MARLBOROUGH DISTRICT COUNCIL

Summary Report on the Results of the

Significant Natural Areas Project 2019/2020

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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 SNA project over the one year period from July 2019 to June 2020. It follows from nine 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 2019.

This report summarises the results of:

- Ecological survey work carried out from July 2019 to June 2020;
- Environmental protection work carried out through the SNA Landowner Assistance Programme from July 2019 to June 2020;
- Significant Natural Area monitoring programmes; and;
- several other projects associated with the Significant Natural Areas project, including:
  - publicity and education activities,
  - the Native Seed Collection Project; and
  - the Tūī to Town Project

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

External Strategic Review and Prioritisation Project

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. The Council is looking to contract in expertise to produce a Biodiversity Strategy for Marlborough and will take guidance also from the Environment Plan and Kotahitanga mō te Taiao Alliance Strategy.

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 the Ministry for the Environment and the Department of Conservation with major input from local government. This process will guide our local efforts so the timing has been very beneficial. Delays caused by Covid 19 mean that these documents have been also delayed and are expected in the next 12 months.

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 only the occasional survey is carried out, generally through landowner requests.

There are a total number of 713 SNAs currently mapped and identified on Council's database.

In 2017, Muller Station held an open day as part of the spinoff from winning the farming section of the Marlborough Environment Awards. On that day the owners of three high country stations in the upper Awatere requested that Council complete an SNA survey of their farms. The field work and reports for

these are complete after surveys were done in 2018, 2019 and 2020. The first survey identified 12 SNAs on the farm's 5000ha of freehold land. The second farm survey was completed in summer 2019 with 12000ha of freehold land being surveyed. Sixteen sites were identified on the freehold land but once again the 27000ha of Crown lease land was not surveyed mainly due to cost.

In the 2020 season, another neighbouring property was surveyed. Most of the 13000ha was able to be surveyed, both freehold and leasehold, so the report will more accurately reflect the values of the entire farm, and will give the owners a more complete report of their farms biodiversity attributes. At the same time effort was made to survey some sites on the previous two properties that were beyond the reach of the previous two year's surveys. The regionally significant Winterton Wetlands were visited by helicopter while other sites were viewed opportunistically.

In other parts of the region another six new sites were identified and described on two properties being visited as part of the monitoring programme. Two of the sites are in the lower Awatere and were overlooked during the Protected Natural Areas (PNA) survey in 2002. The remaining sites are in the Sounds and one in the Wairau. They were mainly regenerating scrubby hillslopes in 2008 during the SNA survey and now are important connections between a number of existing SNAs. In the meantime they have benefitted from 12 years of protection from stock and other vermin, or just light grazing by benevolent landowners.

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 2019/2020 financial year started with 12 projects underway. An additional eight new projects were started in the year, and four were completed, giving a total of 16 current active assistance projects.

This programme to assist landowners to improve the condition of their SNAs resulted in the investment of nearly $200,000 into native biodiversity on private land in 2019/20, of which Council paid one third. Nearly half of this went into fencing stock out of wetlands and the rest went into weed control and planting native trees.

Two new SNAs are being covenanted with the Queen Elizabeth II National Trust (QEII) after conversations with landowners in 2019. They have a combined area of approximately 365ha.

Council is working with a proactive forestry company and assisting with seed collection, advice and monitoring. Through QEII, it is about to protect another 10 SNAs.

Total Funding Contributions for Biodiversity Protection Projects on Private Land 2019/2020

	2019/20	**2018/19**
Marlborough District Council Funding	$119,578.00	$79,646.00
Central Govt	$3298.00	
QEII National Trust	$18,766.81	$55,148.00
Landowners	$178,487.19	$53,939.66
Total	**$320,130.00**	**$166,780.66**

Monitoring

The Monitoring Plan for 2019/20 was impacted by the Covid 19 Lockdown. Council focussed mainly on three areas: Flaxbourne ED, the Wairau Valley and the Sounds. Many of them were at the request of the landowners in their desire to engage with the SNA programme and the One Billion Trees Fund. Monitoring of five Managed sites and 16 Un-managed sites made for a total of 21 sites monitored for the year.

Monitoring of Managed SNA Sites was initiated in 2006 and has been repeated on a bi-ennial basis since that time. Of the 5 Managed sites monitored this year, two were wetlands. All were in Fair-Good or Good condition with a trend of Stable-Improving or Improving.

Results from monitoring 16 Un-Managed SNA Sites in the same period were pleasing as all sites were Fair or Good in condition with a trend over time of stable. Only one was stable-deteriorating.

The contact generated by these site visits and the monitoring project in general was very valuable. Other than a raised level of awareness by landowners about their sites, it resulted in management of another two previously unmanaged sites on private land in Te Whanganui/Port Underwood, as well as ongoing discussions with foresters about SNA management.

Associated Projects

- Publicity – information about the project has been disseminated at a number of public events over the year including the Garden Marlborough Fete, a Beef+Lamb Forestry meeting and the Marlborough Environment Awards Farm/Forestry Field Day.

- Seed collection – was carried out between February and June 2020 with a focus on collecting kahikatea, tōtara and kanuka seed for the Tūī to Town Project, as well as species suitable for the Awatere high country, especially mountain totara, kohuhu, cabbage tree.

- Tūī to Town project –Six Tūī to Town projects received funding assistance in the 2019/20 year. They were mostly wetlands and streambanks in Blenheim ecological district, with one in Waihopai ecological district. Over 5000 trees were planted.

Discussion and Conclusions

Monitoring on the East Coast area showed that the 2016 Kaikōura earthquake had not had huge effects on SNAs there, but it highlighted the impact of increased visitor numbers along the coast, and the subsequent damage to ecosystems, habitats and landscapes by vehicles. This has not reduced with time. There is also an issue with exotic marram grass and other weeds invading the coast and overwhelming the natural ecosystems and species. The area is an Outstanding Natural Landscape and is important for threatened species, such as banded dotterel and katipo spider. Council is developing bylaw to manage the impacts.

After last year's SNA assessments of Lake Elterwater we have had a focus on improving the condition of the habitat starting with fencing and planting the edges with landowners.

A focus on talking to landowners about covenanting SNAs through the QEII Trust seems to be having some success with four of them currently in the process of being protected by QEII. This is reported on annually in this report.

A biodiversity prioritisation system is currently being developed which will give more direction to the Significant Natural Areas programme. The current review of the resource management framework in Marlborough through the proposed Marlborough Environment Plan may also provide some further direction once the public submission process has been completed.

Members of the Significant Natural Areas working group which has been instrumental inhelping 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 took over the SNA coordinator role then.

Contents

1. 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: Basin clad in old growth lancewood forest, Upcot

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 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 improving the condition of 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 for all areas of indigenous vegetation through general rules.

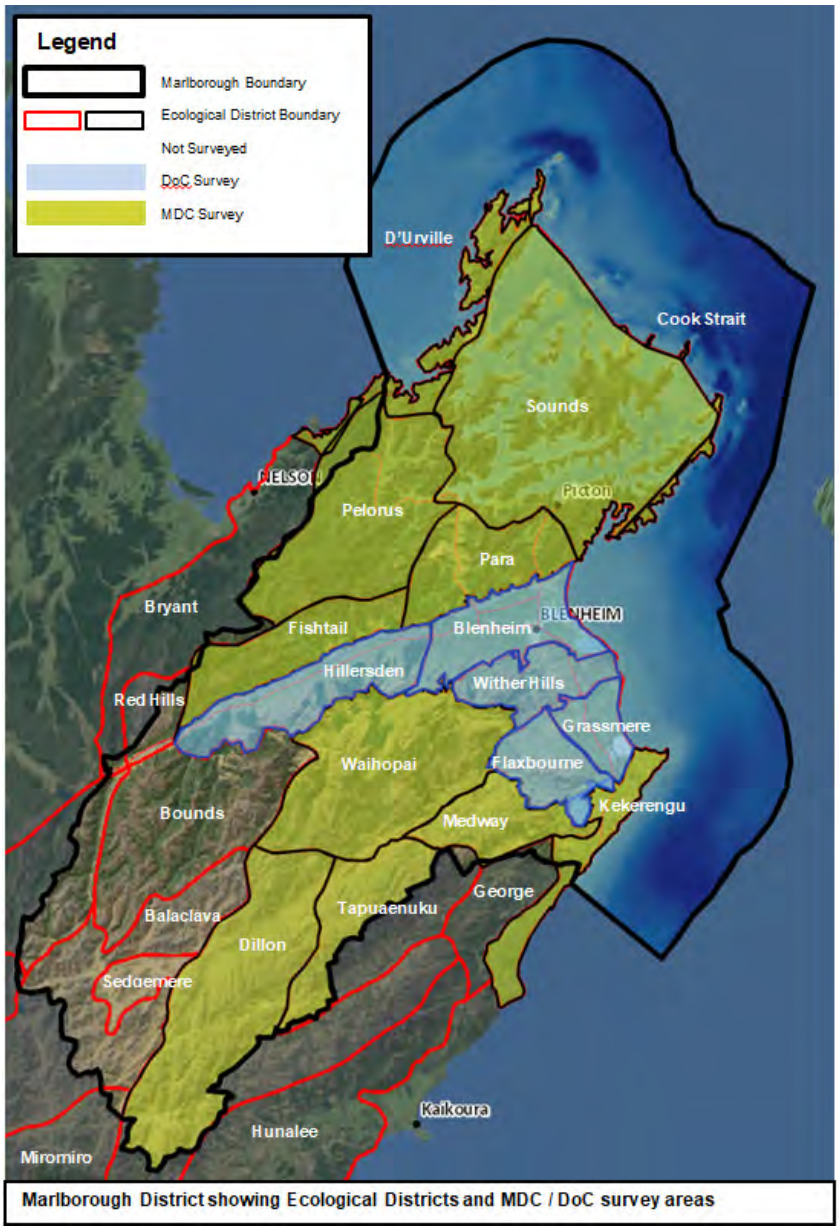
Part A: Ecological Survey Work

2. Field Based Ecological Surveys – Background and Overview

Between 2001 and 2009, extensive field based ecological surveys were been 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 were not surveyed in the 2000s (Tapuaenuku, Bounds, Dillon, Sedgemere, Balaclava, Travers and Red Hills), being mostly Department of Conservation land or pastoral leasehold land. This changed in 2018 with annual surveys of large farms in the Upper Awatere Valley.

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.



Map 1: Ecological Districts and MDC/DOC survey areas

Further occasional field surveys have been carried out at the request of landowners since 2009. These are mainly surveyed by Ecologist Geoff Walls in association with annual monitoring of SNA condition.

There are some large gaps in coverage in parts of Marlborough, especially in the Awatere, Pelorus, Waihopai, and Flaxbourne, which are being addressed as opportunity allows.

The recent focus on surveying the Awatere high country runs was generated by the Farm Environment Award open day on Muller Station in 2017, and this will continue for as long as the 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 three of the 10 properties that were not surveyed in the original surveys around 2006. Three have been completed and we plan to survey another in summer 2021.

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 same process is undertaken for Significant Wetlands that are visited.

2.1. Summary of Results – July 2019 to June 2020

In the 2019-20 year, the survey programme was disrupted severely by Covid19. Geoff Walls and I visited two large Sounds properties previously surveyed in the early 2000's. We identified six new SNAs on those two properties, some discreet and others surrounding or adjacent to the original sites. We also extended an important SNA in the Awatere after contact with a new owner and added another new site in the Wye. The cost of this to Council was about $17,250.00

In addition to this, we contracted Wildlands Consultants to survey a large Awatere high country station which straddles three ecological districts, Dillon, Tapuaenuku and Waihopai. The farm was physically surveyed over 10 days which gave a good overview of 90% of the 13,000ha farm. Ten new SNAs were identified on the freehold land totalling approximately 9200ha. 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. The farming operation is sympathetic to the indigenous vegetation. The property contains the most significant population known of northern pink broom, which is a critically endangered Marlborough endemic species. The cost to Council of the survey and report was $31,464.00.

Figure 2: Marlborough green gecko

Figure 3: Euphorbia glauca

2.2. 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.

The wetlands were not automatically 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 1300 wetlands identified in the desk-top exercise. While the final number of identified wetlands is yet to be confirmed, well over 1000 are likely to be scheduled in the Marlborough Environment Plan once it is ratified. As these wetlands are being treated as SNAs, they qualify for the same assistance with protection works through the Landowner Assistance Programme. A number of

wetland owners have expressed an interest in wetland restoration and approached the Council for assistance.

In the 2019/2020 year, six wetland restoration projects were funded.

2.3. 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 2019. 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 2017 in South and North Marlborough respectively. Using ecological district units, the tables show; the number of properties surveyed, the number of properties where permission to survey was sought but declined, the number of sites identified, the combined area and percentage of total land area of all of the identified significant natural area sites, and in North Marlborough, the percentage of Department of Conservation land.

As of June 2018 a total of 291 landowners participated in the ecological survey in both South and North Marlborough (75% of those approached). A total of 711 significant natural areas have been identified, with a combined area of 45,575 hectares. Another 94 landowners declined to participate (25% of those approached at the time).

Table 1: South Marlborough Ecological Survey Participation and Results (July 01 – June 20)

Ecological Districts	No. Properties Surveyed	No. Properties Declined	No. of Sites	Combined Area (ha)	% of Total Land Area
Kekerengu	23	2	60	1,582	4.6%
Medway	15	2	80	4,986	15.5%
Waihopai	19	14	69	14,102	14%
Blenheim	15	1	13	292	1%
Wither Hills	22	7	24	5,132	16.7%
Grassmere	10	4	11	155	1%
Flaxbourne	26	14	62	2,027	7%
Hillersden	29	4	30	3,666	7.5%
Tapuaenuku	1	0	13	363	NA
Dillon	1	0	16	1868	NA
Totals	**156 (75%)**	**50 (25%)**	**336**	**23,092**	**7.6% av**

Table 2: North Marlborough – Ecological Survey – Participation and Results (July 01 – June 20)

Ecological Districts	No. Properties Surveyed	No. Properties Declined	No. of Sites	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 DOC Land
d'Urville	21	9	47	3,650	16.5%	12.0%	27%
Cook Strait	3	0	7	755	17.1%	13.2%	24%
Sounds	66	16	189	11,825	16.1%	9.5%	39%
Pelorus	19	10	45	1,472	3.8%	1.4%	63%
Para	22	7	59	3,449	9.9%	6.2%	24%
Fishtail	6	2	33	1,350	9.0%	3.0%	55%
Totals	**137 (76%)**	**44 (24%)**	**380**	**22,501**	**(Av=12%)**	**(Av=7.4%)**	**(Av= 38.5%)**

2.4. 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.

2.4.1. 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 eight ecological districts that were surveyed in the South Marlborough area there is very little Department of Conservation land, apart from in the Waihopai ecological district, and in general, the percentage of total land area of significant natural sites is very low - less than 10% in six of the eight ecological districts and less than 5% in the three lowland coastal ecological districts (Blenheim, 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: Winterton Wetlands, Upper Awatere Valley

2.4.2. 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 63% in different ecological districts). The percentage of total land area of significant natural sites is generally higher than in South Marlborough, ranging from about 4% to 17% 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, freshwater native fish species).

Part B: Site Improvement – Landowner Assistance Programme – Summary of Results 2019/2020

3. 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 Tūī to Town restoration project with an original focus on the Wairau Plain area but which was extended in 2015 to include the Wairau Valley and lowland areas around Seddon and Ward.

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 only about 13% of the 722 identified sites over the whole of Marlborough have received any restoration or management (36 in North Marlborough and 64 in South Marlborough). Many SNAs are likely to be deteriorating in condition over time due to a range of threats and pressures, however, its pleasing to note that the condition of over half of the 16 unmanaged sites monitored in 2019/20 was improving.

Expenditure to manage SNAs averaged about $120K per annum from 2007 until 2012, when DOCs Bio Fund rules changed. Since then, Council has invested an average of approximately $71K per annum managing SNAs, and this has been matched by landowners and others so that in 2019/20 a total of $320,130.00 was spent improving the condition of Significant sites. A lot of restoration and good-will has also been achieved by the programme in that time.

Its well worth mentioning that the total amount spent by Council assisting landowners with the management of SNAs since 2003 has exceeded $1million, and that because of the programme, over $3.2million has been spent in total when contribution of landowners, QEII and Central Government are taken into account

3.1. SNA Habitat Improvement Projects 2019/2020

In the 12 month period from July 2019 to June 2020, the Council contributed to 26 projects in total. Fifteen of these were new projects, with a mix of weed control, planning, fencing and planting. Eleven are ongoing projects; mostly weed control but also including a fencing project for threatened native broom management.

Highlights of the year in the Management Projects are:

- Spraying approx. 3ha of marram grass at Marfells Beach and Cape Campbell, in preparation for planting native spinifex and pingao;
- fencing, restoring and securing a covenant over a 4ha wetland in the Awatere high country;
- planting 1500 native plants in a wetland complex in Wairau Valley;
- fencing stock out of 200ha of coastal cliff SNAs in the outer Sounds;
- fencing and willow control at Lake Elterwater; and
- Rowley Cres/Old Opaua Riverbed Restoration Plan.

The total number of projects carried out since 2003 is 119, including current ongoing projects.

Recently, restoration of the East Coast south of Lake Grassmere has been a focus. Seedling spinifex plants were unable to be planted due to the 2020 summer drought but the planting areas were sprayed to kill invading marram grass and the plants should be in the ground this spring. In the meantime we have completed an area of wilding maritime pine control at Ward Beach and cotoneaster control south of Cape Campbell.

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

Figure 5: Northern pink broom in flower, Avon Valley, 2020

Figure 6: Successful marram grass control to let the spinifex take over, Marfells Beach 2020

3.2. Protection Projects Summary – July 2018-June 2019

Table 3: Summary of new protection projects July 2018 – June 2019 (GST inclusive)

Ecosystem Type	Size (ha)	North/South Marlborough ED	Type of Work	Total Funding	Council	Biofund	Landowner and QEII/other
Forest (Wi)	2	S Kekerengu	Weed	$1150	$1150		0
Wetland (Ba)	73.5	S Kekerengu	Weeds, fence	$9562	$2806		$6756
Wetland (Pa)	3.8	S Hillersden	Weeds, fence, plan	$20000	$10000		$10000
Wetland (Fo)	1.5	S Blenheim	Plan, weeds	$2760	$1380		$1380
Coastal (An)	1660	N Sounds	Pines	$9000	$3000		$6000

Ecosystem Type	Size (ha)	North/South Marlborough ED	Type of Work	Total Funding	Council	Biofund	Landowner and QEII/other
Coastal (MDC)	3	S Kekerengu	Weeds	$3298	$3298		0
Forest (Ke)	26	S Medway	OMB	$7000	$3500		$3500
Coastal (We)	121	S Kekerengu	Pines	$2153	$2153		0
Wetland (Ma)	4.5	S Tapuaenuku	Fence, weeds	$26762	$15226		$11500
Coastal (Mo)	200	N Sounds	Fence	$99287	$11500		$87787
Wetland (Gr)	1	S Withers	Fence, plant	$4674	$2337		$2337
Wetland (Xx)	2.4	S Blenheim	Plan	$1725	$1725		0
Wetland	73.5	S Kekerengu	Fence	$3500	$1750		$1750
Wetland	73.5	S Kekerengu	Fence	$3900	$1950		$1950
Hillslopes (Me)	57	S Medway	Fence	$20198	0		$20198
Total				**$214969.00**	**$61775.00**		**$153158.00**

Table 4: Summary of ongoing protection projects July 2018-June 2019 (GST inclusive)

Ecosystem Type	Size (ha)	North/South Marlborough ED	Type of Work	Total Funding	Council	Biofund	Landowner and QEII/other
Hillslope (Ha)	54	S Medway	OMB control	$4600	$2300		$2300
Forest (Di)	28	S Waihopai	Fence	$31871	$31874		0
Wetland (PR)	5.7	S Blenheim	Weeds	$8950	$3950		$5000
Forest (Ad)	3	N Para	Pines	$9732	$4866		$4866
Wetland (Di)	2.5	S Waihopai	Restoration	$3036	$1518		$1518
Wetland (Va)	3.6	S Withers	Willows	$217	$217		0
Wetland (Jo)	4	S Hillersden	Plant	$16100	$8050		$8050

Ecosystem Type	Size (ha)	North/South Marlborough ED	Type of Work	Total Funding	Council	Biofund	Landowner and QEII/other
Hillslopes (Me)	20	N Sounds	Wilding pines	$9894	$3298	$3298	$3298
Wetland (Ba)	2.5	S Flaxbourne	Weeds	$230	$230		$230
Hillslopes (Po)		N Sounds	Weeds	$6118	0		$6118
Hillslopes (Mi)		S Kekerengu	Weeds	$11216	0		$11216
Total				**$101964.00**	**$56303.00**	**$3298**	**$42596.00**

Total Funding Contributions for Biodiversity Protection Projects on Private Land 2019/2020

Marlborough District Council Funding	$118,078.00
Central Government	$3298.00
QEII National Trust	$18,766.81
Landowners	$176,987.19
Total	**$317,130.00**

Summary of Total Funding Contributions for Biodiversity Protection Projects on Private Land 2003/2019

Marlborough District Council Funding	$1,034,904.04
Central Government Biodiversity Fund	$836,308.00
QEII National Trust	$160,577.28
Landowners	$1,165,956.70
Total	**$3,197,746.02**

3.3. Relationships

Council promotes covenanting and has developed 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 46 of the 106 projects protected through the programme so far have been covenanted. Three of these are Protected Private Land (PPL) covenants administered by the Department of Conservation and the other 43 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.

A 70ha Covenants over an SNA was achieved by QEII in 2019/20. Another 200ha over five SNAs are in process. While the 70ha covenant is new, it is over another part of an SNA that is already protected by an existing covenant, therefore the overall number has not increased

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 data comes from the QEII 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

	No. of Sites
SNAs in Marlborough which have some legal protection at August 2019	74
SNAs in Marlborough which have some legal protection at July 2020	74

Figure 7: A new QEII Covenant at Needles Point protecting a dune and limestone SNA.

Figure 8: A rare hybrid daphne (*Pimelia*) found on limestone now protected by the new QEII Covenant.

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 2019/20, Council contributed $3298 toward control of wilding pines on a multi-year project in Admiralty Bay which back onto Mt Shewell Scenic Reserve. Another project with the Trust was postponed due to Covid 19.

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
- Tūī 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 is working 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. Initially this has involved consultation with the groups to find out what they want and then having an inaugural meeting, which was well attended.

Part C: Monitoring Programme – Summary of Results

4. 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 have 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 700 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, the monitoring season was heavily impacted by the Covid 19 pandemic. We were still able to visit two large Marlborough Sounds properties, which between them have 16 SNA sites, some of which have management programmes, and three other properties, in Hillersden, Wither Hills and Grassmere EDs. We also completed two property monitoring visits which were unable to be fully completed in 2018/19 and another ongoing managed site in the Wairau Valley. This monitoring was primarily carried out by contractor with assistance from Council staff and cost the programme about $15,000. During the Sounds property visits we identified another five new SNAs which have either developed or recovered in the years since survey in 2008.

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 2020, 5 managed sites were monitored at a cost of about $11,000.

The QEII National Trust monitors the sites that it has covenanted (currently 80 sites in Marlborough, 74 of which are on SNAs), so Council does not monitor the 74 SNAs that QEII monitors, even though Council contributes to funding management when required.

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 2019/20.

They were located in the Sounds, Durville, Fishtail, Hillersden, Wither Hills, Grassmere, and Kekerengu ecological districts (ED). (see Map 3).

The majority of the effort was spent in Hillersden, Sounds and Durville EDs at the request of landowners managing retired land or looking to retire land, and looking to see what assistance was available.

4.2. Site monitoring results

Map 3: Surveyed Ecological Districts

- A total of 16 unmanaged sites were monitored on seven properties. The results are pleasing.
- Overall results show that most Un-managed sites visited were generally in reasonable
- condition (Six were Good, four were Fair-Good and six were Fair). 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 some landowners to undertake management without any Council assistance.
- A good proportion of Un-managed sites (15 or 94%) show a condition trend of improving or stable (over 50% were improving), while one (6%) was stable/deteriorating. 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. Some landowners are retiring areas to sequester carbon. Deteriorating condition on one site was mainly a result of weed infestation.
    - The One Billion Trees Fund 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 the One Billion Trees Fund and with assistance from Council. This is incentivising landowners to set aside their marginal land for

growing carbon. Council is actively assisting landowners to connect with experts able to assist in this effort.

- A key issue is that very few sites are legally protected, and rely on the benevolence of the owners or the Marlborough Environment Plan clearance rules to protect them from damage or destruction. There is a recommendation in SNA 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, Durville, Fishtail, Hillersden, Wither Hills, Grassmere, and Kekerengu ecological districts- 2019/20

Site Condition	Good	Good/Fair	Fair	Fair/Poor	Poor
	6 (38%)	4 (24%)	6 (38%)		
Site Trend	**Improving**	**Improving/Stable**	**Stable**	**Stable/ Deteriorating**	**Deteriorating**
	6 (38%)	3 (18%)	6 (38%)	1 (6%) 1	

Last year I reported on the damage that was occurring to the dunes, beaches and coastal vegetation within and beside the SNAs along the East Coast, post the Kaikōura Earthquake of 2016. The damage to these vulnerable natural communities has continued in the absence of any control or reduction of this vehicle access to the coast. A huge effort has been made to understand the biodiversity of these communities better, quantify the damage and to come up with solutions to remedy it.

Next year I hope to report on the gains that have been made in managing some of these issues as Council consults with the community on the best way to go.

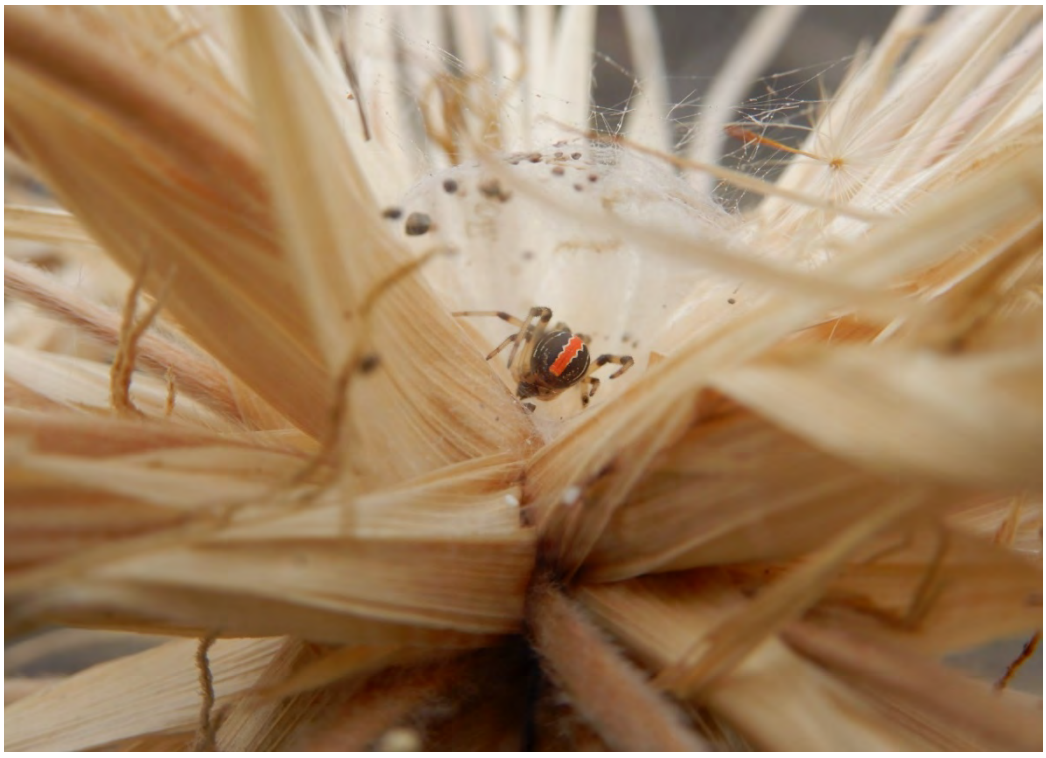


Figure 9: Katipo spider in a spinifex seed ball

4.3. 2019/2020 Monitoring of Managed SNA Sites

SNA Assistance Programme Monitoring – In the 2019/20 monitoring round a total of 9 sites were visited on 4 properties.

Table 7: Summary of Monitoring of Managed SNA sites 2006/2020

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)

Contract ecologist Geoff Walls and Council staff member Mike Aviss carried out the monitoring over the 2019/20 season. Assessment methodology is qualitative and simple and includes photo points and rapid ecological condition and trend assessment. 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 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.

All these managed sites were found to be in good or good/fair condition and with a trend of improving or improving/stable. This is a good outcome although with a small sample size due to Covid 19.

Table 8: Summary of Monitoring results for SNA Managed sites 2019/20

	Good	Good/Fair	Fair	Fair/Poor	Poor
Site Condition	3 (60%)	2 (40%)			
	Improving	**Improving/Stable**	**Stable**	**Stable /Deteriorating**	**Deterioratin g**
Site Trend	2 (40%)	3 (60%)			

4.4. Summary and discussion

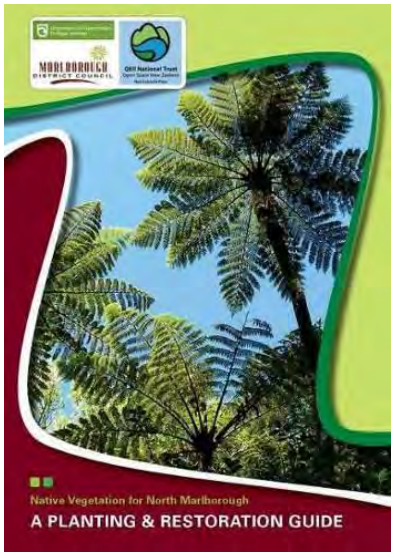
Some observations from the 2019/20 monitoring round:

- Landowners continue to be co-operative and allow access for monitoring purposes and most landowners are either very, or moderately, 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 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 establishment and growth of restoration plantings within sites.
- Post the earthquake, natural regeneration on the coast south of Marfells Beach is largely being hindered by the impacts of much higher numbers of vehicles being driven over the beaches. Indigenous dune ecosystems and species are being damaged. Success of any restoration programme would require that vehicle impacts were managed and reduced.

Part D: Associated Projects

5. Publicity and Information

5.1. Background



Publicity and promotion have been integral to the SNA 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
- Tūī 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 2019/2020 Year

During 2019/20 displays were presented at public events, including the Garden Marlborough Fete, and at Smart and Connected events in the rural towns of Marlborough. The Biodiversity Coordinator spoke at Forest Industry Field Days, the Marlborough Environment Awards Farm/Forestry Field Day and the East

Coast Protection Group's Field Day. Articles were placed in local papers and in magazines, such as Wine Press, about SNAs and the Tūī to Town programme.

The Biodiversity Coordinator also appeared on Kea Kids (Stuff TV kids channel) in a magazine item about katipo spiders at Cape Campbell Farm.

All existing information brochures and website versions are updated regularly.

6. 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 Tūī to Town natural habitat restoration project is helping to stimulate this activity on the Wairau Plain area 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 10 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 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 Tūī to Town, 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 Upper Wairau.

Figure 10: Seedfall nets collecting mountain totara at 1200m asl

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.

6.2. The 2019/2020 seed collection season

In the 2019/20 seed collection season, seed was collected from a number of sites in both North and South Marlborough. The cost of the project was $11,142.18 incl GST.

Good quantities of kahikatea and totara seed were collected on the Wairau Plains and Valley and tributaries. Larger quantities of mountain totara seed was collected to assist with plantation style planting programmes in the upper valleys. Smaller quantities of kanuka and kowhai seed were also collected and distributed to growers. Spinifex seed was collected from Marfells Beach for dune restoration.

Other seed was collected opportunistically during survey and monitoring work, to help make rarer or uncommonly grown plants available for local restoration projects. This included seed from a range of species in the Upper Awatere, including pink broom, cabbage tree and mountain totara. Over 1000 native plants have already been planted on Middlehurst this autumn from seed collected on the property last year.

7. Tūī to town Project 2008/2020

7.1. Background and Overview

The Tūī to Town project is a subset of the SNA project which promotes the protection of natural areas of ecological value. The SNA surveys have confirmed that very little natural habitat remains on the lowland parts of South Marlborough and the Tūī to Town project is designed to promote habitat restoration in this area. From 2008 the programme was targeted to the areas around Blenheim and Renwick but in early 2015 was extended to include the wider lowland South Marlborough area, including the Wairau Valley area and out to Seddon and Ward and surrounds. Native bird sightings (not limited to tūī) are being regularly reported from these new areas and a number of enquiries about funding for larger plantings have been received.

The programme essentially focusses on encouraging the planting of indigenous forest in the areas where the loss has been greatest by making advice and funding available for native plantings which are a minimum of 1000 square metres.

7.2. Information and Publicity

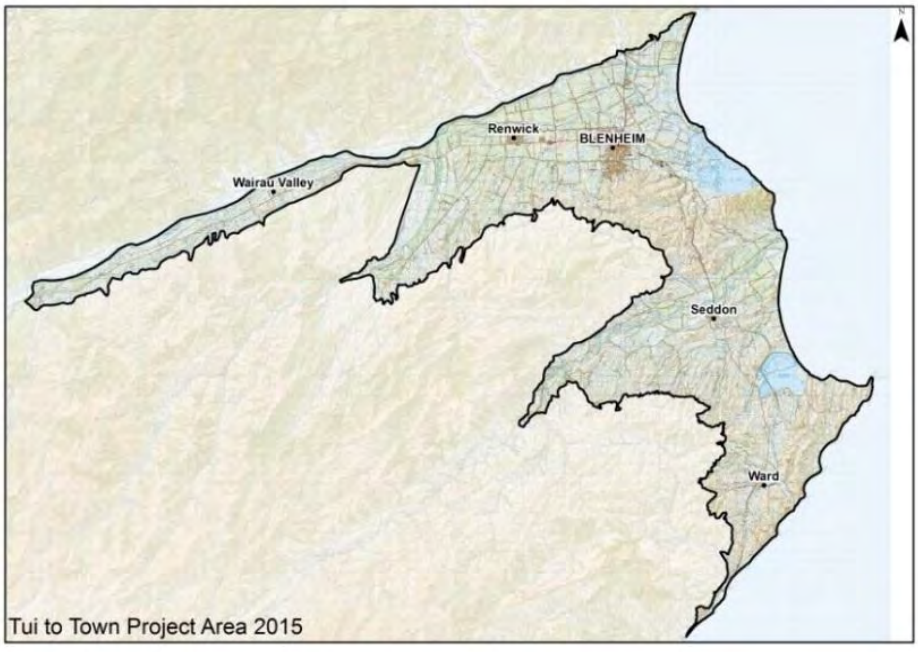
In the 2019/2020 year, displays and presentations promoting the Tūī to Town project were presented at several public events including the Garden Marlborough Fete, making good use of the T2T banners.

Three new Tūī to Town banners were produced for the Garden Marlborough Fete and have since been used at a Rarangi Dawn Chorus event and a number of other community events, including Small Townships events.

Tūī to Town street flags continue to be flown in Blenheim and Renwick periodically. More Tūī to Town signage has been purchased to ensure that Tūī to Town projects are labelled with durable signs.

A number of public plantings (for instance the Taylor River plantings carried out by the Council Reserves section and the Nelson Marlborough Institute of Technology (NMIT) Horticulture course), are publicised as being linked to the Tūī to Town project.

7.3. Extension of Tūī to Town Programme to Wairau Valley and Seddon/Ward Areas



Map 4: Overview map showing the Kekerengu, Medway, Waihopai, Blenheim, Para and Sounds

Map 4 shows the expanded Tūī to Town area which includes the original Wairau Plain area along with the valley floors of the Wairau Valley and the lowland areas of the South Marlborough area which contain less than 10% of indigenous vegetation cover. This is based on the Ministry for the Environment "Threatened Environments" layer and has been identified as one of four priorities for protection on private land in the 2007 Central Government "Protecting our Places" document. The area represents land where very little indigenous habitat remains –between 1 – 5% of land area with sites generally very small, highly

modified and scattered within the landscape. It includes all of the Blenheim and Grassmere ecological districts and lowland parts of the Hillersden, Wither Hills, Medway and Kekerengu ecological districts.

7.4. Sightings

After 10 years of recording bird sightings in Marlborough, it became obvious that the numbers are steadily increasing and the need to keep counting tūī numbers was questioned. In the 2019 calendar year, it was decided to stop reporting on the sightings database and instead to encourage residents to report on the EBird website.

The total number of tūī sightings over the nine year life of the project was 900. Aside from illustrating that tūī numbers have increased gradually over time, it has provided useful information about tūī movement and feeding patterns on the Wairau Plain as well as given an important focus to native birds in our town.

7.5. Plantings

There were five planting projects in the 2019/20 financial year that the Tūī to Town fund contributed to, with a total of $5200 paid out. Philip Walsh's planting on the Omaka Riverbank at Dog Point is a great example of how one man can convert a weedy mess of wattles and willows into a beautiful and diverse native riparian forest, and is now a multi-year project. The other stand-out project has been undertaken by Pernod-Ricard on their Lower Wairau wetland ponds.

Figure 12: Tūī to Town planting, Omaka River

The total number of funded plantings since 2008 is now 60 and a total area of new habitat of about 8.3 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 and we are giving advice to assist people in choosing the trees best suited to their site.

8. Significant Natural Areas Review

8.1. Background overview

A decision was made to have a professional external review of the SNA 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 Council's 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.**
    - A QEII covenant was created this year over 70ha of coastal dunes and limestone in Kekerengu ED.
    - Five new QEII covenants in wetlands and high country forests are currently being laid over SNAs in Marlborough, totalling 200ha.
- **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.**
    - Agreements with landowners have been reached at Lake Elterwater resulting in all but 280m of the lake shore being fenced from stock. The lakeshore will now be planted with indigenous species.
    - Council has commissioned a restoration plan for Para Swamp which includes input from Fish and Game and the Department of Conservation.
    - 5000 indigenous dune grass plants were propagated for Marfells Beach and will be planted this spring, after the 2020 drought forced postponement.
    - All Significant **Wetlands** are treated as SNAs and therefore qualify for funding assistance for restoration.
- **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 third survey completed last summer and another set to begin in 2021. 1ha of crack willows was treated on a neighbouring

property in another site being covenanted. Sites are listed for further restoration effort in 2020/21.

- Five Significant Wetlands on the plains in Blenheim ED were targeted for SNA restoration projects, including fencing, planting and weed control.
- Lake Elterwater restoration and control of marram grass and wilding pines are being targeted in Kekerengu ED.
- A QEII covenant was created this year over 70ha of coastal dunes and limestone 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, Tūī to Town, farm field days and forestry field days.
- **Improve the SNA database to allow for better reporting.**
  - This project is underway.
- **Target sites on Pallic Soils (e.g. dry coastal soils) as they are poorly represented.**
  - The ongoing focus on the Katipo Coast is fast becoming a targeted restoration project 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.**
  - A large Sounds property was resurveyed and 472ha was added to the areas in SNA, with the four valuable sites now all linked with regenerating forest in an area virtually twice the size.
  - Another large Sounds property was monitored and will be resurveyed /remapped to include about 12km of coastal cliffs and hills which will effectively link eight existing SNAs.
  - A large Wairau Valley property was resurveyed to include an extra 350ha of regenerating forest which links the original high value sites.

9. General Discussion and Conclusions

The SNA programme has been run by the Council since 2001. It is the main mechanism used to identify and promote protection of terrestrial indigenous biodiversity on private land. It is entirely voluntary but sits alongside some rules preventing certain types and scale of indigenous vegetation clearance 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).

The project is very 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 SNA 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 Strategy of Indigenous Biodiversity. The process is consultative and will lead to a new Biodiversity Strategy which will give Council direction for its Biodiversity programme.

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 700 or so sites identified through the SNA surveys, about 120 have been managed in some way to enhance biodiversity and a number (40) 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 it was found that all were in good condition. In terms of the trend in condition, all were improving. This is a great result but came from only five sites.

However, there are 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. A programme to contact landowners and re-visit a selection of 99 un-managed sites carried out over the last four summer seasons showed that in contrast to the managed sites, only 15% of them are improving in condition, while 44% are in stable condition and 40% are deteriorating in some way. The impacts of weeds, especially wilding pines, marram grass and boxthorn, were the main issue in 2019/20, in addition to feral animals and farm stock having an impact in some sites.

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 recognises 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 has gone some way to re-establishing contact with many landowners in the ecological districts involved.

Other initiatives to more actively engage with landowners through sector groups, such as Dairy NZ, Beef and Lamb, Federated Farmers, Marlborough Winegrowers and the Marlborough Forest Industry Association are helping to raise the profile of the programme and spread the message of our native species.

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 Department of Conservation survey programme.

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.

In their external review, Wildlands Consultants 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. This is progressing well with a Zonation exercise having been completed.

The SNA 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, the Department of Conservation and the Top of the South councils working closely to develop a strategy for improving indigenous biodiversity in Te Tauihu.

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

In summary, the SNA 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.

Appendix 1: Total Budget for Main Aspects of Significant Natural Areas Project – Marlborough District Council Expenditure and Revenue – July 2019 to June 2020 (GST inclusive)

Table 9: Significant Natural Areas Project – Total budget July 2019 to June 2020

Project Name	Projected Budget	Actual Expenditure
SNA Ecological Survey	$28,750.00	$38,364.00
SNA protection projects	$115,000.00	$118,078.00
Tūī to Town	$11,500.00	$5,979.00
Seed collection	$5,750.00	$10,945.00
SNA monitoring – Managed sites	$34,500.00	$23,261.00
SNA monitoring – Unmanaged sites	$34,500.00	$13,974.00
SNA miscellaneous (meetings and contributions)	$4,600.00	$906.00
Total	**$234,600.00**	**$211,507.00**

Figure 13: Beech forest in the Grey River, Awatere Valley