



**MARLBOROUGH  
DISTRICT COUNCIL**

**Summary Report on the  
Results of the**

**Significant Natural  
Areas Project  
2016-2017**

**Technical Report No: 18-001  
December 2017**



# Summary Report on the Results of the Significant Natural Areas Project 2016 - 2017

MDC Report No: 18-001

E310-006-001 & E310-012-003/Record No: 184587

ISSN 1179-819X (Online)  
ISBN 978-1-927159-75-0 (Online)

December 2017

Report Prepared by:

**Mike Aviss**

Biodiversity Coordinator  
Environmental Science & Monitoring Group

With contributions from Paul Millen (Environmental Consultant) and Geoff Walls (Consulting Ecologist)

Marlborough District Council  
Seymour Square  
PO Box 443  
Blenheim 7240  
Phone: 520 7400

Website: [www.marlborough.govt.nz](http://www.marlborough.govt.nz)

Acknowledgements:

Participating Marlborough Landowners  
Members of the Significant Natural Areas Working Group  
Council Staff - Peter Hamill, Jamie Sigmund

## 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 2016 to June 2017. It follows from eight 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 2016.

This report summarises the results of:-

- Ecological survey work carried out
- Environmental protection work carried out through the SNA Landowner Assistance Programme from July 2016 to June 2017
- Significant Natural Area monitoring programmes; and ;
- several other projects associated with the Significant Natural Areas project including:-
  - o publicity and education activities,
  - o the Native Seed Collection Project; and
  - o the Tūi to Town Project

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

### External Strategic Review and Prioritisation Project

An ecological consultancy company was contracted to do an audit of the Significant Natural Areas project in 2016. Their report was received in 2017. The report highlighted the low levels of natural species cover and protected areas in general in the Wairau ecological region, as well as the Kekerengu and Medway ecological districts, which all have less than 20% of the total land area in natural vegetation cover. This is regarded as the critical point where native species struggle to persist.

Experts have been contracted to map Marlborough’s natural ecosystems and to show which are most in need of help. This process will lead to a prioritisation system to give direction to our future work effort.

### 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 710 Significant Natural sites identified on our database.

Expressions of interest were received in 2017 from three large Awatere stations for SNA surveys to be carried out. The upper Awatere has not had a SNA survey undertaken, and it is hoped that these surveys will lead to other farms in the area being surveyed which will fill a significant gap in our knowledge.

### 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 2016/2017 financial year started with six projects underway. Two of these are now completed. An additional nine new projects were started in the year and two of these are already complete. This leaves nine active projects and a number being negotiated to start in 2017/18. The major commitment to an ongoing community weed control initiative in the Waima/Ure valley is now complete. Council contributed to 14 SNA projects and one Tūi to Town planting during the year.

## Total Funding Contributions for Biodiversity Protection Projects on Private Land 2016 – 2017

	2016/17	2015/16
Marlborough District Council Funding	\$72,986.42	\$63,452.00
QEII National Trust	\$1905.30	
Landowners	\$71,255.35inc \$34K LINZ	\$15,743.00
<b>Total</b>	<b>\$146,147.07</b>	<b>\$79,195.00</b>

## Monitoring

Monitoring of Managed SNA Sites was initiated in 2006 and has been repeated on a bi-ennial basis since that time. No monitoring work was planned in the 2016/17 year however 1 property was visited with 3 sites monitored on the property during the visit. This resulted in some weed control, and fence repair, post the Kaikōura earthquake.

The 2016/17 monitoring programme of Un-managed sites targeted two ecological district areas (Hillersden and Waihopai). It included a telephone survey with participating landowners and field visits to 24 sites in total.

Results showed that only 4% of these un-managed sites are improving in condition, while 12% are stable and 84% have deteriorated in some way. Impacts from forestry conversion were the most common cause of site deterioration and two properties were referred to the Overseas Investment Office for their investigation. Forest harvest, feral animals and farm stock are also having an impact in some cases.

The phone survey carried out in conjunction with this programme showed that landowners have mixed levels of awareness and interest in the SNA sites and programme. While over half support the programme, there is little on the ground management of threats in those sites which don't have a Council management programme associated with them.

The contact generated by these site visits and the monitoring project in general was very valuable. Other than a raised level of awareness about their sites by landowners, it resulted in management of another six previously unmanaged sites on private land in the Waihopai and Wairau Valleys.

## Associated Projects

- Publicity – information about the project has been disseminated at a number of public events over the year including the Garden Marlborough Fete.
- Seed collection was carried out between February and May 2017 with a focus on collecting kahikatea, tōtara and mataī seed for the Tūi to Town areas in south Marlborough.
- Tūi to Town project – The programme area was extended in early 2015 to include the Wairau Valley area and the Seddon/Ward/Flaxbourne area and there has been publicity about this to encourage further plantings in lowland south Marlborough in the future. One new planting was funded in the 2016-2017 year in Seddon.

## Discussion and Conclusions

Monitoring of a selection of the many unmanaged sites shows that many of these sites are only in fair condition and a large proportion (84%) are deteriorating in condition. By comparison, 74% of managed sites are improving in condition.

The phone survey carried out in conjunction with this project showed that landowners have mixed levels of awareness and interest in the SNA sites and the SNA programme. There is more work to do in promoting the programme and the assistance that is available to landowners. The monitoring project is doing a lot to improve this situation.

A site prioritisation system is being developed currently to give 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 hearing processes has been completed in 2018.



**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 rep), Ross Beech (farmer rep), Roy Grose (DOC), Jan Clayton-Greene (DOC), Simon Moore (DOC)**

**Absent: Chris Bowron and Kristen Gerard (farmer representatives), Federated Farmers representative**

**Note: Nicky Eade, the manager of the programme since its inception in 2001, stepped down in late 2016. Mike Aviss was employed to take over the programme in early 2017. Chris Bowron, farmer representative since the programme began, retired in March 2017. He has yet to be replaced.**



## Contents

<b>Executive Summary .....</b>	<b>i</b>
<b>1. Introduction.....</b>	<b>1</b>
<b>Part A: Ecological Survey Work – Summary of Results – July 2016 to June 2017 .....</b>	<b>2</b>
<b>2. Field Based Ecological Surveys – Background and Overview.....</b>	<b>2</b>
2.1. Wetland Survey 2010 – 2013.....	3
2.2. Results .....	3
2.3. Discussion .....	4
<b>Part B: Site Improvement – Landowner Assistance Programme – Summary of Results 2016-2017 .....</b>	<b>6</b>
<b>3. Landowner Assistance Programme – Background and Overview.....</b>	<b>6</b>
3.1. Protection Projects 2016-2017.....	8
3.2. Protection Projects Summary – July 2016 – June 2017.....	8
3.3. Relationships.....	10
<b>Part C: Monitoring Programme – Summary of Results 2016 – 2017 .....</b>	<b>11</b>
<b>4. Background and Overview .....</b>	<b>11</b>
4.1. SNA Un-Managed Site Monitoring.....	12
4.2. Landowner questionnaire results .....	12
4.3. Site monitoring results.....	13
4.4. Summary and discussion .....	15
<b>Part D: Associated Projects .....</b>	<b>16</b>
<b>5. Publicity and Information.....</b>	<b>16</b>
5.1. Background .....	16
5.2. The 2016-2017 Year.....	16
<b>6. Seed Collection Project.....</b>	<b>17</b>
6.1. Background .....	17
6.2. The 2016-2017 seed collection season.....	17
<b>7. Tūi to Town Project 2008 – 2016.....</b>	<b>18</b>
7.1. Background and Overview.....	18
7.2. Information and Publicity.....	18
7.3. Sightings.....	19
7.4. Plantings.....	19

7.5.	<b>Extension of Tūi to Town Programme to Wairau Valley and Seddon/Ward Areas. ....</b>	<b>20</b>
<b>8.</b>	<b>Significant Natural Areas Review .....</b>	<b>21</b>
8.1.	Background overview.....	21
8.2.	Discussion and Recommendations .....	21
8.3.	Outcomes.....	21
<b>9.</b>	<b>General Discussion and Conclusions.....</b>	<b>23</b>
	<b>Appendix 1: Total Budget for Main Aspects of Significant Natural Areas Project – Marlborough District Council Expenditure and Revenue – July 2016 – June 2017 (GST inclusive).....</b>	<b>26</b>
	Table 1: South Marlborough Ecological Survey Participation and Results (July 01 – June 17) .....	4
	Table 2: North Marlborough – Ecological Survey – Participation and Results (July 01 – June 17) .....	4
	Table 3: Summary of new protection projects July 2016 – June 2017 (GST inclusive).....	8
	Table 4: Summary of ongoing protection projects July 2016-June 2017 .....	9
	Map 1: Ecological districts and Marlborough District Council/DOC survey areas.....	2
	Map 2: The location of the majority of the 92 sites that have been protected through the programme. The sites shown in green have been covenanted. ....	7
	Map 3: Overview map showing the Waihopai and Hillersden ecological districts.....	12



## 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.



**A remnant forested gully in the Kekerengu ecological district**

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 the hearing process is underway. 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 – Summary of Results – July 2016 to June 2017

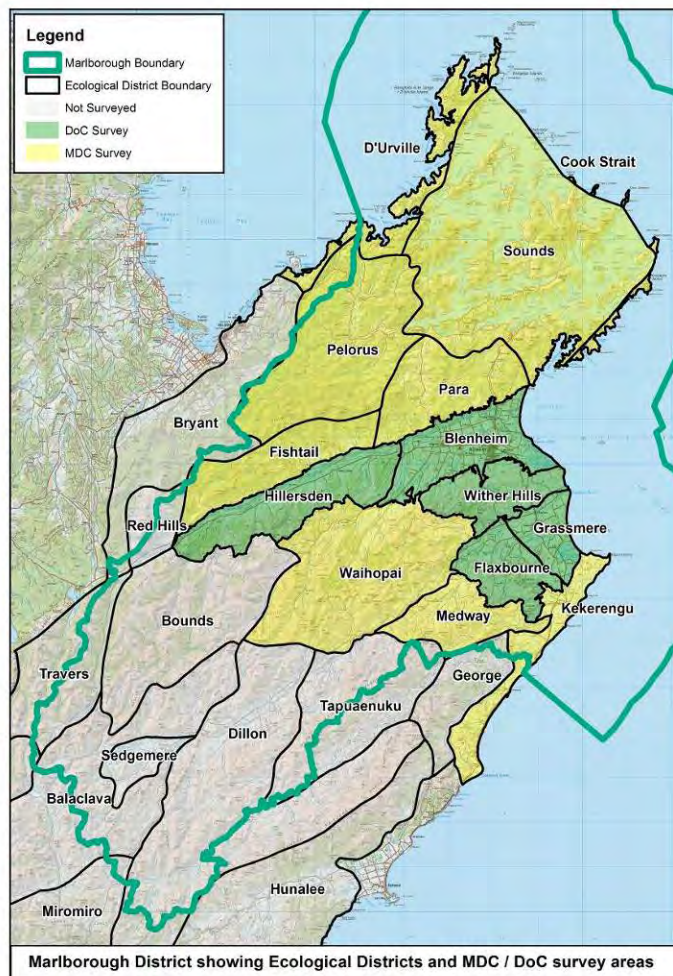
### 2. Field Based Ecological Surveys – Background and Overview

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 Straight 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 (Tapuae-o-Uenuku, Bounds, Dillon, Sedgemere, Balaclava Travers and Red Hills), being mostly Department of Conservation land or pastoral leasehold land.

The ecological survey work has resulted in a large amount of information being collected. This 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.

Further occasional field surveys have been carried out at the request of landowners since 2009. In the 2016-17 year, two surveys were carried out on private land in the Kaituna Valley. The two properties are adjoining and are rare lowland tōtara forest. This brings the total number of sites identified to 710.



**Map 1: Ecological districts and Marlborough District Council/DOC survey areas**

As a result of the Marlborough Environment Awards Farming Award being won by Muller Station, there has been an opportunity to engage with run holders in the Upper Awatere Valley. Some interest from run holders is promising and may herald another period of surveys in the 2017/18 years and onward. This is the last major area in Marlborough that has not had a Significant Natural Area survey. With large properties it will be an expensive undertaking but can be spread over time.

## **2.1. 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. Wetlands are identified on the Plan zoning maps and are subject to the hearing process. 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.

There were 1300 wetlands identified in the desk-top exercise. While the final number of identified wetlands is not yet completely confirmed, well over 1000 are likely to be scheduled in the Marlborough Environment Plan once it is ratified. The intention is that these wetlands will in effect be classified as significant natural areas and will therefore 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 2016-2017 year, three wetland projects were started.

No physical assessment of the wetlands was undertaken as part of the identification process. This is an information gap which will need to be filled as opportunity allows with some ecological assessments.

Wetland expert John Preece was contracted to do an assessment of the conservation values of an inland saline wetland in the Wairau Valley. It is thought to be the only inland saline wetland north of the Waitaki River, and possibly the only saline spring fed wetland in New Zealand.

John also completed a discussion document/report into Lake Elterwater, following an extended dry period which dried out the lake over the 2016/17 summer, and the Kaikōura Earthquake, which tilted the lake and raised the outlet 250mm more than the head of the lake.

## **2.2. 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 2017. These do not include the additional wetland sites that have been identified more recently through the 2010-13 survey described above.

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 2017 a total of 288 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 17)**

Ecological Districts	No. Properties Surveyed	No. Properties Declined	No. of Sites	Combined Area (ha)	% of Total Land Area
Kekerengu	20	3	57	1,446	4.6%
Medway	14	3	79	4,961	15.5%
Waihopai	19	14	61	5,418	5%
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%
<b>Totals</b>	<b>154 (75%)</b>	<b>50 (25%)</b>	<b>336</b>	<b>23,092</b>	<b>7.2% av</b>

**Table 2: North Marlborough – Ecological Survey – Participation and Results (July 01 – June 17)**

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	64	16	186	11,790	16.0%	9.5%	39%
Pelorus	19	10	45	1,472	3.8%	1.4%	63%
Para	20	7	57	2,977	8.7%	6.2%	24%
Fishtail	6	2	33	1,350	9.0%	3.0%	55%
<b>Totals</b>	<b>133 (76%)</b>	<b>44 (24%)</b>	<b>375</b>	<b>21,924</b>	<b>(Av=12%)</b>	<b>(Av=7.4%)</b>	<b>(Av=38.5%)</b>

## 2.3. 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.

### 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 a recent 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, which will ensure the long term sustainability of some of these sites.

### 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 land in Department of Conservation management (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 2016-2017

### 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 Tūi 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.

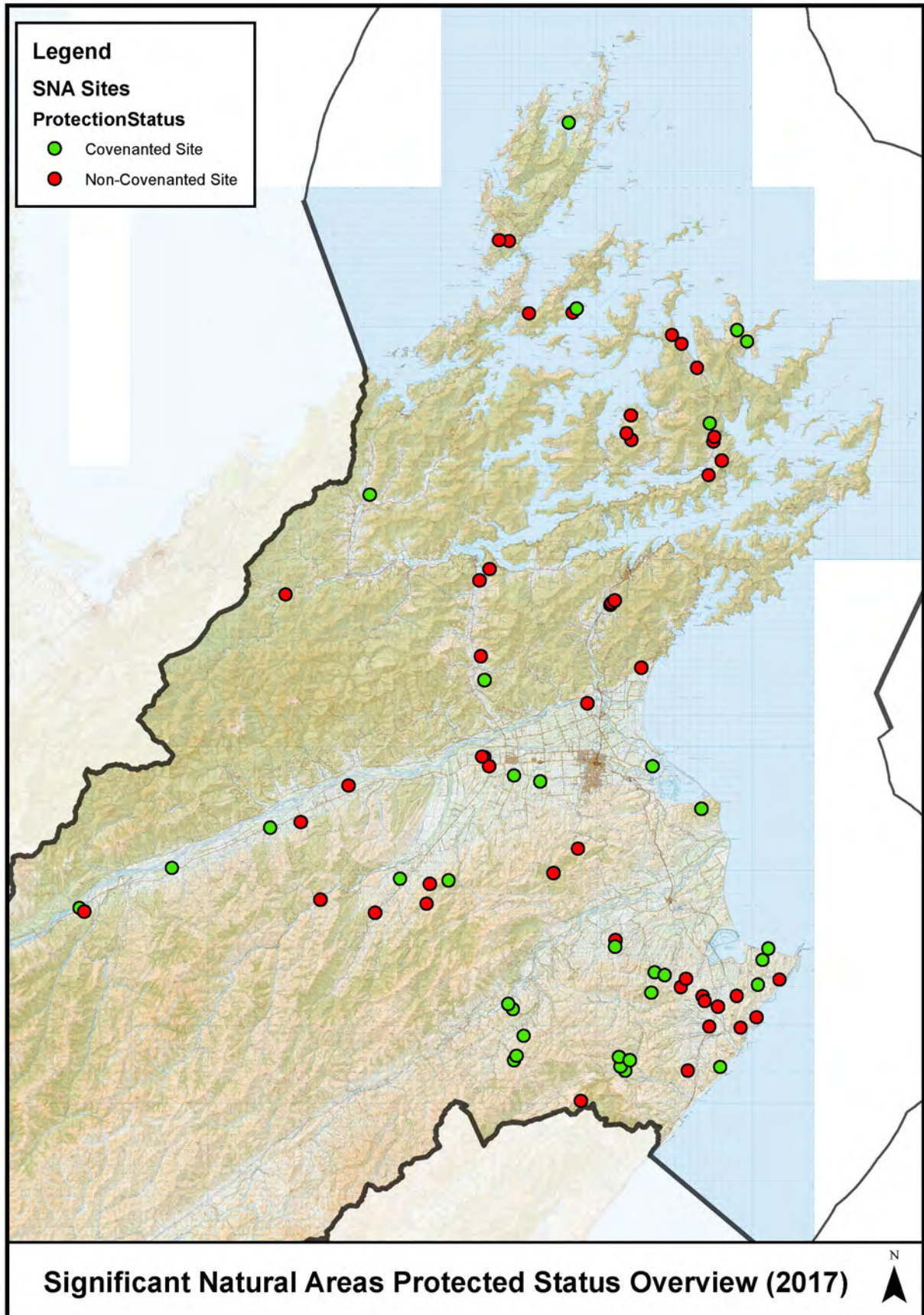


**A significant natural area site in south Marlborough which has been fenced with some restoration planting established to complement existing vegetation which is thriving in the absence of stock pressure**

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 711 identified sites over the whole of Marlborough have received any restoration or management (33 in north Marlborough and 60 in south Marlborough). Many surveyed sites are likely to be deteriorating in condition over time due to a range of threats and pressures.

Expenditure to manage SNAs averaged about \$120K per annum from 2007 until 2012, when DOCs Bio Fund rules changed. Since then, Council has invested approximately \$71K per annum managing SNAs. A lot of restoration and good will has been achieved by the programme in that time.





Map 2: The location of the majority of the 92 sites that have been protected through the programme. The sites shown in green have been covenanted.

### 3.1. Protection Projects 2016-2017

In the 12 month period from July 2016 to June 2017, the Council contributed to fifteen projects in total. Nine of these were new projects, with a mix of weed control, fencing and planting, planning and threatened species management. Six were ongoing projects; mostly weed control but also including a fencing project.

In addition, the Council contributed significant funding to a community led weed control programme in the Waima/Ure valley. This programme has been underway since 2009 and is overseen by a community group (the Waima Valley Ecological Restoration Society). This was the second year of two years of Council funding support, which allowed the group to successfully seek further major ongoing funding to continue its work (from the NZ Lotteries Fund, Community Conservation Fund and Land Information NZ). This is a significant achievement. There is room for other groups like this in Marlborough, especially in the Awatere/Medway area.



**Peggioh landowner Susan King and Council Biosecurity Coordinator Jono Underwood look over part of the Waima/Ure catchment**

Highlights of the year in the Management Projects are sycamore control in the Omaka Gorge, management of Pink Broom in the Waihopai and the unique salt spring wetland in the Wairau Valley.

An additional restoration planting project within the Grassmere ecological district was funded through the Tūi to Town Project.

The total number of projects carried out since 2003 is 92.

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

### 3.2. Protection Projects Summary – July 2016 – June 2017

**Table 3: Summary of new protection projects July 2016 – June 2017 (GST inclusive)**

Ecosystem Type	Size (ha)	North/South Marlborough ED	Type of Work	Total Funding	Council	Biofund	Landowner and QEII/other
Wetland (Pa)	10.9 ha	S Blenheim ED	Fence	\$11788.72	\$894.36		\$894.36 QE11
Forest (Lo)	155 ha	S Waihopai	Sycamore	\$14221.65	\$7321.65		\$6900.00
Forest (Di)	12 ha	S Waihopai	Elder, OMB barberry	\$1366.18	\$966.18		\$400.00
Forest (Di)	28 ha	S Waihopai	Broom cages	\$1569.69	\$1569.69		
Riverbank (Gr)	3 ha	S Wither Hills	Buddleia	\$3688.37	\$2049.46		\$1638.91

Ecosystem Type	Size (ha)	North/South Marlborough ED	Type of Work	Total Funding	Council	Biofund	Landowner and QEII/other
Wetland (Sm)	2ha	S Hillersden	Restoration Plan	\$5,544.00	\$5,544.00		
Wetland (Jo)	3.6 ha	S Hillersden	Plan/OMB	\$2012.50	\$1150.00		\$862.50
Wetland (Ba)	9ha	S Blenheim	OMB	\$943.00	\$943.00		
Tūi to Town x 1	0.4 ha	S Grassmere ED	planting	\$5000.00	\$1000.00		\$4000.00
<b>Total</b>				<b>\$36,134.11</b>	<b>\$21,438.34</b>		<b>\$14,695.77</b>

**Table 4: Summary of ongoing protection projects July 2016-June 2017**

Ecosystem Type	Size (ha)	North/South Marlborough ED	Type of Work	Total Funding	Council	Biofund	Landowner and QEII/other
Wetland (Hi)	15	Kekerengu ED	Weed control	2740.00	2740.00		
Gully (Waima OMB Project)		S Medway ED	OMB control	\$75,480	\$38,695.75		\$39000 plus various in kind contribution
Gully (Av)	11	S Flaxbourne ED	Weed Control	\$647.45	\$647.45		
Hill Slopes (SB) QEII	40	S Flaxbourne ED	Weed control	\$6675.76	\$3337.88		\$3337.88
Wetland (Mi)	1ha	N Sounds ED	OMB	\$2254.00	\$1127.00		\$1127.00
Forest (PI)	80 ha	N Sounds ED	Fencing	\$20000.00	\$5000.00		\$15000.00
<b>Total</b>				<b>\$110,012.96</b>	<b>\$51548.08</b>		<b>\$58,464.88</b>

**Total Funding Contributions for Biodiversity Protection Projects on Private Land 2016-2017**

Marlborough District Council Funding	\$72,986.42
QEII National Trust	\$1905.30
Landowners	\$71,255.35
<b>Total</b>	<b>\$146,147.07</b>



## Summary of Total Funding Contributions for Biodiversity Protection Projects on Private Land 2003 – 2017

Marlborough District Council Funding	\$767,276.42
Central Government Biodiversity Fund	\$810,010.00
QEII National Trust	\$80223.30
Landowners	\$628,085.35
<b>Total</b>	<b>\$2,285,595.07</b>

### 3.3. Relationships

Council promotes covenanting and has developed a strong relationship with the Department of Conservation and the Queen Elizabeth II National Trust (QEII), both of which provide a mechanism for landowners to independently covenant protected areas on their properties. A total of 40 of the 92 projects protected through the programme so far have been covenanted. Two of these are Protected Private Land (PPL) covenants administered by the Department of Conservation and the other 38 are QEII covenants. The QEII National Trust takes responsibility for on-going monitoring of their covenanted sites, reducing the monitoring required to be carried out by Council.

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 and a new guideline about converting pine plantations to native vegetation.

Funding for Department of Conservation to undertake control of wilding conifers on Molesworth was allocated by The Ministry of Primary Industries and this is being held by Council for reimbursement as the work gets done.

The Marlborough Landscape Restoration Trust has been established and has already been successful in securing funding of around \$200,000 to undertake wilding tree control on private land. The focus of this Trust in the immediate future is the Awatere Valley.

The Waima Valley Ecological Restoration Society is a community based initiative in South Marlborough with an emphasis on Old Man's Beard control in the Waima/Ure catchment area. Council has assisted this group to develop a management strategy to structure the project work, and has also contributed financially to some small areas of control work. More substantial contributions were granted for the 2015/16 and 2016/17 years which allowed the trust to operate while attracting new funding sources through the DOC Community Fund, Lotteries Commission and LINZ.

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

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

All of these groups are independent of the Council and compete in a tight market for funding from a small number of other sources, for instance Lotteries Commission, Canterbury Community Fund, the DOC Community Fund, Council and landowners.

## Part C: Monitoring Programme – Summary of Results 2016 – 2017

### 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 initiative in conjunction with Landcare Research, Department of Conservation and other regional Councils. This project is developing some standardised biodiversity indicators and methodology to measure these indicators along with a business case. Staff continue to maintain a watching brief over this project.



**Site Monitoring**

Secondly and more specifically, in relation to the Significant Natural Areas project, Council is undertaking a programme of some ongoing monitoring of the state and condition of a selection of representative sites from the more than 600 SNAs identified that have not had any specific conservation management applied. This type of monitoring was started in the 2014-2015 in two ecological districts and repeated in the 2015/16 year in a further two ecological districts. In 2016/17, Hillersden and Waihopai EDs were the focus. This monitoring was carried out by contractor with assistance from Council staff. A prerequisite to the monitor is a telephone questionnaire by a consultant to measure engagement and get landowner permission to enter the property. 24 sites were visited with a total cost to the programme of \$25,355.

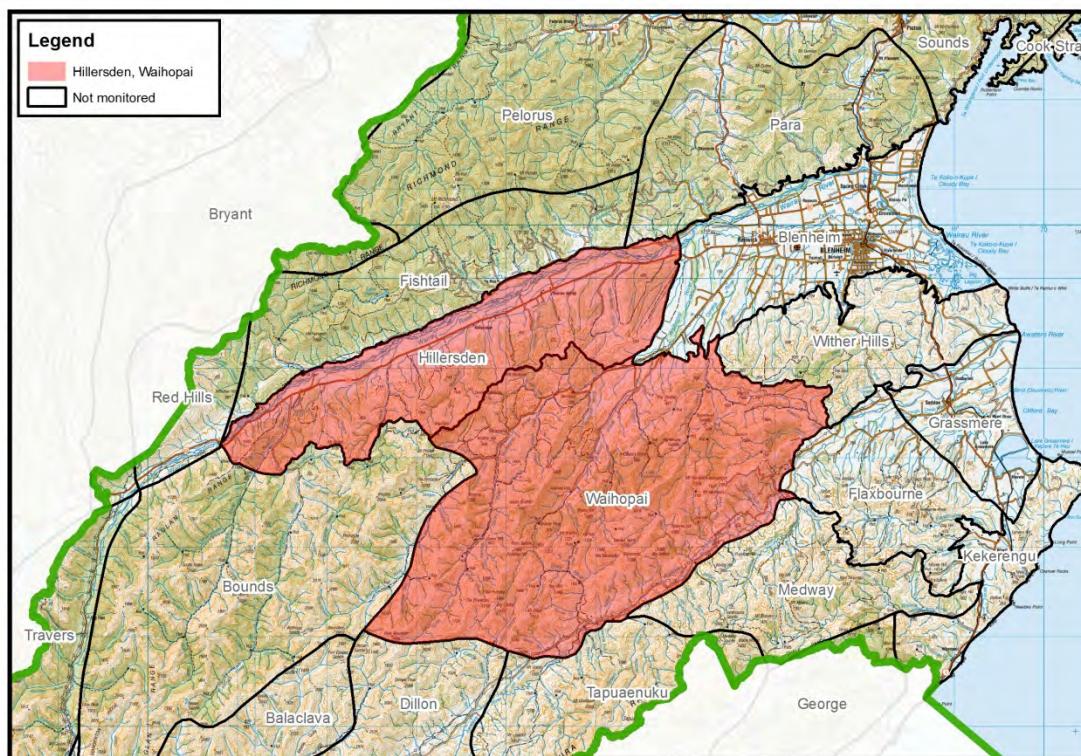
Thirdly, systematic monitoring has been established to assess the condition of the 92 sites that have been managed through the Landowner Assistance Programme (about 13% of all sites identified). It is repeated every two years. So far five monitoring rounds have been undertaken starting with a pilot in the summer of 2006/7 with 12 sites visited. The following four rounds have been carried out at two yearly intervals including 2010, 2012, 2014 and in the summer of 2015/16. The next Managed Site Monitor is programmed for summer 2018.

The QEII National Trust monitors the sites that it has covenanted (currently 40 sites), so Council does not monitor the sites that QE11 monitors.

## 4.1. SNA Un-Managed Site Monitoring

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 the Hillersden and Waihopai ecological districts in 2016/17. This included a telephone questionnaire with all landowners of properties with significant natural areas identified on them and site visits to a selection of sites to assess their ecological condition.

The sites visited were a mixture of DOC surveyed Recommended Areas for Protection (RAPs) and Council surveyed SNAs. They were located in the Wairau, Waihopai and Awatere valleys in a range of habitat types; wetlands, hill slopes, gullies, bluffs and forestry hill country. (see Map below).



**Map 3: Overview map showing the Waihopai and Hillersden ecological districts.**

## 4.2. Landowner questionnaire results

Communication with landowners was necessary to obtain permission to access properties to carry out this monitoring. This was carried out via a phone questionnaire to collect information about landowner's awareness, interest and thoughts about the SNA sites located on their properties. Access permission (to re-visit sites), was also sought from a selection of landowners.

- A total of 31 landowners completed the telephone questionnaire in 2016/17, 17 in the Hillersden ecological district and 14 in the Waihopai ecological district.
- Four landowners declined to carry out or complete the survey and one landowner who owns multiple properties was unable to be contacted.
- A series of questions were asked to evaluate the level of landowner awareness and interest about the significant natural areas on their properties and the assistance available to them through the Council programme. There was a clear difference in the levels of awareness and knowledge between the two groups, with the first group having higher levels across all of the areas discussed. This was obvious both in relation to general awareness about the SNA programme and the more specific levels of awareness around the sites themselves and the



support available to assist with protection work. This is most likely due to the difference in approach between Council run SNA surveys and the Department of Conservation run Protected Natural Area surveys.

- Overall, landowner attitudes and awareness are quite mixed. It is likely that involvement in the SNA programme has raised awareness of indigenous biodiversity and conservation issues in a general sense. A number of landowners had a positive attitude towards the SNA programme and biodiversity issues, although a few (generally new landowners), had been unaware that they had sites of value on their properties. Of the less interested and aware participants the attitude can generally be described as indifferent or uninterested rather than directly negative.
- While a third of properties were still in the same ownership (10 out of 31 properties) and a small number were in the hands of the next generation through family succession (3 properties), the majority (18 properties) had changed hands and were in different ownership.
- The following table shows the telephone questionnaire results for the season.

**Table 5: Summary of responses to Significant Natural Areas phone survey Hillersden and Waihopai ecological districts 2016/17**

Landowners responses	number and % high/yes	Number and % medium/maybe	Number and % low/no
Awareness of Council SNA programme and voluntary approach?	11 (46%)	3 (13%)	10 (41%)
Voluntary approach to continue?	14 (59%)	9 (37%)	1 (4%)
Aware of SNA report?	16 (55%)	4 (14%)	9 (31%)
Awareness and knowledge of SNA sites?	17 (59%)	5 (17%)	7 (24%)
Importance and value of SNA sites?	17 (61%)	5 (18%)	6 (21%)
Desire to generally protect SNA sites and values- day to day farm management?	16 (56%) 9 (32%) - fencing 11 (39%) - other	7 (25%)	5 (19%)
Awareness of Council Assistance programme?	13 (45%)	4 (14%)	12 (41%)
Interest in Council support?	11 (39%)	10 (36%)	7 (25%)
Community of interest in relation to SNA sites?	8 (29%)	1 (4%)	19 (68%)

### 4.3. Site monitoring results

- A total of 24 unmanaged sites were monitored in 2016/17, covering a mix of ecosystem types. The majority were areas of broadleaved forest (5 sites), dry shrublands (5 sites), wetlands (4 sites), kānuka forest (4 sites) and riparian (4 sites). Landowners received reports showing the results of the site monitoring.

- Overall results combining both ecological districts show that most sites visited were generally in reasonable condition (58% good or good/fair and 33% fair and 8% fair-poor). 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 the sites in the early 2000's.
- However, on a less positive note, very few sites were improving in condition (8% improving or improving/stable) and a reasonable proportion of sites are deteriorating (92% stable/deteriorating or deteriorating). The reasons for the deteriorating condition vary but the main one was damage during conversion from high country grazing to forestry. Other reasons include damage during logging operations, weed encroachment and browse damage.
- One company was reported to the Overseas Investment Office for possibly not adhering to their conditions of purchase. Another forestry block, halfway through a harvest that did considerable damage to the Significant Natural Sites in it, has been sold to an ecologically aware investment company. The harvest will now be likely to be completed in a more sustainable manner.
- 25% of the sites surveyed in 2016/7 are now either receiving or about to receive assistance through the programme, to manage threats. This is one of the main benefits of the monitoring programme, as it allows direct face to face communication/re-engagement with owners that are either new or haven't seen a Council employee on site for up to 17 years.
- Another issue is that very few sites are legally protected, and rely on the benevolence of the owners or Marlborough Environment Plan (MEP) clearance rules to protect them from damage or destruction. There is now a recommendation in monitoring reports that the owners contact the QE11 Trust to discuss legal protection of sites.



**Well forested gully in Hillersden ecological district**



**Impressively large mature matai in valley floor of the same site**



**Table 6: Combined summary of condition results of SNA site revisits to Hillersden and Waihopai ecological districts- 2016/17.**

Site Condition	Good	Good/Fair	Fair	Fair/Poor	Poor
	6 (25%)	8 (33%)	8 (33%)	2 (9%)	0
Site Trend	Improving	Improving/Stable	Stable	Stable/ Deteriorating	Deteriorating
	0	1 (4%)	3 (12%)	20 (84%)	0

#### 4.4. Summary and discussion

The process of carrying out the landowners' questionnaires and the site re-visits has assisted in re-engaging with the landowners. It is seen as a very good use of the programme funds now that large areas of the region have been surveyed and the earliest surveys were over 15 years ago.

While most of the sites that were re-visited through this programme are naturally resilient remnants within highly modified landscapes, a number are in deteriorating condition due to the impacts of plantation forestry, weeds, feral animals and farm stock. This is to be expected without active management intervention.

The monitoring methods used in this programme were qualitative only and designed to provide a fast way to assess the state and condition of sites. The establishment of photopoints provides some scope for ongoing monitoring but additional quantitative methods could be built into the programme if required in the future.



**SNA damaged during forestry harvest operation**



## Part D: Associated Projects

### 5. 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, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2014, 2015
- 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

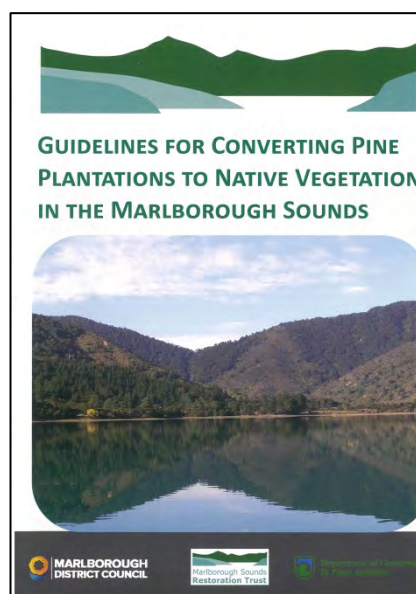
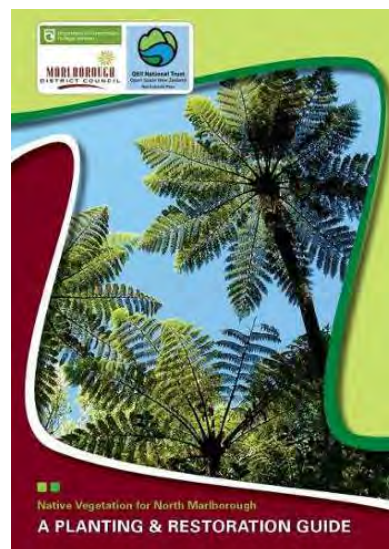
#### 5.2. The 2016-2017 Year

In the 2016/17 year, displays were presented at public events, including the Garden Marlborough Fete, Rarangi Dawn Chorus open day and at Smart and Connected events in the rural towns of Marlborough.

A new 20 page publication “Guidelines for Converting Pine Plantations to Native Vegetation in the Marlborough Sounds” was produced in conjunction with DOC and the Marlborough Sounds Restoration Trust.

All existing information brochures and website versions have been updated with contacts for the new Biodiversity Coordinator

[https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Environment/Biodiversity/Biodiversity%20Guidelines%20for%20Pine%20Plantations%20List/B%20Pines to Native Guidelines Website PV.pdf](https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Environment/Biodiversity/Biodiversity%20Guidelines%20for%20Pine%20Plantations%20List/B%20Pines%20to%20Native%20Vegetation%20Guidelines%20Website%20PV.pdf)



## 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 Tūi 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.



**Seed collecting**

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.

Over the last eight 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 Tūi to Town, Significant Natural Areas and other lowland restoration projects all have a supply of suitable plants.

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 2016-2017 seed collection season

In the 2016/17 seed collection season, seed was collected from a number of sites in both north and south Marlborough. The main focus was on collecting seed from podocarp species (kahikatea, mataī and tōtara) on the Wairau Plains and Valley and tributaries, with some collected in the Avon and one site in Kekerengu ecological district to ensure a supply of locally sourced plants are available for future Tūi to Town and SNA plantings, as well as general planting. Smaller quantities of kowhai seed were also collected and distributed to growers. Collection of tōtara seed from the Branch River area was undertaken specifically for a forestry company which is about to plant tōtara as a way of buffering and extending SNA sites on the land they manage.

The cost of the seed collection project in the 2016/17 financial year was \$7,909.55.



## 7. Tūi to Town Project 2008 – 2016

### 7.1. Background and Overview

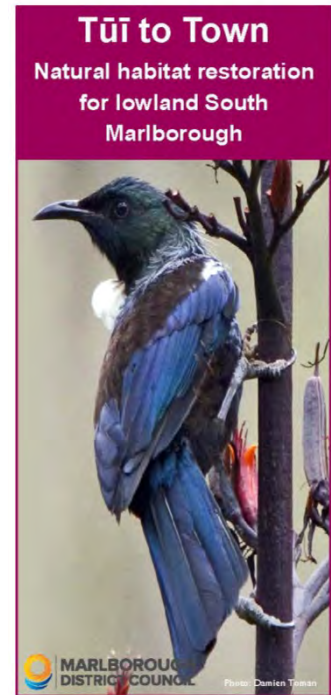
The Tūi to Town project is a subset of the significant natural areas project which promotes the protection of natural areas of ecological value. The SNA surveys have confirmed that very little natural habitat remains on the lowland parts of south Marlborough and the Tūi to Town project is designed to 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 tūi) are being regularly reported from these new areas and a number of enquiries about funding for larger plantings have been received.

The programme essentially remains the same with the public encouraged to report native bird sightings to build a picture of species present and habitat use, and funding available for native plantings which are a minimum of 1000 square metres.

### 7.2. Information and Publicity

In the 2016-2017 year, displays and presentations promoting the Tūi to Town project were presented at several public events including the Garden Marlborough Fete (November 2016).

Three new Tūi 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.





The Tūi to Town brochure and website page have been updated.

Tūi to Town street flags continue to be flown in Blenheim and Renwick periodically.

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.

### **7.3. Sightings**

In the 2017 calendar year, a total of 34 tūi sightings were reported. The sightings came mostly from greater Blenheim, including Grovetown, Spring Creek, Rapaura, Fairhall and Hawkesbury.

Rapaura had higher densities of tūi than elsewhere, and also had kererū recorded. This supports the theory that most tūi are coming to Blenheim from the forests on the north side of the Wairau River.

This brings the total number of tūi sightings to over 780 over the eight year life of the project, providing useful information about tūi movement and feeding patterns on the Wairau Plain and the beginnings of some information about tūi presence in the Seddon and Awatere area.

The basic pattern that has emerged is that tūi are resident in the forested areas to the north of the Wairau Plain and begin travelling to feed about May, continuing through until about December. They appear to be resident in and around kowhai and flax, and large flowering eucalyptus trees for periods of time through winter (ie; they are present early in the morning and late in the evening for several weeks), but it is not yet clear if they nest in any locations on the Wairau Plain.

Kowhai trees are the most common tree for sightings (11) with flax next (6) and gums (5), as well as a variety of other species (banksia, apricot, lusitanica, oak and karamu).

### **7.4. Plantings**

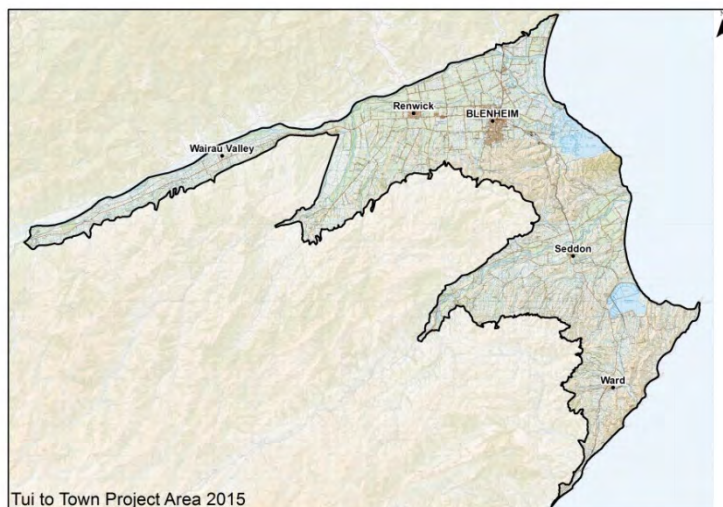
While only one planting project was funded in the 2016/17 financial year, 10 applications were received late in the year for planting over the 2017 winter. During my absence on leave over winter, five of these went ahead, although one of them found alternative funding and didn't claim their payment. The remaining four sites will receive funding in 2017/18. There was an issue with some applicants securing trees, due to a huge demand for plants from around the country and local applicants failing to order their trees. In future, landowners will be encouraged to pre-order their trees well before the planting season.

The total number of funded plantings since 2008 is now 49 and a total area of new habitat of about 5 hectares has now been planted. 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.

The Council contribution to the Tūi to Town planting project in 2016-17 year was \$1000. Already in 2017, over \$4000 has been contributed to 4 projects from the fund.

**7.5. Extension of Tūi to Town Programme to Wairau Valley and**

**7.6. Seddon/Ward Areas.**



Map 4 shows the new, expanded, Tūi 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 where there is less than 10% of indigenous vegetation cover remaining. 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 governments 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.

The extension of the Tūi to Town project into these new areas will help to create more awareness about native bird presence as well as stimulating new native plantings. A good number of enquiries have been received from the new areas over the 2016-17 year but only three planting projects were actually completed in these areas (1 in the Wairau Valley and 2 in the Seddon area). One of the plantings was carried out by a community group on private land in the centre of Seddon and has received a good level of publicity.



**Seddon Tūi to Town planting November 2015**



**Seddon Tūi to Town planting November 2017**

## 8. 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 Ltd 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

They proposed a number of recommendations, including;

- SNA status offers no legal protection and therefore more sites should be encouraged to be protected, for example, QE11 covenants. Likewise, approach landowners with existing QE11 covenants that do not have SNA status to be registered on the SNA 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
- 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.
- 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.
- Continue to engage with landowners in relation to having SNAs and managing the threats on them.
- Improve the SNA database to allow for better reporting.
- Target sites on Pallic Soils (eg dry coastal soils) as they are poorly represented.
- Identify ecological corridors and target potential SNAs and restoration areas within them.

### 8.3. Outcomes

As a result of the report, Nick Singers from NS Ecological Solutions Limited was contracted to do a Potential Ecosystem Mapping exercise as the first step to an Ecosystem Prioritisation System Map of Marlborough District. This is seen as critical to ensure that the Significant Natural Areas programme is focussed on achieving gains in the most ecologically important areas of Marlborough.

Other outcomes include:

- All SNA landowner reports include a recommendation to strongly consider giving legal protection to SNAs via the Queen Elizabeth II Trust.



- Awatere High Country farmers are being approached about having Significant Natural Area surveys on their freehold properties.
- We continue to engage with landowners through the SNA Monitoring programme
- A new SNA database is being developed by Council
- A number of sites on Pallic soils will be monitored this summer as part of the Unmanaged Sites Monitoring programme, which will target sites that are likely to have been impacted by the November 14 Kaikōura Earthquake.
- Improvements to the quality of aerial photography and GIS mapping mean we can map the SNAs far more accurately. This will be done as sites are revisited and as opportunity allows, starting with all sites on land administered by Council.

## 9. General Discussion and Conclusions

The Significant Natural Areas programme has been in place in Marlborough since 2001. It is the main mechanism used by the Council to identify and promote protection of terrestrial indigenous biodiversity. 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 the 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 as a mechanism to protect larger suites of indigenous species (insects, reptiles and birds). Ecological assessments are relatively broad scale, relying on experienced ecologists and rapid qualitative methods. While it is a voluntary method of promoting protection, the information collected through the significant natural areas ecological surveys is used internally by the Council when assessing the effects of resource consents.

A wider review of the roles and responsibilities of local government in managing indigenous biodiversity in the New Zealand context is currently underway and it will be interesting to follow this discussion over the next year or two. It may provide some direction in relation to the SNA programme or other Marlborough District Council activities or programmes. The government has also re-started the process of developing a National Policy Statement for Indigenous Biodiversity.



**Wetland surviving in a sea of vineyards.**

A working group continues to assist the Council to manage the SNA project and meets at least 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 92 have had protection work of some kind applied to them and a number (38) of these sites are also covenanted to provide permanent legal protection (primarily through the QEII Trust).

Monitoring to track the condition of these protected sites was carried out over the 2015/16 summer season and found that 74% of sites are improving in condition, 20% in stable condition and only 6% deteriorating in some way. Monitoring of protected sites is carried out every two years and it due again in 2017/18.

However, there are around 600 SNA sites yet to be protected and proactively managed so that their ecological values are sustained in the long term. A programme to contact landowners and carry out a telephone questionnaire in addition to re-visiting a selection of 68 un-managed sites carried out over the last three summer seasons showed that in contrast to the managed sites, only 11% of sites are improving in condition, while 38% are in stable condition and 53% deteriorating in some way. Commercial plantation forestry was the most common cause of site deterioration in 2016, with weeds, feral animals and farm stock also having an impact in some cases.

The phone survey carried out in conjunction with this programme showed that landowners have mixed levels of awareness and interest in the SNA sites and programme. There is more work to do in promoting the programme and the assistance that is available to landowners.

In addition to the monitoring of SNA sites (both managed and un-managed) mentioned above, Council may also need 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 met recently to discuss the future direction of the SNA programme. The 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 questionnaire and site re-visits has gone some way to re-establishing contact with most landowners in the four ecological districts involved. This engagement could be built on by extending it to other ecological districts and following up more regularly with individual landowners.



**A fenced and planted riparian area in the Marlborough Sounds, pasture growth and weed plants can cause problems and require ongoing management.**

Other initiatives could include more active engagement with landowners through sector groups, such as Dairy NZ, Beef and Lamb, Federated

Farmers, Marlborough Winegrowers and the Marlborough Forest Industry Association. Targeting protection of certain types of high priority sites, or within certain high priority localities, could also provide opportunities to raise the profile of the project and improve uptake of assistance available for protection of sites.

An external review of the SNA programme may help 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 hearing 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 Councils 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.

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

In their external review, Wildlands Consultants suggested the SNA programme could be improved if we have better planning tools to prioritise where the survey and management effort needs to go, and to improve the storage of the data for each site. Both these recommendations are underway with a Prioritisation system being designed and a new Biodiversity Database being developed in house.



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.

Treaty of Waitangi settlements across the top of the South Island may also influence iwi involvement in biodiversity related issues in future. In particular, Te Tau Ihu Iwi, DOC and the Top of the South Councils have recently signed up to a Memorandum of Understanding to create a collaborative biodiversity alliance called "Kotahitanga mo te Taiao".

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 way in which the Council works to protect land based indigenous biodiversity on private land in the Marlborough region. With Primary Industry being such a significant part of the Marlborough economy, there remains pressure to convert land for productive outcomes. Council has an important role in ensuring that the natural environment is not degraded, and improved. Marlborough has less than 5% of its rarer ecosystem types remaining on the plains, which is not enough to sustain biodiversity over time.



## Appendix 1: Total Budget for Main Aspects of Significant Natural Areas Project – Marlborough District Council Expenditure and Revenue – July 2016 – June 2017 (GST inclusive)

Table 6: Significant Natural Areas Project – Total budget July 2016 to June 2017

Project Name	Projected Budget	Actual Expenditure	Revenue
SNA survey and general	\$5,000	\$9,685	
SNA protection projects	\$80,000	\$77,822	
Tūi to Town	\$10,000	\$2000	
Seed collection	\$10,000	\$7,909	
SNA monitoring – managed sites	\$30,000	\$2,520	
SNA monitoring – Un-managed sites	\$30,000	\$24,995	
SNA miscellaneous (meetings and publications)	2250	\$5943	
SNA Review	\$0	\$10,000	
<b>Total</b>	<b>\$167,250</b>	<b>\$140,874</b>	