

Summary report on the results of the  
**Significant Natural Areas Project**

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**MARLBOROUGH  
DISTRICT COUNCIL**

## **Summary Report on the Results of the Significant Natural Areas Project 2020 - 2021**

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## Executive Summary

### Introduction and Background

Through the Resource Management Act 1991 and its subsequent amendments, the Marlborough District Council (Council) has a role in maintaining and protecting indigenous biodiversity and significant natural areas in the Marlborough region. Since 2001 the Council has implemented the "Significant Natural Areas" (SNA) project, which has involved extensive field based ecological survey work and a subsequent protection and monitoring programme.

This report provides a summary of results of the Significant Natural Areas project (SNA) over the one year period from July 2020 to June 2021. It follows from ten previous summary reports, one of which covered the early years of the project from 2001 to June 2008, one covering the two year period from 2008 to 2010 and the others covering the annual periods from 2010 to 2021.

This report summarises the results of:

- Ecological survey work carried out from July 2020 to June 2021.
- Environmental protection work carried out through the SNA Landowner Assistance Programme from July 2020 to June 2021.
- Significant Natural Area monitoring programmes, July 2020 to June 2021; and
- The Native Seed Collection Project in 2021.

(NB: All financial amounts in this report are presented GST inclusive).

### Strategic Direction

Following the external review of the SNA project which was undertaken by Wildlands Consultants in 2016, a Prioritisation Project was initiated to give better direction to the Council's Biodiversity work. The Potential Ecosystems map produced in 2016/17 has been used to inform this process. Subsequently a Zonation Analysis was undertaken using this and other data in 2018/19 and GIS maps produced. This work will guide our biodiversity work by prioritising the sites of natural biodiversity in the region.

Overlaying all of this has been the development of a National Biodiversity Strategy and a National Policy Statement on Indigenous Biodiversity through a process being led nationally by MfE and DOC with major input from Local Government. These documents are expected in the next six months after a number of lengthy delays due to Covid 19 and other issues. They, along with the likes of the Kotahitanga mō te Taiao Alliance Strategy, will guide the Marlborough Biodiversity Strategy, so the timing has been potentially very beneficial if not a bit frustrating.

### Ecological Survey Work

Since 2001, extensive field based ecological surveys have been carried out on private land through large parts of the Marlborough region. The majority of the work was carried out from 2001 to 2009 and since that time properties have been visited opportunistically.

There are a total number of 758 Significant Natural Areas currently mapped and identified in our database, an increase of 45 sites.

In 2021, a fourth high country property was surveyed, including the largest known population of the endangered pink broom tree, *Carmichaelia carmichaeliae*, which is endemic to Marlborough.

## Protection Programme

A pilot landowner assistance programme to implement protection of areas identified as significant natural areas was established in 2003 and extended into a full programme in 2005. Since this time a total of 92 projects have been completed.

The 2020/2021 financial year started with 13 projects underway. An additional 14 new projects were started in the year, and seven were completed, giving a total of 20 current active assistance projects.

This programme to assist landowners to improve the condition of their SNAs resulted in the investment of \$473,022 into native biodiversity on private land in 2020/21, of which Council paid less than half. Over half of this went into fencing stock out of sites and the rest went into weed control and planting native trees.

Funds were also directed towards restoration of beaches and dunes in the Marfell's Beach to Ward Beach area, with a mix of weed control and planting backed up by collection of local seed for propagation.

### Total Funding Contributions for Biodiversity Protection Projects on Private Land 2020 – 2021

	2020/21	2019/20
Marlborough District Council Funding	\$215,247	\$73,379
Central Government (NZTA)	\$12,336	
QEII National Trust	\$54,708	\$6,439
Landowners	\$190,731	\$60,130
<b>Total</b>	<b>\$473,022</b>	<b>\$139,948</b>

## Monitoring

Monitoring of Managed SNA Sites was initiated in 2006 and has been repeated on a bi-ennial basis since that time. Monitoring of Un-managed sites was started in 2014/15. The Monitoring Plan for 2020/21 had a major setback with our much valued, long term expert ecologist, Geoff Walls, becoming unavailable at the last minute. The programme was reduced accordingly and the allocated funding was channelled into the Landowner Assistance programme and the Survey programme. Monitoring of two Managed sites and six Un-managed sites made for a total of eight sites monitored for the year in Flaxbourne, Hillersden and the Sounds EDs.

Results from this monitoring were pleasing as all sites were Fair or Good in condition with a trend over time of stable or improving. Only one was stable-deteriorating. Two of these sites are protected by covenants.

## Associated Projects

- Seed collection – was carried out between February and June 2021 with a focus on collecting kahikatea, tōtara and kanuka seed for local planting projects, as well as species suitable for the Awatere high country and Katipo Coast, especially akiraho, pingao, sand *Coprosma* and sand tussock.
- Tūi to Town project – This project was amalgamated into the Working for Nature Fund Environmental Grants Scheme that Council created in 2020. Agreements made prior to this were still honoured and during the year, 1.6ha of indigenous planting was achieved through Tūi to Town grants, at a cost to Council of \$4,835.

## Discussion and Conclusions

There has been a continued involvement with landowners on the east coast, south of Lake Grassmere. This work began in earnest after the November 2016 Kaikoura Earthquake as we did a concerted assessment of the SNAs that were likely to have been affected by that quake. Many of the sites are coastal dune areas that have been impacted by uplift during the quake. While they had not been hugely damaged by the quake, there was considerable evidence of damage caused by vehicles being able to access the area in a way they hadn't been able to previously. At the same time the uplift created an opportunity to restore a natural dune ecosystem less overwhelmed by exotic weeds such as marram grass and wilding pines. Increased interest in the coastal dunes has resulted in an improved knowledge in what is found there, including nationally important populations of endemic invertebrates, such as katipo and kiwaia, the mat daisy jumper, which is a flightless moth unique to this coast.

The Council is currently consulting with the community on how best to manage the conflict between vehicles and indigenous biodiversity. In the meantime we are committed to planting pockets of native sand binding plants to introduce native seed sources into the area and gradually reducing the weed populations in those same areas. This area is highly regarded for its indigenous biodiversity and is important for threatened species, such as banded dotterel, katipo, kiwaia and coastal mat daisy.

In an effort to focus attention and restoration direction onto large wetland ecosystems, SNA assessments were completed for Para Swamp, Lake Elterwater and other large wetlands in the region. They are all in various states of condition and it is hoped to drive their restoration with targeted assistance. Para Swamp received some attention this year with Council banding together with NZTA and landowners to clear over 2ha of willows from gullies east of State Highway 1.

Landowners are also showing their commitment to their SNAs by covenanting through the QEII Trust, with 15 new covenants on SNAs. New data gathered from DoC about Conservation Covenants has also been useful to help target legally protected biodiversity on private land.



**Members of the Significant Natural Areas working group which has been instrumental in helping to guide and manage the project since 2001.**

From left to right: Geoff Walls (contract ecologist), Alan Johnson (Council), Jo Gould (DoC), Paul Millen (consultant), Mike Aviss (DoC), Nicky Eade (Council), Tom Stein (QEII), Ross Beech (farmer rep), Roy Grose (DoC), Jan Clayton-Greene (DoC), Simon Moore (DoC).

Absent: Kristen Gerard (farmer representative) and a Federated Farmers representative.

Note: In 2016, Nicky Eade resigned her position as coordinator of the SNA programme since its inception. Mike Aviss was appointed Biodiversity Coordinator in 2017 and became manager of the programme.

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## 1.0 Introduction

The Significant Natural Area project was established in 2001 to enable the Marlborough District Council to meet its obligations under section 6(c) of the Resource Management Act which requires that, in relation to managing the use, development and protection of natural and physical resources, the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna, shall be recognised and provided for as a matter of national importance.

The Council of the time decided to meet these obligations through a proactive but non-regulatory programme to identify significant natural areas and offer landowners support to protect and enhance these areas. Integral to this approach was a commitment to hold the property specific information confidentially rather than scheduling it for regulatory purposes.

A working group was established to assist the Council to manage the programme. The group included Councillors and staff, Department of Conservation staff, three landowner representatives and the local QEII representative. This group met several times a year in the initial stages of the project and continues to meet approximately annually. It has played an important role in guiding the direction of the project over the years.



**Figure 1: Awatere high country silver tussock and beech forest.**

A small team was employed to assist with landowner consultation and carry out the ecological survey work. Paul Millen carried out the majority of the direct consultation with landowners while ecologists Geoff Walls and Philip Simpson carried out the ecological field work and reporting and also provided expert advice as required. Once the later protection programme was established Paul Millen also



assisted with managing restoration and protection programmes and has carried out the seed collection work since 2006. Some external assistance was also used to help with publicity and the publication of the two summary reports (2005 and 2009) and planting and restoration guides (2004 and 2011).

Information collected through the significant natural areas surveys is held in a database and is only reported publicly in a general sense. The two main ways the information is used are, firstly, to provide a regional overview of significant natural areas and biodiversity on private land in the Marlborough region, and secondly, to provide a basis for developing protection programmes with landowners interested in proactively managing and protecting these areas.

The Marlborough District Council continues to support the non-regulatory approach to provide for the protection of significant natural areas. The Significant Natural Areas programme is well established but continues to evolve over time.

At the time of writing, the proposed Marlborough Environment Plan has been publicly notified, submission period is over and submissions are now being analysed. This proposed Plan promotes the ongoing use of the voluntary partnership approach adopted through the Significant Natural Areas project and also sets out indigenous vegetation clearance rules which are designed to provide a reasonable level of protection to all areas of indigenous vegetation through general rules.

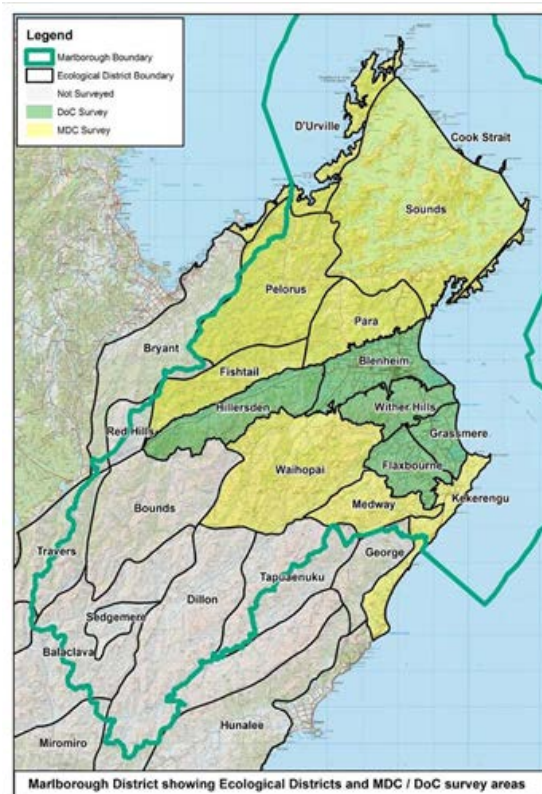
## Part A: Ecological Survey Work

### 2.0 Field Based Ecological Surveys – Background and Overview

Between 2001 and 2009, extensive field based ecological surveys were carried out on private land throughout large parts of Marlborough District. This work has been approached as a partnership with landowners, who have participated voluntarily. Through the results of the ecological survey work, it has been possible to analyse the extent and type of ecosystems remaining and the severity and types of pressures these remaining areas are subject to.

Ecological districts have been used as the survey units. The Marlborough District Council carried out the majority of the survey work overall (Kekerengu, Medway and Waihopai ecological districts in South Marlborough and Para, Fishtail, Pelorus, D'Urville, Sounds and Cook Strait ecological districts in North Marlborough - see yellow shaded areas on map). However, the Department of Conservation also carried out a substantial part of the survey work between the years 2002 – 2004, as part of the Protected Natural Areas (PNA) survey of the Wairau ecological region which included five ecological districts in South Marlborough - Grassmere, Flaxbourne, Wither Hills, Blenheim and Hillersden (see green shaded areas on map).

Some ecological districts at the south of the region (Tapuaenuku, Bounds, Dillon, Sedgemere, Balaclava, Travers and Red Hills), were not surveyed in the 2000's being mostly Department of Conservation land or pastoral leasehold land. This changed in 2018 with initiation of surveys of properties in the Upper Awatere Valley to fill gaps in coverage in Tapuaenuku, Dillon and Waihopai ecological districts.



This recent interest was generated during the Farm Environment Award Open Day on Muller Station in 2017, and this will continue for as long as run holders welcome us onto their properties. We are moving one property at a time from the top of the valley down and have so far been invited onto four of the 10 properties that were not surveyed in the original surveys around 2006. Wildlands Consultants have been contracted to undertake these surveys which have required ten days or more of field time per property and frequently take more than one field trip to complete. Three reports have been completed and one is part finished. We plan to complete the fourth survey in summer 2022.

There are still some large gaps in coverage in parts of Marlborough, especially in the Pelorus, Waihopai, and Flaxbourne, which are being addressed as opportunity allows. These have been conducted at the request of landowners since 2009, mainly by Ecologist Geoff Walls in association with annual monitoring of SNA condition, and more recently by Council staff.

As each SNA is visited for monitoring, the opportunity is taken to reassess the boundary to ensure it still reflects the extent of significant habitat. The inaccuracies mainly stem from the quality of mapping that was available during the early 2000's compared to what is used today.

This ecological survey work has resulted in a large amount of information being collected. It provides both a regional scale overview of the extent and state of biodiversity resources on private land, and a more detailed property scale assessment which is useful for implementing practical protection measures

such as fencing and pest control. While the emphasis has been on terrestrial vegetation and habitat values, wetlands, and some waterways, have also been assessed.

## 2.1 Summary of Results – July 2020 to June 2021

### 2.1.1 Property Surveys

Wildlands Consultants were contracted to survey another Awatere high country station in the Waihopai ecological district. The farm was physically surveyed over five days which gave a good overview of 30% of the 11,300ha farm. Three new SNAs were identified within the area surveyed, totalling approximately 3,000ha. Collectively, these SNAs contain a range of habitats that include forest, treeland, scrub, shrublands, grasslands, short-tussock grasslands, scree-herbfields, bluff and outcrop shrublands, bluff and outcrop shrublands and wetlands. A large part of the farming operation is sympathetic to the indigenous vegetation, especially in the area that was chosen for survey in 2021. The property contains a large part of the most significant population known of northern pink broom, which is a critically endangered species endemic to Marlborough. There were another 17 threatened plants and birds also recorded.

At the same time, three sites that had been missed during neighbouring property surveys were also assessed, mapped and added to previous property reports. The cost to Council of the surveys and reports was \$41,000.00.



Figure 2: Gorge supporting pink tree broom.



Figure 3: Weed issues with Cotoneaster.

Geoff Walls and I surveyed the Waima River mouth including an adjacent property and then I undertook field assessments of two important properties in North Marlborough, one in the Pelorus catchment and the other in the hills above Waikawa Bay. Another Flaxbourne property survey is partially completed.

### 2.1.2 Wetland Survey 2010 – 2013

From 2010 – 2013 Council carried out a further project to identify regionally significant wetlands in Marlborough. These have been scheduled in the proposed Marlborough Environment Plan which is currently notified and submissions are being analysed. Wetlands are identified on the Plan zoning maps and landowners now have another opportunity to consider this. This project involved desktop identification followed by notification to all affected landowners and follow up field visits on request. There was some overlap with wetland areas already identified through the earlier Significant Natural Areas surveys.

Most wetlands were not visited or described in a survey as part of the identification process. This is an information gap which will need to be filled as opportunity allows with some ecological assessments.

There were 1,300 wetlands identified in the desk-top exercise. While the final number of identified wetlands is yet to be confirmed, well over 1,000 are likely to be scheduled in the Marlborough Environment Plan once it is ratified. Until then they are all being treated as SNAs, which means they qualify for the same level of assistance through the Landowner Assistance Programme.

### 2.1.3 Results

The tables below show the summary of ecological results from the Significant Natural Area surveys on private land for both South and North Marlborough in the 12 year period from July 2001 to June 2021. These do not include the additional wetland sites that have been identified more recently through the 2010-13 survey described above, unless they have had a full SNA assessment report completed.

Tables 1 and 2 show the total participation rates and overall results from 2001 to June 2021 in South and North Marlborough respectively. Using ecological district units, the tables show; the number of sites identified, the number legally protected, the combined area and percentage of total land area of all of the identified significant natural area sites, and the percentage of Department of Conservation land in each Ecological District.

As of June 2021 a total of 758 significant natural areas have been identified, with a combined area of 92,516 hectares. There has been a significant increase in number of sites and the area identified as being significant. Much of this is to do with the size of the landscapes in the high country in the Upper Awatere Valley.

**Table 1: South Marlborough Ecological Survey Participation and Results (July 01 – June 21).**

Ecological Districts	No. of Sites	No. Sites Legally Protected	Combined Area (ha)	SNA sites as a % of Total Private Land Area in ED	SNA sites as a % of Total Land Area	% of ED in DoC land
Kekerengu	60	5	1,504	9%	3.8%	3.8%
Flaxbourne	67	7	2,188	5.8%	7.8%	0.3%
Grassmere	19	0	1,742	6.2%	9.4%	0.4%
Blenheim	20	8	3,085	2.4%	7.4%	3.4%
Medway	68	15	3,813	12%	11.9%	1.0%
Hillersden	47	5	9,439	10%	18.3%	3.6%
Wither Hills	25	3	5,039	16.7%	16.6%	0%
Waihopai	72	23	16,815	20%	15.4%	24.5%
Tapuaenuku	19	0	1,341	4.4%	1.8%	40.2%
Dillon	29	0	13,876	37%	7.6%	69.8%
<b>Totals</b>	<b>426</b>	<b>66 (13%)</b>	<b>58,842</b>	<b>Av=12.4%</b>	<b>Av=10.0%</b>	<b>Av=15%</b>

**Table 2: North Marlborough – Ecological Survey – Participation and Results (July 01 – June 21).**

Ecological Districts	No. of Sites	No. sites legally protected	Combined Area (ha)	SNA sites as a % of Total Private Land Area in ED	SNA sites as a % of Total Area of ED (DoC and Private)	% of ED in DoC Land
D'Urville	49	1	5158	32.7%	17.8%	31%
Cook Strait	6	2	478	12.9%	9.3%	28%
Sounds	219	27	12,436	17.8%	10.8%	27%
Pelorus	43	8	2,131	8.3%	2.0%	68%
Para	63	5	3,648	10.7%	7.6%	28%
Fishtail	27	3	1,088	7.5%	2.5%	68%
<b>Totals</b>	<b>407</b>	<b>46 (10%)</b>	<b>24,939</b>	<b>(Av=15%)</b>	<b>(Av=8.3%)</b>	<b>(Av=41.6%)</b>

## 2.2 Discussion

The field based ecological surveys have produced a lot of information about the distribution and type of native habitat remaining on private land in both South and North Marlborough. Despite a high level of buy-in from Marlborough landowners when the programme was initiated, there are still large tracts of land that have not been assessed for SNA status which we are visiting as opportunity allows.

### South Marlborough

This part of the region is characterised by a history of extensive native vegetation clearance and is consequently much depleted in ecological functioning in some respects. While there are some extensive areas of beech forest, kānuka forest, shrublands and tussock grasslands, these all occur in the extensive areas of hill country. Of the ten ecological districts that were surveyed in the South Marlborough area there is very little Department of Conservation land in seven of them. The percentage of total land area of significant natural sites is also very low for some of these - less than 10% in the three lowland coastal ecological districts (Flaxbourne, Grassmere and Kekerengu).

This is clearly reflected when the ecological districts are compared to the Priority One area of the 2007 Statement of National Priorities for Protecting Rare and Threatened Biodiversity on Private Land which identifies land environments that have less than 20% remaining in indigenous cover. The 20% threshold is based on a well-established species-area relationship which shows that the rate of biodiversity loss increases dramatically when the amount of available habitat drops below 20% of its original extent.

Some ecosystem types in South Marlborough are much depleted (for instance wetlands, podocarp forest and broadleaved forests) and the little that does remain is not always well managed or formally protected in any way. However, with an emphasis on protection of some of these areas, some improvements are being made with landowners introducing management such as fencing, weed control and restoration planting. This will help to ensure the long term sustainability of some of these sites.



**Figure 4: Planting in Kekerengu ED, a Threatened Land Environment with <10% cover remaining.**

### **North Marlborough**

The North Marlborough part of the region has a different climate and history of land clearance to South Marlborough and also has a considerable amount of Public Conservation Land (ranging from 24% to 68% in different ecological districts). The percentage of total land area of significant natural sites is generally higher than in South Marlborough, ranging from about 7% to 30% across the ecological districts.

While some ecosystem types are quite depleted, for instance lowland alluvial and swamp forests and kohekohe forest, a significant amount of native forest habitat remains – both beech and podocarp dominated. Additionally, large areas of regenerating forests consisting of kānuka, mānuka, tauhinu and broadleaved species are present where land has been left to regenerate following earlier clearance.

While fencing is important for some lowland sites within a pastoral farming landscape, feral animal pest control is the main challenge in North Marlborough, especially as there are still populations of a range of native fauna present (forest birds, sea birds, weka, giant land snails, and native freshwater fish species).

## Part B: Site Improvement – Landowner Assistance Programme – Summary of Results 2020-2021

### 3.0 Landowner Assistance Programme – Background and Overview

The Landowner Assistance Programme has been operating since 2003 in conjunction with the field ecological survey work, and has targeted assistance to high value sites with identified pressures and threats that can be practically managed. It was initially established as a pilot programme with a focus on the South Marlborough area, but has since been fully established as a permanent programme and extended to include North Marlborough.

While the main focus of the programme has been on management of threats within individual high value significant natural area sites (including a mix of fencing, weed and animal pest control and restoration planting work), other broader methods to promote the protection of natural values in South Marlborough have also been incorporated. These have included:

- The pilot use of farm scale plans to balance the production and conservation values within properties (especially where fencing is not practical);
- Three feasibility studies looking at pest and weed control issues (old man's beard and goat control in South Marlborough and wilding pine control on d'Urville Island);
- The collection of native plant seed material to ensure an ongoing supply of locally sourced plants for re-vegetation and restoration efforts, associated publicity and promotion work (newsletters, a series of newspaper articles and publication of summary reports and native planting guides for both South and North Marlborough); and
- The Tūi to Town project which was recently discontinued in favour of the Working for Nature fund, part of Councils Environmental Grants Scheme.



A concerted conservation effort on private land is needed if functioning ecosystems are to be maintained, especially in the lowland areas of South Marlborough which have been identified nationally as threatened environments with less than 20% of natural cover remaining. To be effective, this would need to include continued protection of the last remaining remnants as well as active restoration planting to create new habitats and increase the overall area in natural cover (which is currently less than 1% on the Wairau and Awatere Plain areas). So far about 18% of the 758 identified sites over the whole of Marlborough have received funding assistance for restoration or management (43 in North Marlborough and 87 in South Marlborough). While a number of sites are likely to be deteriorating in condition over time due to a range of threats and pressures, it is pleasing to note that the condition of all of the six unmanaged sites monitored in 2020/21 was Fair, and the trend was either Improving or Stable.

Expenditure to manage SNAs averaged about \$120K per annum from 2007 until 2012, when DoCs Bio Fund rules changed. Council has since increased its commitment and in 2021 landowners were given financial assistance amounting to \$215,000 to help manage threats to indigenous biodiversity on their land. The amount has been matched by landowners and others so that in 2020/21 a total of \$473,022 was spent improving the condition of significant natural sites on private land in Marlborough.

A lot of restoration and good-will has also been achieved by the programme over time. There is also unrecorded effort over and above this where Council is not involved financially through the SNA programme.

### 3.1 SNA Habitat Improvement Projects 2020-2021

In the 12 month period from July 2020 to June 2021, the Council contributed to 27 projects in total. Fourteen of these were new projects, with a mix of weed control, fencing and planting, planning and threatened species management. Thirteen are ongoing projects; mostly weed control but also including a fencing project and threatened native broom management.

Highlights of the year in the Management Projects include:

- Planting 5000sqm of native spinifex and pingao into the sand at Marfells Beach and Cape Campbell, in two community planting days.
- Fencing, predator trapping and securing a covenant over a 160ha riparian forest in the Awatere high country.
- Restoring over 6ha of wetland complex in Wairau Valley.
- Aerial cotoneaster control in the Grey River to protect the native pink tree brooms.
- Ongoing fencing and planting of 200ha of coastal cliff SNAs in the outer Sounds.
- Willow control over 4.5ha in arms of Para Swamp cut off by State Highway 1.
- Fencing and covenanting a tawa/pukatea remnant in Keneperu Sound.

The total number of projects carried out since 2003 is 132, including current ongoing projects.

Recently, restoration of the East Coast south of Lake Grassmere has been a focus. Ward School pupils helped other locals to plant 1500 seedling spinifex plants at Marfell's Beach and Cape Campbell. This was after they were unable to be planted due to the 2020 summer drought. Another 3600 spinifex grasses and 1000 ngaio trees have now also been planted further along that coast. This is part of a project called Beach Aid, a collaboration with University of Canterbury, MDC and East Coast landowners. Barriers are erected to exclude vehicles and we plant the grasses in different ways to help design the ultimate best way to restore native vegetation to the beaches uplifted during the November 2016 Kaikoura Earthquake. Areas of dense marram are also being planted with ngaio and other native trees in a trial to shade out the marram and replace it with indigenous coastal forest.

A number of wetland owners have expressed an interest in wetland restoration and approached the Council for assistance. All Significant Wetlands are treated as if they were SNAs and in the 2020-2021 year, seven wetland restoration projects were funded, with Council funding \$28,515.

A summary of all Significant Natural Area project expenditure is included in Appendix 1.





**Figure 5: Tawa and pukatea forest remnant now fenced and covenanted.**



**Figure 6: Para swamp protected by removal of enclaves of willow.**

### 3.2 Protection Projects Summary – July 2020 – June 2021

Table 3: Summary of new protection projects July 2020 – June 2021 (GST inclusive).

Ecosystem Type	Size (ha)	North/South Marlborough ED	Type of Work	Total Funding	Council	QEII	Landowner
Wetland (Gre)	2.6	S Kekerengu	Plant	\$3,700	\$1,850		\$1,850
Wetland (Hun)	0.8	S Blenheim	Weeds, plant	\$9,584	\$5,367		\$4,217
Riparian (Dow)	1.0	N Sounds	Fence	\$1,7250	\$5,750	\$5,750	\$5,750
Wetland (Cam)	0.4	S Waihopai	Fence	\$6,700	\$3,350		\$3,350
Wetland (Woo)	1.0	S Hillersden	Weeds	\$3,064	\$1,532		\$1,532
Forest (Pon)	26	N Sounds	Pines	\$10,350	\$3,450		\$6,900
Hillslopes (Yea)	1	S Kekerengu	Weeds	\$633	\$633		\$0
Riparian (Mac)	56	S Tapuaenuku	Fence, traps	\$142,929	\$47,643	\$4,7643	\$47,643
Coastal (MDC)	3.5	S Kekerengu	Marram	\$6,828	\$6,828		\$0
Hillslopes (Sti)	66	S Flaxbourne	Weeds	\$5,850	\$2,925		\$2,925
Wetland (Par)	2.4	N Para	Willows	\$21,364	\$4,795		\$16,569
Dunes (Wel)	3.5	S Kekerengu	Pines	\$742	\$742		\$0
Hillslopes (Upc)	125	S Waihopai	Weeds	\$10,000	\$5,000		\$5,000
Forest (Ver)		S Wither Hills	OMB	\$2,630	\$1,315	\$1,315	\$0
<b>Total</b>				<b>\$241,624.00</b>	<b>\$91,180.00</b>	<b>\$54,708</b>	<b>\$95,736.00</b>

**Table 4: Summary of ongoing protection projects July 2020-June 2021 (GST inclusive).**

Ecosystem Type	Size (ha)	North/South Marlborough ED	Type of Work	Total Funding	Council	QEII	Landowner
Hillslope (Mol)	200	N Sounds	Planting, fence	\$51,222	\$14,950		\$36,272
Forest (Pil)	73	S Waihopai	Fence	\$64,663	\$64,663		0
Coastal (Pet)	1	S Kekerengu	Planting	\$9,800	\$4,900		\$4,900
Coastal (Pet)	3	S Kekerengu	Marram	\$5,746	\$2,873		\$2,873
Hillslopes (Sti)	53	S Flaxbourne	Weeds	\$11,600	\$5,800		\$5,800
Riparian (Wil)	2.0	S Kekerengu	Weeds	\$1,351	\$1,351		\$0
Wetland (Opa)	4	S Blenheim	Weeds, plant	\$3,644	\$1,822		\$1,822
Hillslopes (Lee)	20	S Waihopai	Sycamores	\$6,244	\$3,122		\$3,122
Hillslopes (Coa)	250	N Para	Pines	\$10,350	\$5,175		\$5,175
Hillslopes (Har)		S Medway	OMB	\$4,062	\$2,031		\$2,031
Riparian (Wil)	8	S Waihopai	Willows	\$1,630	\$1,630		\$0
Wetland (Pat)	5	S Hillersden	Weeds, plants	\$35,000	\$10,000		\$25,000
Forest (MSR)	26	N Sounds	Pines	\$13,750	\$5,750		\$8,000
<b>Total</b>				<b>\$219,062.00</b>	<b>\$124,067.00</b>		<b>\$94,995.00</b>

**Total Funding Contributions for Biodiversity Protection Projects on Private Land 2020-2021**

Marlborough District Council Funding	\$215,247
Central Government (NZTA)	\$12,336
QEII National Trust	\$54,708
Landowners	\$190,731
<b>Total</b>	<b>\$473,022.00</b>

## Summary of Total Funding Contributions for Biodiversity Protection Projects on Private Land 2003 – 2021

Marlborough District Council Funding	\$1,233,622
Central Government Biodiversity Fund	\$848,644
QEII National Trust	\$215,265
Landowners	\$1,354,487
<b>Total</b>	<b>\$3,652,018.00</b>

### 3.3 Relationships

Council promotes covenanting and maintains strong relationships with the Department of Conservation and the Queen Elizabeth II National Trust (QEII), both of which provide a mechanism for landowners to independently protect areas on their properties.

A total of 57 of the 132 projects protected through the programme so far have been on covenanted sites. Three of these are Protected Private Land (PPL) covenants administered by the Department of Conservation and the other 54 are QEII covenants. The QEII takes responsibility for on-going monitoring of their covenanted sites, reducing the monitoring required to be carried out by Council.

The table below shows the number of SNAs that have been protected by either the QEII Trust or DoC. The boundaries of both do not always, or even often, agree so the area is only where they overlap. The QEII data comes from their website and is only updated once the covenant has been formalised, fenced and then surveyed, which allows it to be mapped and added to the GIS layer. This creates a lag time from the time the agreement is signed to when it is mapped.

**Table 5: SNAs in Marlborough which have legal protection.**

	Sites
SNAs in Marlborough which have some legal protection at August 2020	74
SNAs in Marlborough which have some legal protection at July 2021	89

Council has also been working collaboratively with the Marlborough Sounds Restoration Trust in recent years and has contributed to several wilding pine control projects on private properties led by the Trust as well as a new guideline about converting pine plantations to native vegetation. In 2020/21, Council contributed \$9,200 toward control of wilding pines in two SNAs in the Outer Sounds.

Other community based conservation groups currently operating in the Marlborough region include:

- Endeavour Inlet Restoration Trust.
- Grovetown Lagoon Restoration Project.
- Kaipupu Mainland Island Sanctuary.
- Para Swamp Restoration project (Fish and Game and The Gamebird Habitat Trust).
- Picton and Rarangi Dawn Chorus Groups.
- Te Hoiere/Pelorus Long-Tailed Bat Project (Forest and Bird).
- Tōtara for Tōtaranui Project.
- Tūi Nature Reserve Trust.

All of these groups are independent of the Council and compete in a tight market for funding from a small number of other sources, such as Lotteries Commission, Canterbury Community Fund, the DoC Community Fund, Council and landowners. Council has worked with DoC to set up a Biodiversity Forum to provide a simple way of communicating with all the groups and enabling them to communicate with each other. These meetings have been well attended and have been seen as positive by the various community groups.

## Part C: Monitoring Programme – Summary of Results

### 4.0 Background and Overview

Monitoring is an important part of measuring and tracking the outputs and outcomes of any project. There are three types of biodiversity monitoring that are relevant to the Significant Natural Areas project.

Firstly, at the broadest level, regional scale biodiversity monitoring is desirable so that an overall picture of biodiversity state and trends can be gained. At this stage, this type of monitoring is not established in the Marlborough region but we are involved in a national Envirolink Tools project which is being carried out in conjunction with Landcare Research and the Department of Conservation. This project is developing some standardised biodiversity indicators and methodology to measure these indicators. Staff has been involved in meetings helping to develop this project.

Secondly and more specifically, in relation to the Significant Natural Areas project, Council is undertaking a programme of ongoing monitoring of the state and condition of a selection of representative sites from the more than 730 SNAs identified that have not had any specific conservation management applied. This type of monitoring was started in the 2014/15 in two ecological districts and repeated annually ever since.

In 2019/20, as reported last year, the monitoring season was heavily impacted by the Covid 19 pandemic. In the 2020-21 year, the programme was poised to rebound from the effects of Covid but then other issues arose which prevented this. Funding and time which was allocated to the monitoring project was reallocated to an enhanced Landowner Assistance Programme and towards surveying of SNAs on new properties.

Three properties were visited for monitoring of unmanaged sites and a total of six separate Significant Natural Areas were assessed for their condition. The results show that without financial assistance from Council, these SNAs have been able to maintain an improving, or at least stable, level of condition, benefiting from the considerable efforts of the owners.

Thirdly, systematic monitoring has been established to assess the condition of the 118 sites that have been actively managed through the Landowner Assistance Programme (about 13% of all sites identified). This started in 2006/07. In 2021, two managed sites were monitored and found to be in good condition with a trend of improving.

The QEII National Trust monitors the sites that it has covenanted (currently 95 sites in Marlborough, 89 of which overlap with SNAs), so Council does not generally monitor the SNAs that QEII monitors, even though Council contributes to funding management at some of them.



**Figure 7: Restoration of waterways in the Wairau Valley, June 2019.**



**Figure 8: Same view May 2021.**

## 4.1 2019 - 20 Monitoring of Un-Managed SNA Sites

Monitoring to assess the state and condition of a selection of representative sites that have not had any specific conservation management applied was carried out in 2020/21.

They were located in the Hillersden, Flaxbourne and Sounds ecological districts (ED).

## 4.2 Site Monitoring Results

- A total of 6 unmanaged sites were monitored on three properties. The results are pleasing.
- Overall results show that most Un-managed sites visited were generally in reasonable condition (All were Fair condition). This reflects the inherent resilience of most of the sites, which have persisted within a productive landscape over many years prior to the SNA programme identifying them. In many cases it also reflects the commitment of landowners to undertake management without any Council assistance and to manage their land in a manner sympathetic with the natural environment.
- All of the Un-managed sites (15 or 94%) showed a condition trend of improving or stable (15% were improving). The main reasons for this good result appears to be destocking or low stocking rates on back country farms by careful farmers, and landowner pest control for the property, which allowed the sites to flourish.
- 1BT and the Emissions Trading Scheme are fast becoming buzz words in Marlborough in the native tree space. Properties which have no “managed sites” are doing it themselves when they have engaged in growing natives for the ETS. SNAs are also being fenced out of the farm with funding from 1BT and with assistance from Council. This is incentivising landowners to set aside their marginal land for growing carbon. I am actively assisting landowners to connect with experts able to assist in this effort. The SNA programme has contributed towards fencing stock out of areas set aside for carbon farming.
- While very few sites are legally protected, and rely on the benevolence of the owners, the Marlborough Environment Plan (MEP) clearance rules protect many of them from damage or destruction. There is now a recommendation in SNA monitoring reports that owners contact the QEII Trust to discuss legal protection of sites. This has been successful in prompting a number of SNA sites to be processed for covenanting by the QEII Trust.

**Table 6: Summary of condition results of SNA Un-managed site revisits to Sounds, Hillersden, and Flaxbourne ecological districts - 2020/21.**

Site Condition	Good	Good/Fair	Fair	Fair/Poor	Poor
			6		
Site Trend	Improving	Improving/Stable	Stable	Stable/Deteriorating	Deteriorating
	1		5		

Last year I reported on the damage that was occurring to the dunes, beaches and coastal biodiversity within and beside the SNAs along the East Coast, post the Kaikoura Earthquake of 2016. The damage to these vulnerable natural ecosystems has continued in the absence of any control or reduction of vehicle access to the coast. A huge effort has been made to understand the biodiversity of these ecosystems better. New populations of threatened species, such as katipo spider and the mat daisy jumper have been recorded recently. The SNA programme is managing a planting and weed control programme along the coast in an effort to come up with the best approach to restoring the indigenous biodiversity to the area. Results are being measured by Canterbury University to quantify the best approach to restoring the coast.



**Figure 9: Marram invading spinifex March 2019.**



**Figure 10: Same view July 2021 after control of marram.**

### 4.3 2020 - 2021 Monitoring of Managed SNA Sites

**SNA Assistance Programme Monitoring** – In the 2020/21 monitoring round a total of two sites were visited on two properties.



**Table 7: Summary of Monitoring of Managed SNA sites 2006 – 2021.**

Year	Total Sites	Sites monitored
2006/7	25	12 (9 properties)
2009/10	52	24 (17 properties)
2011/12	74	19 (13 properties)
2013/14	80	25 (19 properties)
2015/16	88	26 (19 properties)
2017/18	98	27 (17 properties)
2018/19	106	8 (6 properties)
2019/20	117	5 (4 properties)
2020/21	119	2 (2 properties)

Council staff (Mike Aviss) carried out the much reduced monitoring project over the 2020/21 season. Assessment methodology is qualitative and simple and includes rapid ecological condition and trend assessment along with photo points. Reports prepared for each site visited and provided to the landowners include commentary, site maps and photographs established at defined photo points to provide a visual record of changes over time. Any emerging issues (for instance weed invasion) are discussed with the landowner and further management is often put in place to deal with these. The monitoring allows the Council to maintain links with landowners and assist them in relation to these sites. Further quantitative monitoring could be added in time to allow a more rigorous analysis of change in site condition over time or to target particular points of interest within sites.

The table below provides a summary of the condition and trend of the sites.

Both these managed sites were found to be in good condition and with a trend of improving. This is a good outcome although with a very small sample size.

**Table 8: Summary of Monitoring results for SNA Managed sites 2017/18.**

	Good	Good/Fair	Fair	Fair/Poor	Poor
<b>Site Condition</b>	2 (100%)				
	<b>Improving</b>	<b>Improving/Stable</b>	<b>Stable</b>	<b>Stable /Deteriorating</b>	<b>Deteriorating</b>
<b>Site Trend</b>	2 (100%)				

## 4.4 Summary and Discussion

Some observations from the 2020/21 monitoring round:

- Landowners continue to be co-operative and allow access for monitoring purposes and all landowners were very interested in their sites and tracking their progress over time.

- More landowners are becoming aware of the benefits of setting aside marginal land from their operation and allowing it to restore itself, often just to reduce their operating costs but also to generate an income by sequestering carbon and earning carbon credits from indigenous trees.
- Most SNA sites visited are improving in condition generally due to natural resilience and re-generation processes and in some cases management interventions.
- Threats are most often either feral ungulates (mostly goats and deer) or weeds (especially old man's beard and wilding pines).
- Post the earthquake, natural regeneration on the coast south of Marfells Beach is largely being hindered by the impacts of much higher use of the coast. Indigenous dune ecosystems and species are being damaged. Success of any restoration programme is being improved by post and rope fences with signs directing vehicles away from newly planted areas.



**Figure 11:** Beach Aid Fence protecting new plants.



**Figure 12:** The endemic Notoreas moth which lives in the Pimelia mats growing on the beach.

## Part D: Associated Projects

### 5.0 Publicity and Information

#### 5.1 Background

Publicity and promotion have been integral to the Significant Natural Areas Project because it relies heavily on voluntary participation and proactive protection activity from landowners. Initially the emphasis was on increasing awareness about the unique and diverse biodiversity of the region and the opportunity for landowners to participate in collecting information and looking at options for protection where necessary. This occurred through personal contact, individual property reports, annual newsletters and newspaper articles.

More recently publicity about the SNA project is integrated into other media releases and publicity, for instance links with entrants in the Marlborough Environment Awards, farming articles and so on.

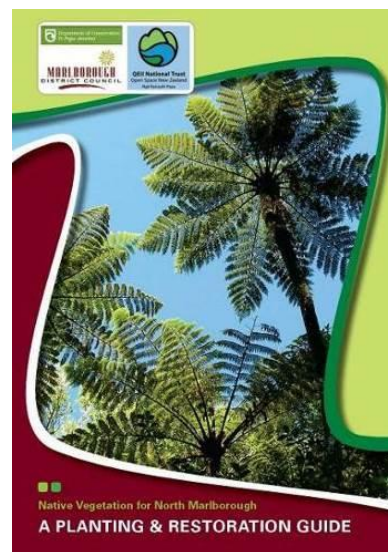
Previous publications relating to the project have included:

- Annual project newsletters – 2003-2016.
- Guidelines for landowners to develop a management plan for the sustainable management of native vegetation – 2004.
- Native Vegetation for South Marlborough – a Planting Guide – December 2004.
- South Marlborough – Significant Natural Areas Project Summary Report – July 2005.
- Marlborough District Council web page – Environment/Ecology and Biodiversity – 2005.
- Tūi to Town brochure, web page and associated planting guides (Wairau Plains and South Marlborough low lying hill country) – June 2008.
- North Marlborough – Significant Natural Areas Project Summary Report – June 2009.
- North Marlborough – Native vegetation planting and restoration guide – June 2011.
- Publication “Guidelines for Converting Pine Plantations to Native Vegetation in the Marlborough Sounds” – November 2016.

#### 5.2 The 2020-2021 Year

During 2020/21 the Biodiversity Co-ordinator spoke at the East Coast Protection Group’s AGM and Community Field Day to promote the Councils role and achievements in relation to the east coast. Articles were placed in local papers and in magazines, such as Wine Press, about SNAs.

All existing information brochures and website versions were updated.



## 6.0 Seed Collection Project

### 6.1 Background

Through the Significant Natural Areas project it became apparent that boosting the supply of suitable locally sourced native plants would be necessary if there was to be an adequate volume of plant material available for restoration projects in Marlborough. The Working for Nature natural habitat restoration project is helping to stimulate this activity in Marlborough by providing information and for larger projects, funding assistance.

The Significant Natural Areas project has provided an opportunity to identify remaining pockets of indigenous plants on private land that provide valuable seed sources to generate future material for restoration planting.

A pilot seed collection project was initiated in 2006 focusing on tōtara seed collection and this has continued since then and broadened to include a range of suitable species for restoration planting such as kowhai, kānuka, flax, cabbage tree, māhoe, kōhūhū, ngaio, broadleaf and lancewood, dependant on demand.

Over the last 13 years since July 2008, the emphasis has been on collecting the podocarp species mataī and kahikatea from sparsely distributed remnant populations to complement the original and ongoing focus on tōtara. Coordination with the Marlborough District Council's Reserves section has also taken place to try to create efficiencies in the area of seed collection.

The programme is flexible and can be shifted to meet the needs of specific projects. The current emphasis in terms of location has been to collect seed close to Blenheim to ensure that the Working for Nature, Significant Natural Areas and other lowland restoration projects all have a supply of suitable plants. Recently this has expanded to collecting revegetation species in the Upper Awatere and the Katipo Coast for targeted restoration projects.

A co-operative arrangement with local plant nurseries has been developed whereby Council collects and provides the seeds (courtesy of the access granted by private landowners to seed sources), and the nursery propagates, grows and sells the plants. This helps to ensure that appropriate locally sourced native plants are available in Marlborough nurseries to service the restoration of natural areas in the modified lowland environments.



**Figure 13: Pingao seed is collected to diversify dune plantings.**

## 6.2 The 2020-2021 Seed Collection Season

In the 2020/21 seed collection season, seed was collected from a number of sites in both North and South Marlborough. The cost of this was \$5,842.90 incl GST.

Good quantities of kahikatea and totara seed were collected from the Wairau Plains, Valley and tributaries. Ngaio, akiraho, sand *Coprosma*, Spinifex, pingao and sand tussock seed was collected from the coast for dune restoration.

Other seed was collected opportunistically during SNA survey and monitoring work, to help make rarer or uncommonly grown plants available for local restoration projects that are being started post the SNA survey. This included seed from a range of species in the Upper Awatere, including pink broom, cabbage tree and akiraho.

## 7.0 Tūi to Town Project 2008- 2021

### 7.1 Background and Overview

The Tūi to Town project, designed to encourage planting projects on the Wairau and Awatere Plains, has been superseded by the Working for Nature project, part of Councils Environmental Grants Scheme. The SNA surveys have confirmed that very little natural habitat remains on the lowland parts of South Marlborough. The Environmental Grants Scheme has been introduced to encourage community activity which enhances the indigenous biodiversity of Marlborough. A number of Tūi to Town projects were approved prior to the Working for Nature taking it over and these have been honoured in 2021.

A number of public plantings (for instance the Taylor River plantings carried out by the Marlborough District Council Reserves section and the Nelson Marlborough Institute of Technology (NMIT) Horticulture course), are publicised as being linked to the Tūi to Town project and along with other signposted sites, these will all be a legacy of the project.

### 7.2 Plantings

There were six planting projects in the 2020/21 financial year that the Tūi to Town fund contributed to, with a total of \$4,834 paid out. Nik Thomas' planting at Wairau Valley is making the best use of a natural water course in the vines on a low river terrace.



**Figure 14: Tūi to Town planting, Wairau Valley.**

The total number of funded plantings since 2008 is now 66 and a total area of new habitat of about 10 hectares has now been created. These plantings compliment other restoration projects on private land being undertaken through the SNA project, projects on Council land, and other smaller scale plantings of native vegetation on private land, school grounds and so on.

Council remains an important advocate for choosing to plant a native tree on any given site, rather than an exotic, and we are giving advice to assist people in choosing the trees best suited to their site.

## **8.0 Significant Natural Areas Review**

### **8.1 Background Overview**

A decision was made to have a professional external review of the Significant Natural Areas programme to help evaluate its effectiveness, give it some direction and to ensure the right information is being collected and stored. Wildlands Consultants Limited was commissioned to undertake the review in 2016 and their report was received in 2017.

The team from Wildlands reviewed annual newsletters, project summaries, the Access database and a number of guides produced by Council. In addition they had the GIS layer of all Marlborough SNAs as well as RAPs and Public Conservation Land.

## 8.2 Discussion and Recommendations

Wildlands proposed a number of recommendations, bullet pointed below. The arrow points illustrate what Councils SNA programme is doing currently to implement these recommendations and are a useful way to monitor the progress of our programme in relation to that review.

- **SNA status offers no legal protection and therefore more sites should be protected with, for example, QEII covenants. Likewise, approach landowners with existing QEII covenants that do not have SNA status to be registered on the SNA database.**
  - 15 new QEII covenants have recently been laid over SNAs in Marlborough.
  - Shapefiles of all Conservation Covenants (PPL) in Marlborough have been received from DOC and incorporated into the Council GIS database.
- **The Threatened Environment Classification for Marlborough may not fully reflect the actual local pattern of indigenous cover and protection. The classification should be re-assessed. Map the districts indigenous vegetation and ecosystems, and use the data to prioritise the work of the SNA programme. This should lead to better targeting of areas where protection or restoration of ecological values is most needed.**
  - Biodiversity Prioritisation GIS maps have been produced under contract using the Zonation Analysis method adopted by all Regional Councils in New Zealand. Marlborough was the first Region in the South Island to have this done. Now all Councils are sharing these maps in an effort to produce a national ranking of environments.
- **There is a need for targeted ecological restoration in Threatened Land Environments especially in the lowlands, using techniques which could include expanding existing SNAs through planting or ecological restoration on Council land parcels, and ensuring that criteria for landowner assistance funding gives preference to the most valuable sites.**
  - Weed control (mainly willow) undertaken over 5Ha with four landowners alongside State Highway 1 at Para, to reduce the reinvasion of willow into previously cleared Para Swamp. This follows recommendations in the SNA report in 2019.
  - 5,600 indigenous dune grass plants and 1000 ngaio trees were planted by volunteers on foreshore reserve at Marfell's Beach and Cape Campbell.
  - Targeted weed control along the East Coast has included marram grass control and maritime pine control, to protect SNAs and to give planted areas the best chance of success.
  - All Significant Wetlands are treated as SNAs and therefore qualify for Council funding assistance for management. Significant funds have gone to managing threats in wetlands.
- **Continue to address sites in the ecological districts with the least indigenous vegetation (Kekerengu, Flaxbourne, Grassmere and Blenheim) and gain access to sites in areas that have not been targeted, for example in the upper Awatere.**
  - SNA surveys in the Upper Awatere are continuing with a fourth survey started over summer which added five sites to the database. Sites in the Awatere are listed for further restoration effort in 2021/22.
  - Protection Work in the Awatere Valley included fencing of a covenanted mountain totara SNA and a riverbed restoration area, and aerial control of cotoneaster and barberry to protect pink broom forest.
  - Two Significant Wetlands on the plains in Blenheim ED were targeted for SNA restoration projects, including planning, weed control and planting.

- Planting indigenous dune species and control of marram grass and wilding pines along the coast in Kekerengu ED.
- **Continue to engage with landowners in relation to having SNAs and managing the threats on them.**
  - This is happening on a regular, even daily, basis through a variety of means, including SNA surveys, monitoring, Working for Nature, and through the Te Hoiere Restoration Project.
- **Improve the SNA database to allow for better reporting.**
  - A new SNA Database is being developed in-house.
- **Target sites on Pallic Soils (eg, dry coastal soils) as they are poorly represented.**
  - The ongoing focus on the East Coast is fast becoming a targeted restoration project along the dry coast, with emphasis on returning indigenous flora and fauna to this isolated area and managing the threats to allow it to thrive.
  - The Rarangi Wetlands/Drylands complex will continue to be regarded as important to encourage indigenous biodiversity there to thrive.
- **Identify ecological corridors and target potential SNAs and restoration areas within them.**
  - The east coast is a vital 50km long corridor/flyway for migratory and resident breeding shore birds. As already reported, a large effort is being invested into the SNAs there as well as towards restoring the vegetation sequences on the connected dunes and foreshore that have been damaged by centuries of fires and more recently agriculture and weed invasion.

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## 9.0 General Discussion and Conclusions

The Significant Natural Areas programme has been run by the Marlborough District Council since 2001. It is the main mechanism used to identify and promote protection of terrestrial indigenous biodiversity on private land. While it is entirely voluntary for landowners to participate, it sits alongside some rules preventing certain types and scale of indigenous vegetation and wetland drainage and clearance. The sites are not scheduled in resource management plans (apart from wetland sites identified in the 2010-13 surveys which are intended to be scheduled in the MEP).

The project is heavily focussed on identifying and protecting habitat areas on private land as a mechanism to protect larger suites of indigenous biodiversity (plants, insects, reptiles and birds). Ecological assessments are relatively broad scale, relying on experienced ecologists and rapid qualitative methods. While it is a voluntary programme, the information collected through the significant natural areas ecological surveys is used internally by the Council when assessing the effects of resource consents.

Central Government has initiated a process to produce a National Policy Statement for Indigenous Biodiversity. The process is consultative and will lead to the Aotearoa New Zealand Biodiversity Strategy, which will give Council direction for a Marlborough Biodiversity Strategy.

A working group continues to assist the Council to manage the Marlborough SNA project and usually meets annually. This group remains integral to the management and direction of the SNA project.

Of the 758 sites identified through the SNA surveys, about 132 have been managed in some way to enhance biodiversity and a number (89) of these sites are also covenanted to provide permanent legal protection (primarily through the QEII Trust).

Monitoring to track the condition of a random selection of these managed sites is undertaken annually. In 2020/21, while the monitoring programme was much reduced, managed sites were in Good condition. In terms of the trend in condition, all were Improving. This is a great result but came from only two sites.

There are, however, still over 600 Significant Natural Areas which have not received any assistance from Council to proactively manage the ecological values and ensure they are sustained in the long term. Of the 6 sites monitored in this season, all were in Fair condition with a trend of Stable apart from one which was Improving. This is a good outcome, although the impacts of weeds, especially wilding pines and old man's beard, in addition to feral ungulates and possums, were an important issue in 2020/21.

In addition to the monitoring of SNA sites (both Managed and Un-managed) mentioned above, Council may be expected to establish a broader regional "state of environment" monitoring programme to align with national monitoring and reporting requirements. Work is underway nationally to assist councils in developing these programmes.

The SNA working group has recognised that building and maintaining goodwill and awareness amongst landowners is at the heart of the SNA programme, and the work carried out in relation to the site re-visits goes a long way to keeping contact with many landowners in the ecological districts involved.

An external review of the SNA programme has helped to set the future direction and work programmes associated with the SNA project. Also, the current review of the resource management framework in Marlborough through the proposed Marlborough Environment Plan may provide some further direction once the public submission process has been completed. The submission process will also result in a final confirmation of wetland sites which will then be formally eligible for financial and technical assistance through the SNA Landowner Assistance Programme.

Information management in relation to the SNA programme is undergoing some changes. Improvements to the Council's internal information storage systems have been implemented. The electronic capture of all of the Department of Conservation 2004 Wairau Region protected Natural Areas Survey Programme is a step forward although there is still work to be done in creating property specific maps and reports for landowners with sites originally identified through the DoC survey programme. More recently we also captured the Conservation Covenant database for Marlborough and this has been useful in identifying further areas of private land which have legal protection.

In addition, new technologies and tools (for instance improved aerial photography for large parts of Marlborough) are creating opportunities to refine site mapping which may allow for a review of some site boundaries in the future. This is hugely important if we are to be able to accurately assess any loss of SNAs over time. As sites are visited, the opportunity to engage with landowners enables boundaries of SNAs to be reviewed.

Wildlands Consultants (2017), in their external review, suggested the SNA programme could be improved if we had better planning tools to prioritise where the survey and management effort needed to go, and to improve the storage of the data for each site. While we already know physically where the gaps are, it's important that we can target the high priority sites in those areas for inclusion in the programme and also to retrieve easily the data we need to run an effective programme. This is progressing well with a Zonation exercise having been completed and a new database being developed.

The Significant Natural Areas programme is an important element of indigenous biodiversity management and protection in Marlborough, with a particular focus on privately owned land. It is complemented by the work of the QEII National Trust which works independently with private landowners to covenant and protect areas. Council's relationship with QEII is close and productive and we help each other to engage with new clients on a regular basis. We also pool our funds to make projects more affordable for all parties.

The "Kotahitanga mo te Taiao" alliance continues to develop with Te Tau Ihu Iwi, DoC and the Top of the South Councils working closely to develop a strategy for improving indigenous biodiversity in Te Taihū.

There has also been an increase in the number of larger scale community conservation and restoration projects in Marlborough in recent years and the Significant Natural Area programme continues to work closely with some of these, particularly where private land is involved.

In summary, the Significant Natural Areas Project continues to be the main avenue for Council to protect land based indigenous biodiversity in the Marlborough region. Marlborough has less than 5% of its rarer ecosystem types remaining on the plains, which is not enough to sustain biodiversity on the plains over time. With Primary Industry being such an important part of the Marlborough economy, Council has an important role in working with the community to help ensure that the natural environment is not degraded, and hopefully is improved.



**Figure 15: Purple pouch fungus growing in silver beech forest near Picton.**

## 10.0 Appendices

### Appendix 1: Total Budget for Main Aspects of Significant Natural Areas Project – Marlborough District Council Expenditure and Revenue – July 2020 – June 2021 (GST inclusive)

Table 9: Significant Natural Areas Project – Total budget July 2020 to June 2021.

Project Name	Projected Budget	Actual Expenditure
SNA survey and general	\$25,000	\$41,001
SNA protection projects	\$150,000	\$215,247
Seed collection	\$5,000	\$6,719
Tui to Town	\$0	\$5,559
SNA monitoring – Managed sites	\$34,500	\$0
SNA monitoring – Unmanaged sites	\$34,500	\$238
SNA miscellaneous (meetings and contributions)	\$1000	\$644
<b>Total</b>	<b>\$250,000.00</b>	<b>\$269,408.00</b>