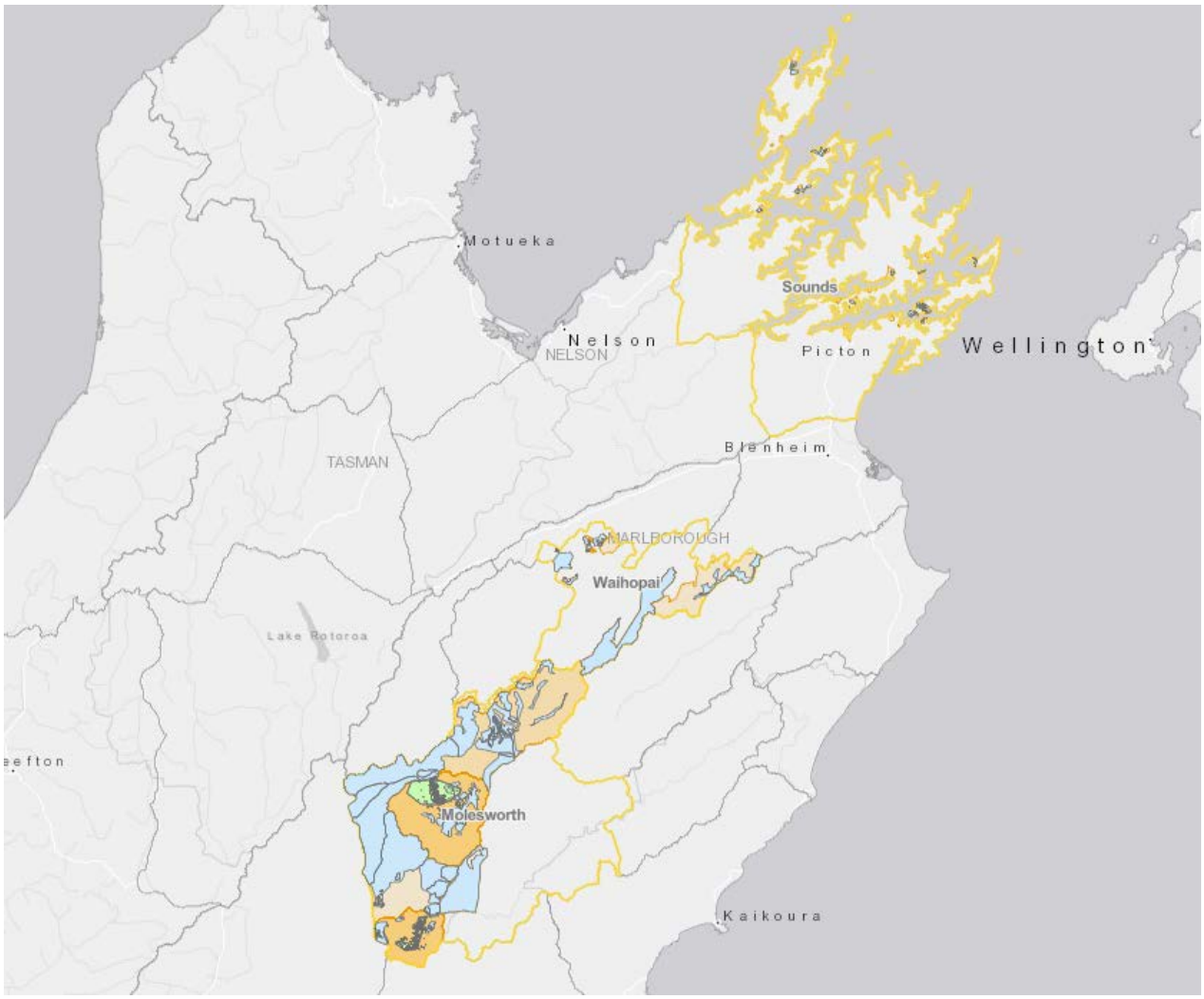
NWCCP Community Partnership Project in the Ned/Te Hau landscape.

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.

Regional Pest Management Plan Amendment

The 2020 policy review process to amend the RPMP to incorporate a programme for pest conifers has been continuing to work through the Environment Court process.

A Hearing was held in September 2022 with an interim decision released by the Court in March 2023. Council subsequently appealed the decision to the High Court with it now working its way through that process.



Aerial control techniques – 76,898ha

Ground control techniques – 3,333ha

Figure 12: An overview of all the operative management units in Marlborough and control efforts from the 2022/2023 season.

6. Research

Overview	With all biosecurity programmes, a continual improvement in understanding relating to both the organisms of interest and techniques to manage them is required. 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.
Operational Summary 2022/2023	In 2022/2023, The Biosecurity team was involved or supported the follow areas of research: • Sponsor and collaborator for the 'Tomorrow's Marine Biosecurity Toolbox' MBIE funded programme led by the Cawthron Institute; • 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. The research budget for 2022/2023 was $5,000. Actual 2022/2023 spend = $0.00 Council's involvement in research projects over the last year has been primarily through staff time providing input and advice – not direct financial contributions.

7. Specific Projects

Operational Summary 2022/2023	In 2022/2023, Biosecurity staff were involved in the following projects that align to the goals of Council's Biosecurity Strategy:
	• **Top of the South Marine Biosecurity Partnership** 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. Contract management rotated to be undertaken by Tasman District Council from 2022/23. Budget: 1. Financial contribution $42,250. 2. Staff time and associated costs. **2022/2023 Actual:** 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.
	• **Response to plague skinks in Marlborough** 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. However, the incursion at Havelock was still managed as 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. By June 2023, after reviewing the results of the prior 2 years' worth of surveillance data, the governance of the Havelock response accepted a recommendation from Biosecurity New Zealand to close the response with elimination considered to have been achieved. Budget: Staff time and associated costs. **2022/2023 Actual:** Staff time involved in the response governance group.
	• **Restoring and Protecting Flora (Jobs for Nature** **Background** 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' (the 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. Since the appointment of the OPLS role on 4 October 2021, a total 2333.5 OPLS hours have been committed to the Project up to 13 July 2023. **MDC Project Budget** A summary of the 2022/2023 MDC project budget is outlined below. The overspend at the end of 2022/2023 financial year was largely attributed to an increase in operational

expenses and were mostly related to costs associated with accommodation and logistics due to operational work at remote locations.

A significant portion of remote work was carried out under the Project delivering weed-led surveillance and control work for wild kiwifruit. MDC Biosecurity are continuing to develop a longer term programme for wild kiwifruit so the addition contribution to the Project aligns with the long term direction for MDC Biosecurity.

2022/2023			
Budget	**Actual**	**Balance**	Comments
$94,500	$108,083	-$13,582.25	This made the MDC Biosecurity contribution a total of $28,582.25 for 2022/23.
MDC Biosecurity Contribution: $15,000 **TNC (J4N):** $75,000 **External contribution (KVH):** $4,500			

Reporting

During the 2022/2023 reporting period, monthly and quarterly reports were submitted to TNC (the project lead) as per the TNC/MDC contract requirements. Project reports were prepared to document key project deliverables and to assist project work planning for each year. These reports also included the outcomes of health and safety audits to ensure that operational hazards were actively managed and that all operations were being carried out according to recommended best practice.

Project outcomes

1. **Planting**
   In 2021/2022 KMTT project partners agreed to widen the project's scope to include restorative/enhancement planting. Subsequently the draft recommendations for planting proposals were finalised by the OPLS and planting projects were implemented in 2022/2023. This resulted in the revegetation of a 1.5-hectare area of retired vineyard land at a site in Rarangi.

   Planting was not initially within the project's scope. However, the planting days at Rarangi has generated a lot of support/engagement with land occupiers and community groups. This has had a positive flow-on effect, resulting in discussions with neighbouring land occupiers who have also expressed an interest to enhance wetlands on their properties. Given the ecological significance of these areas at Rarangi there is some scope for a geographically led programme for the lower Wairau Plain.

Figure 13: Winter revegetation planting within a retired section of vineyard, Rarangi.

2. Biosecurity investigations (weed-led)

The project's initial focus was to implement site-led based weed solutions at high value ecological sites. Given that some sites were deemed too intractable for the project's capability, a weed-led component (wild kiwifruit) was included.

The weed-led component of the project was implemented across the top of the South Island (Tasman, Buller, and Marlborough) and has since provided valuable assistance to the respective Councils by supporting surveillance and early intervention work of this emerging biosecurity threat.

These Operational activities have provided a valuable insight into the current distribution and control of wild kiwifruit in Marlborough. The information from this work will support a proposal to include a programme for wild kiwifruit in the RPMP. The chart below summarises the current status of wild kiwifruit in Marlborough.

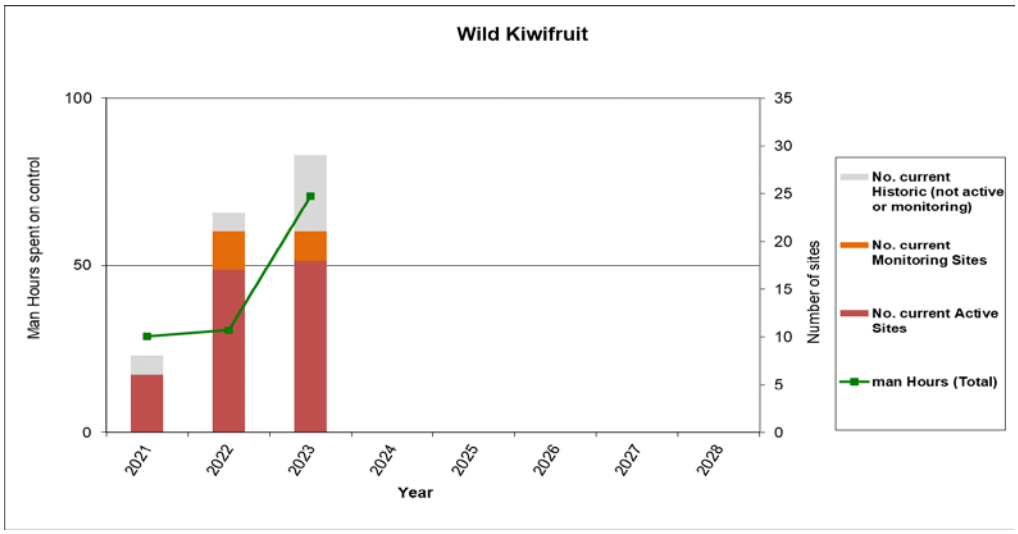


Figure 14: Kumanu Environmental staff removing wild kiwifruit at Punga Cove

3. Site-led work.

In Marlborough the Restoring and Protecting Flora Project included 12 active sites. These sites have received site-led weed control to control the target species that most likely threaten the biodiversity values at those specific sites.

The total operational area of these project sites is estimated to be **655** hectares which is less than the number of hectares reported to TNC (due to the different reporting parameters and the methodology used).

The biodiversity at the smaller project sites (typically less than 100 hectares) have yielded the most benefit from the project's site-led weed work, whereas the benefits to the more expansive sites cannot be easily quantified immediately and are most likely to be future focussed.

The FTE hours committed to the larger sites have been reduced in the project's year three work plan (one site was removed from the year 3 work plan) which will

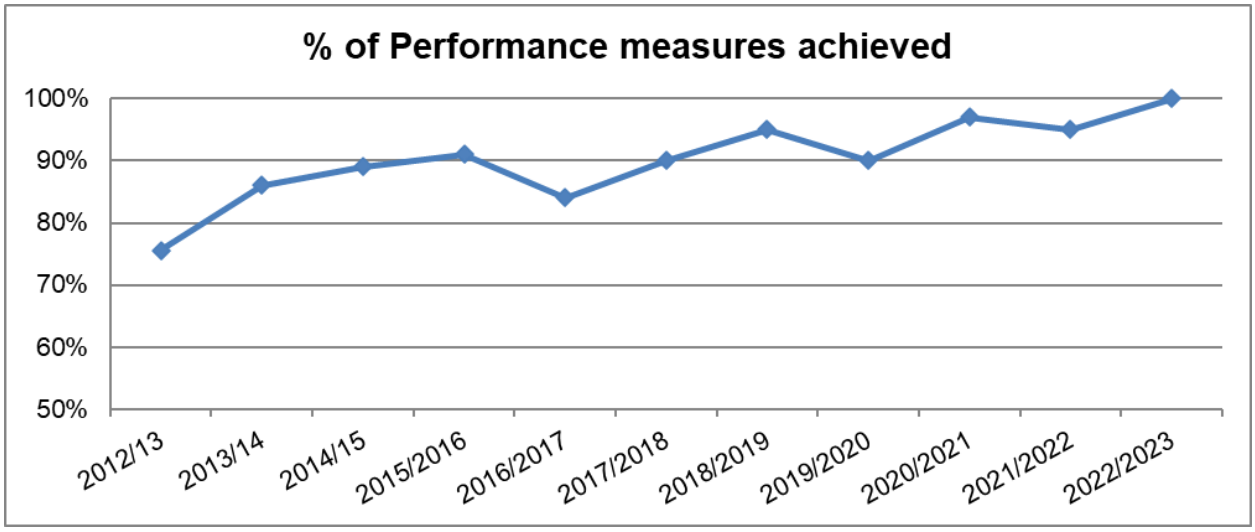
	help to ensure a better outcome for biodiversity within the time frame of the project. Project operations are expected to wind up in April 2024 as the Jobs for Nature Funding for the project runs out.

Part Three – Performance Summary

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

Measure	2022/2023 Score
Achieved	80 (100%)
Almost Achieved	0 (0%)
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 24 August 2023.

Once ratified by Council, the proposed changes to the Operational Plan 2018-2028 will be carried out and be reported upon as part of the 2023/2024 Biosecurity Operational Plan Report.

Section	Current content	Proposed change	Reason
Part 1 – Section 18 Mediterranean fanworm	Target 18.2 Each year, a minimum of two dive surveillance operations are undertaken in Waikawa Bay, Picton Port, and Shakespeare Bay.	Target 18.3 Each year, a minimum of two dive surveillance operations are undertaken in Waikawa Bay~~, Picton Port~~, and Shakespeare Bay.	It is highly unlikely effective surveillance will be able to be delivered while the iRex development is occurring in the Picton Port area usually subject o surveillance activities. The situation will be monitored and if for any reason it is possible, it will proceed, but not set as part of the target.
Part 2 – Section 4. Supporting Community Organisations	Target 37 Each year, provide an annual financial contribution into the following community organisations: • Marlborough Sounds Restoration Trust • South Marlborough Landscape Restoration Trust • Chilean Needle Grass Action Group (by way of a dedicated budget).	Amend Target 37 Each year, provide an annual financial contribution into the following community organisations: • Marlborough Sounds Restoration Trust • South Marlborough Landscape Restoration Trust • ~~Chilean Needle Grass Action Group (by way of a dedicated budget).~~	As reported, without an engaged community to maintain the formation of the group, it can not longer remain as an operational target. As also report however, Council will continue to deliver the RPMP programme and remain prepared should the community wish to reform any type of group in the future.
Part 2 – Section 6. Research	Operational Summary for the coming year Council has a current research focus comprising of: • Improved understanding of the risks related to the residual nature of flupropanate herbicide (as part of Council's role in supporting the product registration of Taskforce™	Amend content: Operational Summary for the coming year Council has a current research focus comprising of: • ~~Improved understanding of the risks related to the residual nature of flupropanate herbicide (as part of Council's role in supporting the product registration of Taskforce™ herbicide in~~	To reflect the current situation in terms of research projects available to support or instigate. As reported, the bulk of involvement currently involves staff input and time as opposed to direct financial investment.

Section	Current content	Proposed change	Reason
	herbicide in NZ). • Sponsor and collaborator for the 'Tomorrow's Marine Biosecurity Toolbox' MBIE funded programme led by the Cawthron Institute; • Ongoing support toward national research projects looking into the biological control of Vespula sp. wasps. The research budget for 2020/21 is $10,000.	~~NZ).~~ • Sponsor and collaborator for the 'Tomorrow's Marine Biosecurity Toolbox' MBIE funded programme led by the Cawthron Institute; • 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. The annual research budget ~~for 2020/21~~ is ~~$10,000~~ $5,000.	
Part 2 – Section 7. Specific Projects	Operational Summary for the coming year. Council has a current commitment to the following specific projects: • Top of the South Marine Biosecurity Partnership. This initiative sees the three Top of the South (TOS) Councils come together with the Ministry for Primary Industries financially, and with many other parties in committee, to minimise the risk and impact of marine pests. It strongly supports the work delivered operationally by Council in the Mediterranean fanworm programme. A contractor delivers an agreed work programme across the TOS region which is focussed strongly on awareness, engagement, risk reduction and more recently surveillance/intelligence. Resource inputs:	Amend content: Operational Summary for the coming year. Council has a current commitment to the following specific projects: • Top of the South Marine Biosecurity Partnership. This initiative sees the three Top of the South (TOS) Councils come together with the Ministry for Primary Industries financially, and with many other parties in committee, to minimise the risk and impact of marine pests. It strongly supports the work delivered operationally by Council in the Mediterranean fanworm programme. A contractor delivers an agreed work programme across the TOS region which is focussed strongly on awareness, engagement, risk reduction and more recently surveillance/intelligence. Resource inputs: 1. Financial contribution $36,250 2. Staff time and associated costs.	As report, the Havelock plague skink response has been closed out.

Section	Current content	Proposed change	Reason
	1. Financial contribution $36,250 2. Staff time and associated costs. • Response to plague skinks in Marlborough As a result of the detection of a breeding population of plague skinks in Marlborough (a first for the South Island), a response led by Biosecurity NZ and DOC commenced in June 2018. Council is a signatory to a Memorandum of Understanding in relation to this response and is fulfilling both a governance role and providing in-kind support to operations. Resource inputs: Staff time and associated costs	~~• Response to plague skinks in Marlborough~~ ~~As a result of the detection of a breeding population of plague skinks in Marlborough (a first for the South Island), a response led by Biosecurity NZ and DOC commenced in June 2018.~~ ~~Council is a signatory to a Memorandum of Understanding in relation to this response and is fulfilling both a governance role and providing in-kind support to operations.~~ ~~Resource inputs: Staff time and associated costs~~	