

Marlborough District Council Report Significant Natural Areas Project

Summary of Results of Landowner Questionnaire and Monitoring Re-visits of a Selection of Un-managed Significant Natural Area Sites in the Kekerengu, Medway, Wither Hills and Grassmere Ecological Districts 2015-2016



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Marlborough District Council Report Significant Natural Areas Project

A Summary of the Results of a Landowner Questionnaire and Monitoring Re-visits of a Selection of Un-managed Significant Natural Area Sites in the Kekerengu, Medway, Wither Hills and Grassmere Ecological Districts 2015-2016

1. Introduction

This report relates to the Marlborough District Council's "Significant Natural Areas" (SNA), programme which identifies, evaluates and in some cases, helps to protect, areas of ecological significance on private land in the Marlborough region. It summarises the results of some follow up work which focussed on four ecological district areas - the Kekerengu, Medway, Wither Hills and Grassmere. The work included a telephone questionnaire to talk with participating landowners about the SNA programme and a selection of follow up field visits to some of the identified sites that to the Councils knowledge, had not been actively managed since the original ecological surveys were carried out, to assess the state and condition trend of these sites. This report summarises the results of this programme over the four ecological district areas and provides an overview of both the awareness and attitudes of landowners and the state and condition trend of a number of the SNA sites. These results allow evaluation of the effectiveness of aspects of the SNA programme, which is based on a long term and voluntary approach.



Limestone scree site on pastoral farm in Kekerengu ecological district.

2. Background

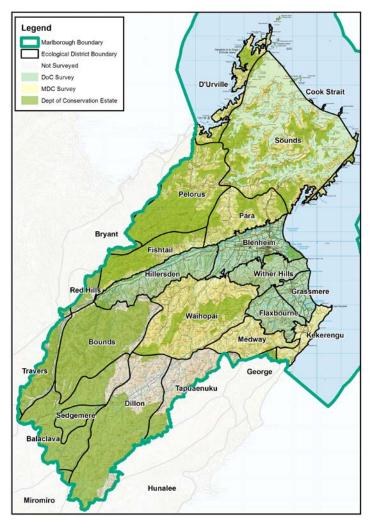
Through the Resource Management Act 1991 and its subsequent amendments, the Council has a role in maintaining and protecting indigenous biodiversity and significant natural areas in the Marlborough region. Since 2001 the Council has implemented the "Significant Natural Areas" (SNA) project, which has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

This programme is based on a voluntary partnership approach with Marlborough landowners which the Council has chosen over a regulatory approach. However, while voluntary, the approach relies on proactive participation and protection of identified sites by landowners and there are also general rules relating to the clearance of indigenous vegetation in place along with rules relating to the protection of wetland areas. A working group including Council and Department of Conservation staff, a Federated Farmers and QEII Trust representative and several landowners, was established in 2001 to assist Council to manage the programme.

In 2001 the Marlborough District Council (the Council) commenced the first SNA ecological ground survey

on a property by property basis throughout the Kekerengu and Medway ecological districts of Marlborough. These areas are located in the southeastern part of the region. At the same time (2001 - 2003), the Department of Conservation carried out a similar ecological survey which identified ecologically significant sites in five other Ecological Districts including Flaxbourne, Grassmere, Wither Hills, Blenheim and Hillersden. The Council then continued its ecological surveys throughout the rest of the Marlborough region though until about 2009 (see Map 1). Around 700 sites on 300 separate properties have been identified through these combined ecological surveys, covering about 6400 hectares in total. All participating landowners received a report describing the significant natural areas sites identified on their properties (SNA reports).

In 2004 the Council established the related Landowner Assistance Programme (LAP), to help Marlborough landowners protect and manage SNA sites. This programme is ongoing and as of 2016 about 45 landowners have protected around 85 sites in some way. About half of these sites have also been covenanted through the QEII National Trust, providing legal protection in perpetuity. Most of these sites are regularly visited through either Council or QEII monitoring



Map 1: Marlborough Ecological Districts showing MDC and DOC survey areas

programmes, so that the effectiveness of the protection work can be monitored and ongoing management adjusted to deal with any issues that arise over time.

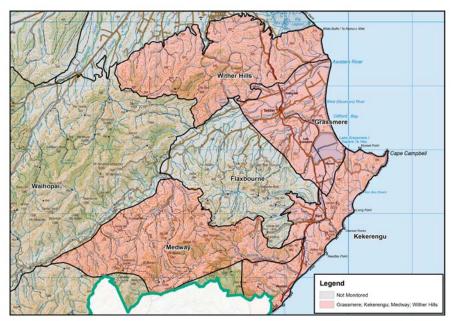
However, many of the other sites identified through the SNA project 12-14 years ago have not been revisited by Council since the original SNA surveys were carried out. The Council produces an annual SNA newsletter which is distributed to all participating landowners but this may be the only contact many landowners have had with the programme over the intervening years.

Council recently decided to initiate a programme to re-connect with landowners through a telephone questionnaire and establish their levels of awareness around the presence of SNA sites on their properties, along with their attitudes towards the programme and these sites. In addition, Council wanted to re-visit a selection of un-managed SNA sites to assess their state and condition trend.

This follow up programme of landowner telephone questionnaire and repeat visits to a selection of SNA sites was carried out in two stages. The Kekerengu and Medway ecological districts were targeted in the 2014/15 summer season followed by the Grassmere and Wither Hills Ecological Districts in the 2015/16 summer season (see Map 2) This report summarises the results of this programme over the four ecological

district areas and provides an overview of both the awareness and attitudes of landowners and the state and condition trend of a number of the un-managed SNA sites.

The results will be reported both separately (Kekerengu and Medway Ecological Districts 2014/15 and Grassmere and Wither Hills Ecological Districts 2015/16), and also combining the results of both years work. This is because there were differences in the way the work was carried out in these two areas. Council carried out the original ecological survey work in the Kekerengu and Medway ecological districts, providing participating landowners with a



Map 2: Overview map showing the Kekerengu, Medway, Grassmere and Wither Hills Ecological Districts

confidential property specific report and the Department of Conservation carried out the original ecological survey work in the Grassmere and Wither Hills ecological districts through a wider Protected Natural Areas (PNA), survey which was reported in a general publicly available report. (North, M, 2004) Engagement with landowners has tended to be more active in the areas where the Council was originally involved in the ecological survey work (Kekerengu and Medway ED's) and more proactive protection of sites has taken place in these localities (see Table 1 below).

Table 1: Summary of sites in the four target ecological districts.

SNA-PNA Sites	Kekerengu ED	Medway ED	Grassmere ED	Wither Hills ED
Total	57	71	15 (13 PNA-2 SNA)	22 (12 PNA - 10 SNA)
Managed/protected	10	8	0	1
Un-managed sites re-visited 2014-2016	16	9	8	11

3. Purpose

The SNA programme is well established in Marlborough and has been operating for fifteen years - from 2001 to 2016. The identification of sites is the first step in the process of recognizing and providing for the protection of significant natural areas and habitats as required by section 6 (c) of the Resource Management Act.

Once a site has been identified through the programme, there is no obligation on a landowner to carry out protection work and only a small subset of 15% of landowners have actively done this through the Council's related assistance programme since 2004.

The Council was interested to gain a wider picture of how the programme is perceived by landowners given the time that has passed since its establishment and also to gauge the state and condition trend of the biodiversity values within identified SNA sites where no active protection or management work (that the Council was aware of), had taken place over time.

The purpose of this programme was therefore two-fold:

- firstly, to re-connect with landowners through a telephone questionnaire and establish their level of awareness around the presence of SNA sites on their properties, along with their attitudes towards these sites, and
- Secondly, to re-visit a selection of un-managed SNA sites and assess their state and condition trend.

4. Landowner Questionnaire – Methods

A simple questionnaire was developed in conjunction with the SNA working group. The purpose of the questionnaire was to help to guide a conversation with landowners to assess their general attitudes and level of knowledge and awareness about the programme. More specific responses in relation to knowledge about the sites and assistance available for protection work were also sought. In addition, access permission was sought to carry out field visits to some sites.

The questionnaire was directed at landowners who had originally participated in the SNA or PNA ecological surveys, and landowners who may not have originally participated but now own properties where sites were identified. It did not include those landowners who had originally declined to participate and therefore only represents a subset of landowners, who, through previous participation are most likely more positively inclined towards the project and its goals.

Local consultant Paul Millen was contracted to carry out most of the landowner questionnaires, with Councils SNA programme manager Nicky Eade also carrying out some of the interview. Paul had been involved in the initial landowner consultation for both the SNA and PNA ecological surveys, and therefore already had a relationship with some landowners.

A letter explaining the purpose of the work was sent to all relevant landowners by the Council. This was followed by a phone call to carry out the questionnaire. The questionnaire was filled in by the interviewers during the phone call and read back to the landowner. If requested, the notes were also emailed to landowners to check. In addition, the original SNA or PNA reports relating to the property were sent to landowners if requested. Sometimes several phone calls were required to complete the process (ie initial call, send out SNA/PNA Report, follow up phone call, etc).

The landowner responses were classified into three categories:-

- high/yes
- medium/neutral
- low/no.

Responses have been summarized into a table and in addition a narrative summary relating to each question was also complied to capture any additional points or comments.

5. Site Monitoring Re-visits – Methods

The objective of the monitoring visits was to ascertain if the site was still present, given more than ten years had passed since the original ecological survey took place and if so, to assess its state and condition trend in the absence of active management.

A secondary objective was to use the re-visits as a pilot and consider what monitoring techniques would be most useful for ongoing monitoring, especially given the diverse range of sites (limestone scree, wetland, remnant and regenerating forest etc).

Permission to access sites was sought from landowners during the phone surveys and they were also contacted just prior to the visits to arrange access, check any relevant health and safety requirements and so on.

The four ecological districts were selected because;-

- they were the first to be surveyed in the early stages of the SNA programme (2001 and 2002);
- They provided a mix of areas surveyed by the Marlborough District Council (Kekerengu and Medway ecological districts) and the Department of Conservation (Grassmere and Wither Hills ecological districts); and
- They all fall, either wholly (Grassmere ecological district), or partly (Kekerengu, Medway and Wither Hills ecological districts),, within the "Threatened Land Environments" area identified by central government in its "Protecting our Places" priorities in 2007 (Ministry for the Environment, 2007).

The re-visits and assessment of un-managed SNA sites were carried out by contract ecologist Geoff Walls and Councils SNA programme manager Nicky Eade. The existing SNA monitoring form was used to carry out a simple on site rapid assessment of the condition of the site based on ecosystem function, vegetation, and the presence of animal and plant pests (Appendix B). Photopoints to monitor vegetation changes over time were also established in most cases.

Comparisons over time are difficult as no formal monitoring was built into the original survey design which was based on a rapid field survey and site assessment based on broad site descriptions, a set of significance criteria and some photographs. The diverse range of sites and ecosystem types creates further challenges in terms of standardizing the approach and collection of information. However the use of experienced ecologists with a strong background knowledge of the locality and sites, enables the condition and trend of the site to be assessed and a broad overview of the state of these sites in the wider context of the ecological districts to be gained and communicated to landowners.

A national framework for biodiversity monitoring is in the process of being developed in a collaborative partnership between the Department of Conservation, the Regional Council Biodiversity Special Interest Group and Landcare Research. (Lee, Allen, 2011). The focus so far has been on developing a suite of high level monitoring indicators (equivalent to the Department of Conservations "Tier 1" monitoring), but attention is currently shifting to site specific monitoring (equivalent to the Department of Conservations "Tier 2" monitoring).

In the interim, the establishment of fixed photopoints at most sites through the 2014/16 monitoring will assist with future comparisons but further techniques such as vegetation plots, bird counts and standardised lizard, fish and invertebrate investigations could be applied in some sites to improve the monitoring information base and the ability for less experienced or familiar ecologists to do the monitoring in the future. These should, as far as possible, be aligned with the "tier 2" monitoring techniques and protocols which are still in development at a national level.

6. Kekerengu and Medway Ecological Districts 2014/15

6.1. Overview

The Kekerengu and Medway ecological districts (see map in Appendix A) were the first areas surveyed at the beginning of the SNA project in 2001-2002. Land use in these areas is predominantly extensive pastoral farming.

Out of a total of 34 landowners originally contacted in these two ecological districts, 30 agreed to participate in the original programme (88%). Subsequently, a total of 128 sites were identified by the MDC's consultant ecologists. Protection work has subsequently been applied to 18 of these sites on 11 separate properties through the SNA Landowner Assistance Programme, most of which are monitored every two years. The condition of the remainder of the 110 sites was unknown.

The selection of sites to re-visit were chosen to provide a spread of vegetation and habitat types (ie forest, grey shrublands, wetlands etc) and also a good geographical spread. Landowner permission and the physical accessibility of the site also had and influence on site selection.

These ecological districts are located in South Marlborough which is a highly modified locality with very little original forest vegetation in place. The Kekerengu ED is more highly modified with only 4-5% of the land area in indigenous vegetation cover. The Medway ED has more land area in indigenous vegetation cover, about 15%, which is predominantly secondary forest vegetation in gullies and riparian areas and mountain beech forest in high altitude areas. Overall the majority of the SNA sites are small and fragmented and often the ecological function and



Tussock grasslands, Medway Ecological District

integrity of these sites is compromised. The sites are also quite diverse which makes developing consistent monitoring methods difficult.

6.2. Landowner Questionnaire – Results

Consultant Paul Millen contacted 25 of the 26 landowners that were identified as current owners of properties with SNA sites present. Some of these landowners owned more than one property. Two of these landowners were unwilling to complete the phone survey, resulting in a total of 23 responses being obtained.

Sites on 20 properties were identified as potentially worth re-visiting and 17 of those asked granted permission to re-visit their properties, with 3 declining permission. Of the 17 properties that granted permission, 12 were actually visited, and where possible, multiple sites were visited on each property to improve efficiencies in the field.

The overall general attitude of the 25 landowners contacted for the telephone survey was:

- 12 (48%) landowners contacted were positive.
- 10 (40%) landowners contacted were neutral.
- 3 (12%) landowners contacted were negative with two of these not completing the phone interview. Main reason was a lack of trust about how Council would use the information.

The overall knowledge of the 23 landowners who completed all questions for the telephone survey was:

- 11 (48%) landowners contacted had high knowledge.
- 7 (30%) landowners contacted had medium knowledge.
- 5 (22%) landowners contacted had low knowledge.

The table below summarises the other more specific survey results.

Table 2: Summary of responses to Significant Natural Areas phone survey Kekerengu and Medway Ecological Districts 2014/15

Landowners responses	number and % high/yes	Number and % medium/maybe	Number and % low/no
Awareness of MDC SNA programme and voluntary approach?	13 (57%)	8 (35%)	2 (8%)
Voluntary approach to continue?	18 (78%)	5 (22%)	0
Aware of SNA report?	12 (52%)	3 (13%)	8 (35%)
Awareness and knowledge of SNA sites?	14 (61%)	6 (26%)	3 (13%)
Importance and value of SNA sites?	15 (65%)	7 (30%)	1 (5%)
Desire to generally protect SNA sites and values- day to day farm mgmt?	All 23 landowners 9 (39%) - fencing 14 (61%) - other	0	0
Awareness of MDC Assistance programme?	9 (40%)	7 (30%)	7 (30%)
Interest in MDC support?	9 (40%)	6 (25%)	8 (35%)
Community of interest in relation to SNA sites?	3 (13%)	9 (39%)	11 (48%)

Overall awareness of the SNA programme was fairly high (92%) and the voluntary approach was strongly favored (100%). Most landowners were aware they had an SNA report (65%) and were aware of the sites on the ground (87%). Virtually all landowners recognized the value of the sites and had a general desire to protect the sites as part of the day to day farm management. However questions around actual awareness of the assistance available for protection and actual action to protect sites showed that only about 40% were well informed, 30% were at the medium mark and another 30% had low or no awareness about this aspect. In regard to any wider community of interest in relation to SNA sites only a low number felt this was relevant (13%) while around 50% saw no relevance at all.

Overall, the level of landowner awareness and support for the SNA programme can be summarised as moderate to high in these two ecological districts.

6.3. Site monitoring re-visits – Results

The re-visits and assessment of un-managed SNA sites were carried out by contract ecologist Geoff Walls from January to June 2015. A total of twenty five sites were visited, spread over twelve properties, with sixteen in the Kekerengu ecological district and nine in the Medway ecological district. Eleven different ecosystem/habitat types were represented including:

-	Broadleaved forest	7
_	Rock scarp	4
-	Grey shrubland	3
_	Riparian forest	2
_	Wetland	2
-	Limestone scree	2
_	Manuka forest	1
_	Kanuka forest	1
-	Coastal dune	1
_	Podocarp forest	1
_	Tussock grassland	1

The sites were assessed for both their current state and the condition trend.

Table 3: Summary of results of SNA site revisits Kekerengu and Medway ecological districts

State	Good	Good/Fair	Fair	Fair/Poor	Poor
	2 (8%)	12 (48%)	11 (44%)		
Condition Trend	Improving	Improving/Stable	Stable	Stable /Deteriorating	Deteriorating
		3 (12%)	14 (56%)	7 (28%)	1 (4%)

Some key observations and learnings from the 2015 monitoring round include:

- all of the twenty five sites still existed, more or less intact, and all were still significant. This
 reflects the existing resilience of most sites which have remained over time within productive
 landscapes.
- the condition of the sites varied with a good proportion in the or good or good/fair categories (56%) and the remainder in the fair category (44%).
- the condition trend of the sites varied with the majority being relatively stable (14 out of 25 or 56%), some deteriorating (8 out of 25 or 32%) and a few improving slightly (3 out of 25 or 12%). It should be noted however that many of the "stable" sites were only in fair condition and had serious infestations of old mans beard (OMB) present which was being kept in some sort of equilibrium with stock grazing pressure.
- Of the sites that showed signs of deteriorating trend in condition weed invasion was the main issue, with stock access an issue at one site.
- In sites with no OMB, where stock access was limited or stock were completely excluded, the indigenous vegetation generally was in better condition than when stock have access to a site.
- However, where the weed OMB is present (15 of the sites), it creates an ecological dilemma
 as stock keep this weed under control and prevent it from completely dominating a site. To
 improve the condition of these sites would require serious attention being given to the control
 of OMB at a landscape scale, followed by fencing of the sites to prevent stock access and
 allow regeneration and recovery.
- Other issues affecting some sites included active vegetation clearance using fire or herbicide (2 of the 25 sites), and all sites are likely to be infested with a suite of animal pests which have impacts on both the vegetation and any indigenous fauna present (birds, insects and lizards).
- most properties were still in the same family ownership, but the younger generation was now in charge or poised to be so;
- most owners were aware of their SNA sites and valued them, though there was a broad spectrum of the degree to which the sites had been nurtured. The sites where the owners treasured the natural values on their properties really shone out.

7. Grassmere and Wither Hills Ecological Districts 2015/16

7.1. Overview

The Grassmere and Wither Hills ecological districts (see map in Appendix A), were chosen for the second year of monitoring over the 2015/16 summer season as these had also been originally surveyed early in the programme over the years 2001 and 2002. The Department of Conservation carried out the majority of the survey work although some additional sites have been surveyed and added to the total over time by the Council. Because of this there are a mix of both SNA and PNA sites. For the purposes of ongoing management and protection, all of the sites are part of the SNA programme.

Out of a total of 38 landowners originally contacted in these two ecological districts, 27 agreed to participate in the original programme (71%). A total of 25 sites on private land were subsequently identified through the Department of Conservation surveys. However due to later SNA surveys carried out by MDC's consultant ecologists a further 12 sites were identified on six separate properties, bringing the total number of combined sites in these two ecological districts to 37. Protection work has subsequently been applied to only one of these sites through the SNA Landowner Assistance Programme. The condition of the remainder of the sites was unknown.



Wetland remnant in dry landscape - Grassmere Ecological District

The Grassmere ecological district

is very highly modified with less than 1% of its land area remaining in indigenous vegetation cover and most sites being small and fragmented. Land use is a mix of dryland pastoral farming, cropping and viticulture, along with some rural residential land use.

The Wither Hills ecological district includes more hill country and has about 16% of its land area remaining in indigenous vegetation cover, with the majority of this being kanuka forest, dry shrublands and silver tussock. Land use is predominantly extensive pastoral farming with a small amount of forestry and viticulture.

7.2. Landowner Questionnaire – Results

Consultant Paul Millen contacted 26 of the 27 landowners that were identified as current owners of properties with SNA/PNA sites. Two of these landowners only partially completed the survey therefore 24 full responses were obtained.

All landowners interview were asked about potential access to re-visit SNA sites and all but two were happy to allow access. Of the 23 properties that granted permission, 15 were actually visited over the monitoring period with a total of 19 sites visited.

The overall general attitude of the 25 landowners contacted for the telephone survey was:

- 10 (35%) landowners contacted were positive.
- 14 (46%) landowners contacted were neutral.
- 3 (12%) landowners contacted were negative

The overall knowledge of the 23 landowners who completed all questions for the telephone survey was:

- 2 (8%) landowners contacted had high knowledge.
- 15 (50%) landowners contacted had medium knowledge.
- 9 (42%) landowners contacted had low knowledge.

The table below summarises the other more specific survey results.

Table 4: Summary of responses to Significant Natural Areas phone survey Grassmere and Wither Hills Ecological Districts 2014/15

Landowners responses	number and % high/yes	Number and % medium/maybe	Number and % low/no
Awareness of MDC SNA programme and voluntary approach?	8 (31%)	8 (31%)	10 (38%)
Voluntary approach to continue?	16 (64%)	9 (36%)	
Aware of SNA report?	7 (24%)	5 (16%)	13 (60%)
Awareness and knowledge of SNA sites?	9 (36%)	9 (36%)	7 (28%)
Importance and value of SNA sites?	10 (40%)	5 (20%)	10 (40%)
Desire to generally protect SNA sites and values- day to day farm mgmt?	10 (42%)	8 (33%)	6 (25%)
Awareness of MDC Assistance progamme?	5 (20%)	3 (13%)	16 (67%)
Interest in MDC support?	7 (29%)	8 (33%)	9 (38%)
Community of interest in relation to SNA sites?	2 (8%)	7 (29%)	15 (63%)

Overall awareness of the SNA programme was only moderate with 62% having a medium or high awareness and a considerable group (38%), having a low or no awareness. The voluntary approach was nevertheless still strongly favored (100%). Only 40% of landowners were aware of their SNA report while a significant proportion had low or no awareness of the reports and information (60%). A higher proportion were aware of the actual sites on the ground (72%), although lower the value placed on the sites and desire to protect them was only moderate. Awareness of the assistance available for protection of sites through the Marlborough District Council programme was quite low (21%), although interest was moderate (62%), once the support available was discussed. In regard to any wider community of interest in relation to SNA sites only a low number felt this was relevant (8%), while most (64%) saw no relevance at all.

Overall, the level of landowner awareness and support for the SNA programme can be summarised as moderate to low in these two ecological districts.

7.3. Site monitoring re-visits – Results

The re-visits and assessment of sites in these ecological districts were carried out by contract ecologist Geoff Walls and Council SNA project manager Nicky Eade, from November to April 2015/16. A total of nineteen sites were visited, spread over fifteen properties. Eight sites were located in the Grassmere ecological district and eleven in the Wither Hills ecological district. Six different ecosystem types were visited including:

_	Broadleaved forest	8
_	Riparian community	1
_	Coastal dune	1
_	Kanuka forest	3
_	Grey shrubland	2
_	Wetland	4

The sites were assessed for both their current state and condition trend.

Table 5: Summary of results of SNA site revisits Grassmere and Wither Hills ecological districts.

State	Good	Good/Fair	Fair	Fair/Poor	Poor
	2 (10%)	3 (15%)	13 (70%)	1 (5%)	0
Condition Trend	Improving	Improving/Stable	Stable	Stable /Deteriorating	Deteriorating
	2 (10%)	0	9 (48%)	2 (10%)	6 (32%)

Some key observations and learnings from the 2016 monitoring round include:

- all of the nineteen sites visited still existed, although one small wetland site was in poor condition and its significance has been compromised over time.
- the condition of the sites varied but was generally quite compromised, with about 25% in the good or good/fair categories, and 75% in the fair or fair/poor categories.
- the condition trend of the sites again varied with two fairly large robust hill country sites improving through natural regeneration processes but the majority being either stable (9 out of 19 or 48%), or deteriorating (8 out of 19 or 42%).
- Of the sites that showed signs of deteriorating trend in condition, weed invasion was the main issue observed. This included a variety of weeds, such as barberry, wild plum, old mans beard, willows, wilding pines etc etc. The condition of several sites was also compromised by pest animals, including deer, pigs and goats.
- Another issue that was raised by 3 landowners was planned vegetation clearance in the near future to further develop farmland by subdividing blocks. Advice about the current and potential future rules on indigenous



Gully vegetation with wilding pines

vegetation clearance was provided and a copy of the relevant plan provisions sent out with the monitoring reports.

- A number of the properties had changed ownership since the original ecological surveys and several landowners had no knowledge of the sites and the values within them.
- Most of the sites were originally surveyed through the Department of Conservation and while landowners did receive information about the sites identified on their properties, individualised property based reports (which were provided through the Councils SNA programme in other ecological districts), were not produced for landowners at the time. The monitoring reports produced through this current monitoring project went some way to remedying this, providing a map of the site and a brief overview description of the ecosystem, along with the evaluation of its condition and trend.

8. Combined results Kekerengu, Medway, Grassmere and Wither Hills Ecological Districts 2014/16

8.1. Landowner Questionnaire

Forty nine landowners completed the telephone questionnaire process, 25 in the first season (Kekerengu and Medway ecological districts) and 24 in the second season (Grassmere and Wither Hills ecological districts). 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 assistance available to assist with protection work. This is most likely due to the difference in approach between the Council run SNA surveys and the Department of Conservation run Protected Natural Area surveys.

While the majority of properties were still in the same ownership (32 out of 56 properties), a number were in the hands of the next generation through family succession (6 properties) and 18 properties had changed hands and were in different ownership.



Remnant kanuka block in the Wither Hills Ecological District

The two areas of similar views across both groups were the desire to see the voluntary approach continue and the view that there was not a strong community of interest around most issues.

Overall, landowner attitudes and awareness is quite mixed. Many are quite positive about the sites and their state of knowledge of indigenous biodiversity and conservation had been elevated by involvement in the programme. Of the less interested and aware participants the attitude can generally be described as indifferent or uninterested rather than directly negative.

Many of the sites occupy less developed parts of the property and are not necessarily high priority for landowners, whose focus is on the more productive parts of the property. In

addition, for those landowners whose sites were identified as part of the Department of Conservation survey in 2001 and 2002, the lack of a property specific report and site maps may be a barrier to understanding the value of the sites. The engagement and monitoring report provided as part of this programme of questionnaire and site re-visits may go some way to remedying this situation. More ongoing information and engagement with this group of less aware landowners may help to raise the profile of these areas. It is notable that no landowners in the Grassmere and Wither Hills ecological districts have voluntarily protected sites through the Councils landowner assistance programme over the

years (although there are several examples of sites having some level of protection applied independent of the Council programme).

Overall, the level of landowner awareness and support for the SNA programme can be summarised as moderate to high in the Kekerengu and Medway ecological districts and moderate to low in the Grassmere and Wither Hills ecological districts.

8.2. Site re-visits

A total of 44 sites were re-visited, 25 in the first year (16 in the Kekerengu ecological district and 9 in the Medway ecological district), and 19 in the second year (8 in the Grassmere ecological district and 11 in the Wither Hills ecological district). A mix of ecosystem types were included, the majority being areas of broadleaved forest (15 sites), with 10 other ecosystem types represented:

_	Broadleaved forest	15
_	Rock scarp sites	4
_	Grey shrubland sites	5
_	Riparian forest sites	3
_	Wetland sites	6
_	Limestone scree sites	2
_	Manuka forest sites	1
_	Kanuka forest sites	4
_	Coastal dune sites	2
_	Podocarp forest sites	1
-	Tussock grassland sites	1

Table 6: Combined summary of results of SNA site revisits to Kekerengu, Medway, Grassmere and Wither Hills ecological districts- 2015/6.

State	Good	Good/Fair	Fair	Fair/Poor	Poor
	4 (10%)	15 (34%)	24 (54%)	1 (2%)	0
Condition Trend	Improving	Improving/Stable	Stable	Stable /Deteriorating	Deteriorating
	2 (4%)	3 (7%)	23 (53%)	9 (20%)	7 (16%)

Overall results combining all four ecological districts show that the sites visited were generally in reasonable condition (44% good or good/fair and 54% fair) which 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 (11% improving or improving/stable) and a reasonable proportion of the sites are deteriorating (36% stable/deteriorating or deteriorating). The reasons for the deteriorating condition vary but the main one is weed invasion, with the impact of farm stock and feral animals relevant in some instances. The sites that are deteriorating in condition are spread across all ecosystem types. In some cases direct management intervention could be very effective. However the widespread presence of old mans beard in many sites in the Medway area presents a real ecological dilemma, as in some cases stock are keeping the weed in check where they can access it. Any efforts at control would need to be well planned and applied over the whole locality to be effective

Another issue that arose in discussion with several landowners was the intention to clear areas of indigenous vegetation and a lack of awareness about the relevant controls in the Marlborough resource management plans. The relevant information and advice was provided to these landowners both verbally and in writing when the monitoring reports were sent out to them.

9. Conclusions

The long term nature of the SNA programme, and its focus on a voluntary approach, inevitably means that effort to protect identified SNA sites is somewhat uneven. By re-engaging with landowners information was gained on the level of awareness about the programme and how it is perceived. The mix of awareness and attitudes is probably to be expected, however more effort may be needed to improve this and therefore possibly stimulate efforts to protect identified areas. Apart from receiving an annual SNA newsletter and perhaps the occasional article in the news media over time, some landowners will have had very little engagement with the project for over ten years.

In regard to the condition of the selection of sites re-visited, the inherent resilience of these sites was apparent. None had been destroyed or removed (although some active vegetation removal has occurred in several cases), and most were at least in fair condition. While a good proportion were in a stable condition, more than a third of sites were deteriorating in some way, reflecting the ongoing effects of weed invasion and in some cases pressure from animals. The presence of old mans beard in many sites, particularly in the Medway ecological district, presents a real challenge. Several landowners in the Wither Hills ecological district expressed the intention to clear fairly large areas of vegetation in the hill country in the near future. The establishment of photopoints will enable future comparisons to be made in most cases.

The landowner assistance fund is available on an ongoing basis to assist with the practical protection and management of sites where this is feasible. Generally, in the context of pastoral farming, fencing appears to be the key as ongoing access by domestic stock tends to result in ecological deterioration. Fencing often leads to heightened weed and animal pest control, restoration planting and formal protection, spurred on by the visible plant regeneration



Conglomerate gully canyon with various fern species in Wither Hills Ecological District.

and tangible increase in native fauna. However, exceptions are where old man's beard is out of control (a serious issue in a number of sites) and where the values are dependent on grazing (such as tussock grasslands or prostrate kowhai shrublands). Weeds other than old mans beard are also a serious threat in a number of sites and require control to prevent continued deterioration in the condition of sites.

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. Other initiatives could include more active engagement with landowners through sector groups, ie, 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.

While the simple monitoring methods used in this exercise were designed to provide a fast way to assess the state and condition trend of sites, the information could be built on to develop a more comprehensive regional scale biodiversity monitoring programme at some point in the future.

10. Summary

The SNA programme has been in place since 2001 and is the main mechanism through which the Council promotes the maintenance and protection of indigenous biodiversity on private land in Marlborough. Participation in the programme is voluntary and therefore not all Marlborough landowners are involved in the project (around 80%). Of those that did participate in the original programme to identify sites, only a relatively small proportion (15%), have since acted to actively invest in protection of these sites through the Councils assistance programme.

This report focussed on re-engaging with all landowners in four ecological district areas that have SNA sites on their properties and re-visiting a selection of sites where no active management has taken place since the original identification in 2001/2002. Landowner awareness is mixed and further work could be done to promote the programme and its objectives. While most of the sites that were re-visited are naturally resilient remnants within very highly modified landscapes, a number are in deteriorating condition due to the impacts of weeds, feral animals and farm stock. This is to be expected without active management interventions in place.

The review has provided some information to assist in evaluating the effectiveness of the SNA programme which is based on a long term and voluntary approach. While there has been some positive proactive action in protecting a number of sites through the programme, further work to prioritise efforts to protect the biodiversity values within sites and promote landowner awareness and interest, would be beneficial to ensure that it continues to remain relevant and encourages the proactive action needed to successfully manage and protect remnant biodiversity areas on private land.

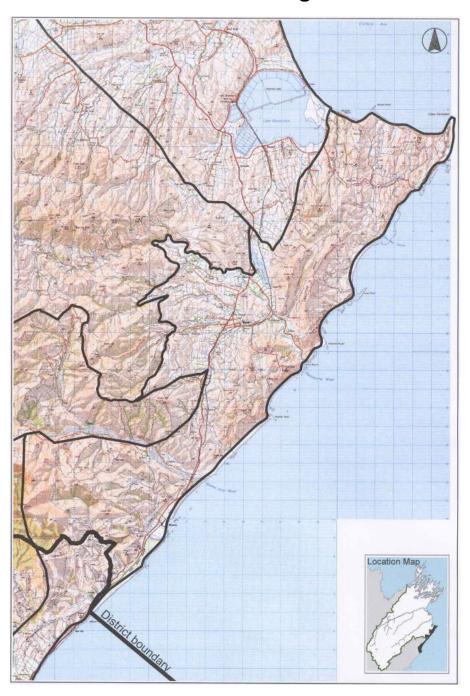
11. References:

Lee, WG, Allen R B; 2011, Recommended monitoring framework for regional councils assessing biodiversity outcomes in terrestrial ecosystems, Landcare Research Contract report LC1 44

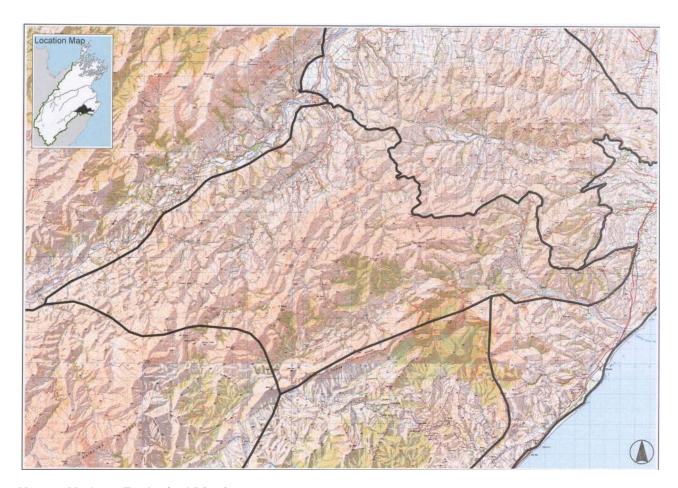
Ministry for the Environment, 2007, Protecting our Places – Information about the Statement of National Priorities for Protecting Rare and Threatened Biodiversity on Private Land

North, M, 2004, Wairau Ecological Region, Blenheim, Grassmere, Flaxbourne, Wither Hills and Hillersden Ecological Districts, Survey Report for the Protected Natural Areas Programme, Department of Conservation

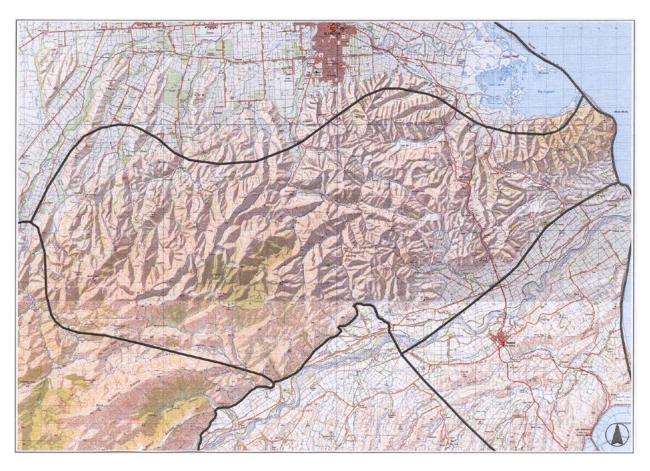
Appendix A: Detailed Maps of Kekerengu, Medway, Wither Hills and Grassmere Ecological Districts



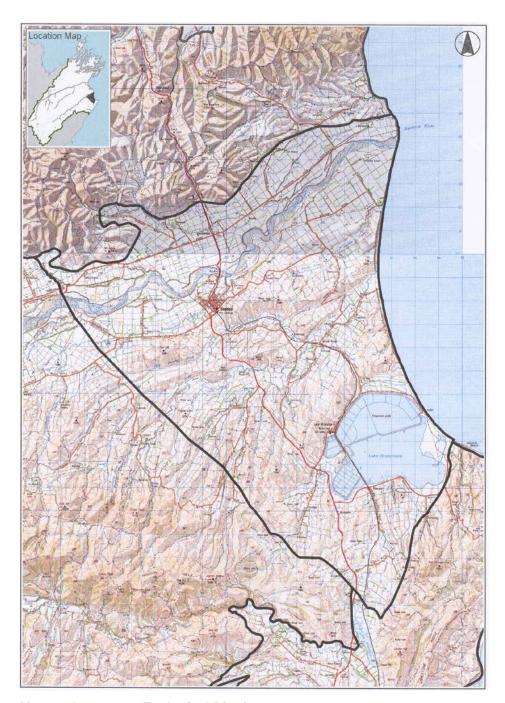
Map 3: Kekerengu Ecological District



Map 4: Medway Ecological District



Map 5: Wither Hills Ecological District



Map 6: Grassmere Ecological District

Appendix B: Monitoring Report Template

MARLBOROUGH DISTRICT SNA MONITORING REPORT

Property: Landowners/Occupier Site location: Protection works:	rs:		
Landowners/Occupier Site location: Protection works:	's:		
Site location: Protection works:			
Monitored by: Photopoints:			Date:
OVERALL MANAGEM	ENT OB	JECTIVE	
MAIN MANAGEMENT	GOALS		
ECOSYSTEM DESCRI	PTION		
SPECIAL FEATURES Flora/Vegetation: Fauna: Other:			
CURRENT MANAGEM	ENT ISS	UES	
SUMMARY Con	dition ¹	Trend ²	Comments
Ecosystem			
Vegetation			
Flora			
Fauna			
Weeds			
Animal pests			
Fences			
Plantings			
Other			
Next monitoring:			

NOTES

Photographs and Photopoints

¹ Good Fair Poor Don't know

² Improving Stable Deteriorating Don't know

Appendix C: Significant Natural Areas Project - Phone Survey Questions

Introductory comments

Hello, introductions, SNA survey on your property 2001/2, part of a voluntary programme by the Council to manage native biodiversity/habitats/vegetation

Explain that there are some bottom line rules around modifying wetland and clearing some vegetation but MDC also followed a pro-active, non-regulatory, voluntary approach with landowners through the SNA programme, we are investigating if this has worked? (explain that that includes this interview, as well as re-visiting some sites.

However, Council is responsible for state of environment reporting so need to know how if these sites are sustainable over time? Do landowners support this approach continuing etc etc. Landowners that are on Council's working group that can be contacted are Ross Beech, Chris Bowron and Kristen Gerard.

Are you happy to answer a few questions and/or is there anyone else (e.g. manager) that may be able to answer on their behalf?

Are you happy that I make notes about your answers and that these are provided to MDC staff? And do they want a copy of my notes sent to them? If so get e mail address.

Main Questions

Were you aware (before this phone call) of Council's SNA programme and that it is voluntary unlike some other regions in New Zealand?

Do you want this approach to continue and give reasons for your answer?

Are you aware of the SNA report for your property? Do you have a copy of the SNA report? If not would you like us to post/email you a copy of your SNA report and delay this discussion?

Are you aware of the individual SNA sites? Run through each site to check knowledge and interest (this could be tricky if they don't have map in front of them?)

Do you consider the SNA sites of value to your property/Are the SNA sites important to you? (offer a checklist list of what these values could be, ie, aesthetic, stock shade/shelter, family history, ecological values,)?

Do you aim to protect your SNA's in your general farm/property management activities?

If so, what have you done already and what other actions would you consider for protecting your site/s? (if \$\$\$ weren't an issue?) (offer checklist of actions taken or considered, ie light grazing only, fencing, weed control, animal pests)

Are you aware that MDC has a programme to help landowners protect these areas?

Would you be interested in Council's assistance with protection work?

Are there any issues common to others – projects of community interest where neighbours are/could work together on issues?

Access Request (where applicable)

Council is planning to re-visit some SNA sites in March/April 2015 to observe the condition of the areas/any changes or threats – we would like to visit sites *** on your property – would you be happy to allow access for this?

Final comments

Confirm contact details - email/ phone postal

Thanks very much for your time, the results of the questionnaire (general not specific) will be set out in the next SNA annual newsletter which will be sent to you about April.

Appendix D: Detailed summary and analysis of each question answered by landowners – Kekerengu and Medway Ecological Districts

Detailed summary and analysis of each question answered by landowners

Question: Were you aware (before this phone call) of Council's SNA programme and that it is voluntary unlike some other regions in New Zealand?

All but 2 landowners were aware of the Council's voluntary SNA programme with 13 (57%) of these being highly aware of this.

One landowner commented that "I does not think that the SNA programmes is voluntary as the information was used in RM consent process to impose subdivision consent conditions over the property outside the scope of the application and involved use of the SNA report. Considers that property rights are being eroded unfairly."

Question: Do you want this approach to continue and give reasons for your answer?

18 (80%) landowners want the Council's voluntary approach to continue with the following comments recorded from landowners that providing an insight to their reasons:

- Thought it was very well done. Wetlands and landscape were not done as well. Unhappy with landscape rules. Not all landowners got involved with SNA programme and were then being required to do this when resource consent being sought from the Council.
- The best way to deal with them is to talk to landowners. Was involved in wetland project over dam on property being identified that had been man made. Site was visited but not sure what happened. Also pissed off by landscape rules being imposed including forestry not being permitted.
- Its healthy approach as landowner feels part of decision making rather regulation.
- Voluntary approach is good. All properties should be surveyed and information kept confidential.
 Suggested that Council has responsibility to find a way for all SNA's to be identified as RMA requires all citizens to be aware of their responsibilities.
- It's been excellent. The Council helped with fencing and to tackle OMB. Without Council assistance difficult to deal with weeds in SNA. Bush has recovered since fencing completed.
- Has enjoyed dealing with the Council compared with ECAN where good dialogue wasn't possible.
 Believes that a voluntary approach is more effective to protect and maintain these areas.
- Should continue with being voluntary and with direct support and advice offered by Council. Current approach gives the landowner a choice.
- Very important as it takes time for people to learn. Best to demonstrate and lead by example, then
 communicate success. Use local networks. Keep process open and ensure landowners retain control
 over property.
- Voluntary approach is far favourable to regulation. However, not sure of which areas identified and what information is being held now on the property and what is voluntary nature of programme.

There were 5 (20%) landowners not sure on answering this question, with some comments including:

Council already doing more than being 'voluntary' in its approach.

Question: Are you aware of the SNA report for your property and do you have a copy of the SNA report?

12 (52%) landowners easily recalled their SNA reports (and some of them the ecologist visit) and also could remember they had a copy and where it was located. Another 3 (13%) of landowners could recall they had seen the report but either they no longer had a copy or had only seen it briefly during the purchase process when buying the property in the last 14 years. 8 (35%) landowners had never seen the report mostly due to being new landowners. PDF versions of SNA reports were sent to several landowners as requested and some phone surveys were delayed until the landowner had received the report and read it.

Some comments worth considering include:

- Landowner hadn't seen SNA report so copy sent to him. Has had visits from QE II who were in contact asap after property purchased. But no contact from the Council. Expressed concern that the information/SNA report hadn't been notified directly by the Council through LIM report when property purchased. Also queried if a new landowner could request to withdraw from programme and have information removed from the Council files.
- Subdivision of adjoining property allowed purchase so that additional SNA sites added to larger property. Process needed to complete new report to amalgamate information into one new property report.
- There was a lot of native vegetation on property when we purchased. We didn't know about the SNA programme but once we found the report, it was logical to identify and fence best bits of bush from rest of property. This assisted them with overall farm planning and development".

Question: Are you aware of the individual SNA sites?

14 (61%) landowners had a high awareness of their SNA sites while 6 (26%) had a medium level of awareness with only 3 (13 %) having low awareness. This often correlated with landowners having a copy of their SNA report or could recall having seen one. However, several other landowners (including new landowners by purchase) who had never seen the report yet still had a medium level of awareness of the SNAs on their property.

Question: Do you consider the SNA sites of value to your property/Are the SNA sites important to you? (in some cases a checklist list was offered of what these values could be, ie, aesthetic, stock shade/shelter, family history, ecological values).

15 (65%) landowners considered their SNA's to be highly important while 7 (30%) gave them medium importance. Only 1 (4%) considered they had little importance. Reasons given for importance included:

- All the above plus visitor appreciation and sustainable business branding.
- Loves native bush. Custodial attitude.
- Three key reasons; good for community, good for environment and has potential to add value to property in long term.
- Sites are very important. Ecology is the main reason. Want to protect/conserve bio diversity areas for future.
- Improve landscape of property: custodial responsibility; sustainability branding; ecological values all important.

Question: Do you aim to protect your SNA's in your general farm/property management activities? If so, what have you done already?

9 (39%) landowners had fenced at least one SNA site on their property since the survey, all of these with the Council support. 14 (61%) landowners said that they used management to protect the site to ensure that it was conserved. Comments included that the site was self sustaining and fencing not feasible due to difficult steep and rocky terrain; also sites only lightly grazed, mainly using sheep. Other comments were made about aerial spraying being used to control regeneration in surrounding areas rather than burning. A number undertake regular animal and plant pest control. This includes several landowners controlling goats with one trapping rats and ferrets.

There were no landowners not wanting to protect their SNA's in some way.

Question: What other actions would you consider for protecting your site/s and are you aware that the Council has a programme to help landowners protect these areas?

9 (39%) landowners have a high level of interest in taking further actions to protect one or more SNA sites and are aware that the Council could be approached to support them do this. 7 (30%) landowners have some interest in further protection but are not fully aware that the Council is offering support. 7 (30%) landowners are either absolutely unaware of there being support available from the Council and/or have no plans to take any further action to protect their site.

Question: Would you be interested in Council's assistance with protection work?

9 (39%) landowners had a high level of interest in getting the Council assistance to protect one or more of their SNA sites while 6 (26%) landowners had a medium level of interest and maybe would get Council assistance with 8 (35%) having little or no interest in Council assistance. This assistance included some interested in possibly fencing 1 or more of their sites; a lot of interest in old man's beard control as well as some interest in trapping animal pests, particularly rats and mustelids.

Question: Are there any issues common to others – projects of community interest where neighbours are/could work together on issues?

3 (13%) landowners already had a community of interest and were working with their neighbours on old man's beard control in the part of the Ure catchment. Another 9 (39%) landowners expressed interest in working with their neighbour or the need for a community lead action to control old man's beard in the Medway and Flaxbourne catchments. Also two landowners were interested to see community led action to restore Lake Elterwater. 11 (48%) landowners said there were no common issues that they could identify, in some cases because of the relative isolation of their SNA's sites in the coastal parts of Kekerengu ED.

Appendix E: Detailed summary and analysis of each question answered by landowners - Wither Hills and Grassmere Ecological Districts

June 2016

Survey carried out by Paul Millen of Millen Associates Ltd - November 2014 to May 2015

Detailed summary and analysis of each question answered by landowners

Question: Were you aware (before this phone call) of Council's SNA programme and that it is voluntary unlike some other regions in New Zealand?

10 (38%) landowners had little or no awareness of MDC's voluntary SNA programme with the other 16 having some or a good knowledge of the programme.

Landowner comments included:

- Knew nothing about the SNA programme. Purchased property 5 years ago. Didn't recall getting any notification about the site when purchasing.
- Can recall visit by ecologists but not aware of SNA programme or that it is voluntary.
- Not really and not aware it was voluntary.
- Yes. Familiar from time of survey. Unsure about what voluntary approach means. Don't want rules imposed.
- Yes. But didn't think it was voluntary as the main site on the property now listed as a wetland...not voluntary.
- While it is voluntary there is insufficient resources provided to support effective conservation.

Question: Do you want this approach to continue and give reasons for your answer?

16 (64%) landowners supported MDC's voluntary approach continuing with the following comments recorded that provide an insight to their reasons. Another 9 (36 %) landowners had not been aware of SNA programme and provided little or no feedback on this question.

- Keen to be involved. Rules not needed to be interested. Needs advice on what is the best management for the site.
- Neutral about MDC policy.
- Voluntary is a good approach as landowners are increasing their understanding of importance of ecology.
 Using rules now will not be helpful.
- It should continue. Every farm is different, better not to be forced onto landowner.
- Yes. If there are rules for farmers who 'tag' parts of their farm as an SNA that are different to non-SNA
 areas then farmers may be reluctant to subscribe to SNA. Rules should cover all areas whether SNAs or
 not. SNAs are about acknowledging special environments, promoting their enhancement in a voluntary way
 and landowner education. Not another rule layer.
- Yes. Support voluntary approach as want to retain control of decision making and what's to done on the farm.
- Large SNA's can be a burden on the landowner. While they merit conservation there is not enough support for SNA protection or enhancement as no rates rebate for retired land, no financial assistance for ongoing weed & pest control or for fencing maintenance.

Question: Are you aware of the SNA report for your property and do you have a copy of the SNA report?

Only 7 (25%) landowners easily recalled their SNA reports (and some of them the ecologist's visit). Some of these could remember they had a copy and where it was located. Another 5 (16%) landowners could recall the survey but had not seen the report. The remaining 13 (60%) had never seen the report some of whom were new landowners. Some comments worth considering include:

- Yes and still have copy of the SNA report.
- Yes, was aware and approached Council proactively to get a SNA assessment carried out.
- Already have a QE II covenenant over part of the SNA area. Original DoC report is not accurate. Would
 have been better to have been advised that it was an old report. Could have requested that landowners
 provide information on any changes.
- Can personally recall the visit by ecologist about 15 years ago but not aware of report. There have been two changes in management since initial visit.
- Bought in 2004 and were not aware of site until receiving letter recently.
- Have not been aware of the SNA on the property. While keen to conserve native ecology, don't like the
 idea of so much of the property being included in the site.

Question: Are you aware of the individual SNA sites?

9 (36%) landowners had a high awareness of their SNA/PNA sites with another 9 landowners having a medium level of awareness and 7 (28%) having low awareness. Higher awareness correlated with landowners having a copy of their SNA/PNA report with other landowners (including new landowners by purchase) who had never seen the report but still had a medium level of awareness of the SNAs on their property.

Question: Do you consider the SNA sites of value to your property/Are the SNA sites important to you? (in some cases a checklist list was offered of what these values could be, ie, aesthetic, stock shade/shelter, family history, ecological values).

10 (40%) landowners considered their SNA's to be highly important while 5 (20%) gave them medium importance while the other 10 (40%) believed they had little importance. Reasons given for importance included:

- · Views and coastal environment highly important.
- The site is important for allowing regeneration of native species. It is also an attractive green landscape in dry environment. Nice area to walk or drive with high aesthetic values.
- Yes, the entire area is important because half of the evaporation process to produce salt occurs in the lake. Lake has appropriate zoning for making salt and this is an industrial activity. However lake is catchment for surrounding farms that increase freshwater content and limit further potential development. Birdlife likely increased following works to develop the salt works in 1940's and in 1960's due to lake becoming permanent water feature. Any new development of the lake is unlikely to affect bird populations. Birds are a key part of the site and the company permit accompanied visits of the local ornithological society access for birdwatching. The development of the lake has provided flood protection for local lower lying farmland and prevented the area drying out into a dust bowl over the summer months.
- Important to protect what's already there. This gives it a chance for it to improve. Regeneration is starting to happen and birdlife is increasing. These areas are important for farm landscape.
- Not financially important, but extremely important personal value that is really appreciated.
- We plan our farming around them (entered into PFSink in the Branch and have carbon from post 1990 and investigating some pre-1990 carbon too).
- Likes the aesthetics of the bush and also that wilding pines are becoming established.
- The property is not economic so every little bit of new pasture helps, "its only wiggy wiggy" and don't see that as high value, however, would consider protecting a small area if it was shown to have high values.
- The site is valued for conservation and stock grazing. Not fenced.

- Site seems pretty insignificant but was thinking of fencing off some of it as stock graze in vineyard at times,
- Not of much value or interest.
- Main value is for stock shelter.
- Not really sure. It's just scrub with nothing very significant.

Question: Do you aim to protect your SNA's in your general farm/property management activities? If so, what have you done already?

10 (42%) of landowners are actively working to protect one or more SNA sites, a few by fencing with others through management. 8 (33%) of landowners said that they some interest in protecting the site but didn't take any action to see that was conserved as they considered it looked after itself. The remaining 6 (25%) were not interested in protecting their site. Comments included:

- Have already protected a number of sites and always looking at options. Some new native planting also been done
- Keen to protect the site so would consider any necessary action required.
- Fencing would be ideal, some associated weed control would also be needed, long narrow site makes
 fencing expensive, other more pressing issues like nasella tussock control is a priority currently, recent use
 of Taskforce chemical not been successful and is costly.
- Cannot afford to protect these areas as needed for stock to utilise. There's a lot of broom and some widling pines throughout.
- The bush has to survive and does without needing to do anything.

Question: What other actions would you consider for protecting your site/s and are you aware that MDC has a programme to help landowners protect these areas?

5 (21%) landowners were aware of MDC's SNA programme and the support available to them for further protection work. 3 (13%) landowners have some interest in protection but were not aware MDC offered support. 16 (67 %) landowners were unaware of possible MDC support and have no plans to take any further action to protect their site.

Question: Would you be interested in Council's assistance with protection work?

7 (29%) landowners had a high level of interest in getting MDC assistance to protect one or more of their SNA sites while 8 (33%) landowners had a medium level of interest and maybe would get MDC assistance with 9 (38 %) having little or no interest in MDC assistance. This assistance included some landowners being interested in fencing 1 or more of their sites; a lot of interest in old man's beard control as well as some interest in controlling wilding pines and other weeds. Also in controlling goats and pigs.

Question: Are there any issues common to others – projects of community interest where neighbours are/could work together on issues?

2 (8%) landowners are already working together on goat and pig control. Another 7 (29%) landowners expressed the possibility of working with their neighbour in some cases to control old man's beard. 15 (63%) landowners said there were no common issues with neighbours due to the site being small and isolated or they didn't share same view as their neighbour if the site crossed boundaries. Others simply said no.

The comment below is worth considering.

• There is the issue of the potentially a large cost for protection of large SNA's that is shared by other landowners with large SNA's. One landowner holds an annual fundraising walk to get support for their property so it could be possible to hold an annual fundraising event. Would MDC help with something like this?