

Kotahitanga mō te Taiao

# KOTAHITANGA MŌ TE TAIAO STRATEGY



## Kotahitanga mō te Taiao Strategy

This co-designed strategic document provides high-level outcomes to achieve significant conservation gains as well as social, cultural and economic benefits to communities that will grow our resilience as a region; outcomes that no one entity could achieve alone. We acknowledge that the high-level outcomes defined in the Place section are a starting point and that significant engagement and collaborative processes are required to further inform this direction. The Alliance is committed to kotahitanga (working together) to achieve these transformational outcomes This Strategy is dynamic, and we acknowledge that community aspirations and unrecognised opportunities may occur and must be considered. As an Alliance, we will consider any such significant changes or opportunities and work to the strengths of the members to secure the best possible outcomes for the region.



## Contents

Who We Are	4
Purpose	5
How this Strategy works	5
Our Vision	6
Our Mission	6
Our Values	6
Outcomes of implementing this Strategy	6
Mātauranga Māori	7
Te Tiriti o Waitangi/Treaty of Waitangi	8
Implementation	9
Review and Measurement	10
What transformational change looks like	11
Top of the South as a whole	14
1. Northwest Nelson	19
2. West Coast Marine	22
3. Nelson Motueka	23
4. Nelson Bays	26
5. Nelson Lakes	28
6. Mt Richmond	31
7. Marlborough Sounds/Cook Strait	33
8. Wairau	36
9. Inland Marlborough	38
10. Kaikōura	40
11. East Coast Marine	42
Appendix 1 – Contributing organisations and individuals	44
Design Working Group	44
Science Workshop	44
Appendix 2 – Technical reports supporting the creation of the Strategy	45

#### Who We Are

Kotahitanga mō te Taiao is an alliance formed by of all the Councils and some of the iwi in the top of the South Island, and the Department of Conservation. Our focus is on landscape-scale conservation projects that also have environmental, social, economic, and cultural benefits. Members are listed on the title page of the Strategy.

Many of our biodiversity taonga<sup>1</sup> are unique to New Zealand (Aotearoa). The environment and people are interconnected. Look after the environment and the environment will look after you.

This Strategy has been created by the Kotahitanga mō te Taiao Alliance (the Alliance) to facilitate collective action, enable access to funding opportunities to enable and enhance delivery on biodiversity outcomes. Kotahitanga is about collaboration, working together to achieve shared outcomes that enhance and protect te Taiao, our natural heritage.

The Alliance is committed to working in partnership to align and integrate the efforts of Alliance members. This Strategy has been created with the support of practitioners and scientists active in natural heritage management. This process worked through collaboration and consensus on the issues and opportunities. The creation of the Strategy did not involve a formal collation and documentation of evidence, although many of the contributors are published authors on these matters. Contributing organisations and individuals are listed in Appendix 1. Three technical reports were completed to support the Strategy development. These provided science advice, a framework to be used for economic analysis, and guidance on application of mātauranga Māori. They are listed in Appendix 2.



<sup>&</sup>lt;sup>1</sup> Treasured resources

#### **Purpose**

The purpose of this Strategy is to align the efforts of the Kotahitanga mō te Taiao Alliance to enable its vision, mission, and outcomes to be achieved through collective action, while attracting and securing investment and enabling system and behaviour changes.

### How this Strategy works

This Strategy is visionary and designed to be applied in a diverse range of ways. It is transformational and future focused and creates a framework linking long term vision to pragmatic actions.

#### Vision

Vision defines what the future will look like when the Strategy is fully implemented. The Alliance vision is that our extraordinary natural heritage is flourishing, having been restored over large areas, including where people live. People live, care for, and benefit from the environment in ways that bolster natural ecology together with the communities that live within them.

#### Mission

The Mission guides how the strategy will be implemented. The Mission of the Alliance *is to work* together to create a connected and aligned region that understands, protects, enhances, and future proofs the values of nature critical to the Top of the South and that this flourishing nature in turn enriches its communities.

#### Outcomes

The Outcomes are the tangible achievements of the Mission as we progress in achieving our collective Vision. Five Outcomes set out the results that successful implementation of the Strategy will achieve. These integrate the health of the natural heritage with the well-being of people

#### Values

The Values define how we will work together. The Values are grounded in Mātauranga Māori, Māori knowledge of the indigenous people of Aotearoa. These have informed formation of the Strategy and will shape its implementation.

A summary of the Vision, Mission, Values and Outcomes of the Strategy is outlined in Table 1 below.

Our extraordinary natural heritage is flourishing, having been restored over large areas, including where people live. People live, care for, and benefit from the environment in ways that bolster natural ecology and the communities that live within them.	To create a connected and aligned region that understands, protects, enhances, and future proofs the values of nature critical to the Top of the South and that this flourishing nature in turn enriches its communities.	OUR VALUES	Matauranga MãoriMatauranga MãoriKotahitangaRangatiratangaMauriAcceptance and Acceptance and Mãori epistemologiesUnity of purpose and collective agreement for achievement of within the construction of key concepts and projectsUnity of purpose and determine use and management of the protected including 	OMES OF IMPLEMENTING THIS STRATEGY	<ul> <li>3. 4. 5.</li> <li>5. 5. 4. 5.</li> <li>6. Wilderness is sustained People flourish in harmony Ecological connections and resilience with nature are protected, restored and enhanced ad</li> </ul>
Our extraordinary natural herita People live, care for, and benefit that live within them.	To create a connected and align nature critical to the Top of the		Kaitiakitanga Provision of active utilisation, preservation, conservation, maintenance, and management of the environs (including flora, fauna, aquatic and marine)	OUTCOMES	2. Naturally functioning ecosystems are protected, restored and
OUR VISION Pe	OUR MISSION <sup>To</sup>		Manaakitanga To care for each other, to be respectful, and an act of reciprocity of natural resources to be shared with others		<b>1.</b> Native species, including those found nowhere else, are thriving

Table 1

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### Mātauranga Māori

Mātauranga Māori is a traditional knowledge system founded on cosmology of the universe and the creation of the world and all living things contained in the world. The mātauranga Māori information in this Strategy is drawn from a report commissioned by the Alliance<sup>2</sup>. This reflects a Māori world view for Te Tau Ihu iwi. Other iwi such Ngāi Tahu Papatipu Runanga, Te Runanga o Ngati Waewae and Ngati Kuri will also have their own traditional knowledge. It needs to be extended in relation to places, and for the iwi within the Top of the South that may include differing traditions.

Core to mātauranga Māori is the interconnected relationship between the spiritual world, natural world, te Taiao, and people. Tangata whenua, the people of the land therefore share a whakapapa (ancestry) with Ngā Atua kaitiaki and te Taiao.

Ngā Atua kaitiaki relate to the natural world, taonga (treasured resources), and management practices important to sustaining te Taiao. These Atua are the offspring of Papatūānuku (the Earth Mother) and Ranginui (the Sky Father) and are therefore siblings. They connect by whakapapa (ancestry), the people of the land and their natural environment and all living things on land and sea. Ngā Atua kaitiaki listed by Te Tau Ihu iwi are:

Tawhirimatea - guardian of winds, air and clouds.

Tangaroa - guardian of all fish, seas, ocean, rivers and waterways.

Tūmatauengā - guardian of war, conflict, negotiations and people.

Rongomaraeroa or Rongomātane - guardian of peace and cultivated foods.

Tāne Mahuta - guardian of ngahere (forests), birds, and creator of light and people.

Tutewehiwehi - guardian of reptiles and amphibians.

Haumiatiketike - guardian of uncultivated foods and fern roots.

Tangata whenua are the physical representation of Ngā Atua kaitiaki and therefore kaitiaki of te Taiao, the environment.

In Te Aotūroa (the framework used in the supporting report) the physical elements of Ngā Atua kaitiaki require the elements of each other to coexist. Plants require water, water is replenished by rain and snow, and wind requires heat from the earth and vapours and moistures from the oceans. All animals and humans require all environments to exist and be healthy. Te Taiao is critical to the sustenance of life. The management of te Taiao is dependent on how natural attributes are managed and utilised, preserved and conserved, restored, and replenished for their own intrinsic worth against developments and impacts of pollution and natural disasters.

Giving expression to this world view, and the inter-relatedness of people and all living and physical things is fundamental to this Strategy. The core values that underpin the relationship of care and utilisation are the values that will govern implementation of the Strategy. Key criteria are incorporated that will be used to guide the projects and programmes and Alliance support. These are listed in the section on implementation.

<sup>&</sup>lt;sup>2</sup> Mātauranga Māori - Understanding and applying Māori Knowledge. Tracey Kingi KIC Ltd. November 2018.

## Te Tiriti o Waitangi/Treaty of Waitangi

Te Tiriti o Waitangi/The Treaty of Waitangi is the founding document of New Zealand/Aotearoa and partnership relationship between the Crown and iwi. The Alliance is made up of iwi trusts and statutory organisations. These organisations have specific responsibilities to implement Treaty obligations to iwi in their activities. These include development and implementation of this Strategy.

The Treaty partnership is a reciprocal relationship enhancing the ability of iwi to participate in conservation activities and to work together for greater outcomes that will benefit Māori and the wider community. This Strategy has been developed to foster good faith engagement at the highest level, collaborative relationships, and to create a platform for growing a shared vision into the future.

#### Treaty responsibilities for agencies come from:

- the Principles of the Treaty of Waitangi in Acts of Parliament;
- acknowledgements in subsidiary regulations and instruments such as statutory acknowledgements; and
- Government policy.

#### For natural heritage the following Acts of Parliament are relevant:

- 1. Te Ture Whenua Māori Act 1993 is the primary legislation to facilitate and promote the retention, use, development and control of Māori land by Māori owners, their whānau, hapū and descendants.
- 2. The Conservation Act 1987 governs all work of DOC and Fish and Game Councils and states in Section 4 *"This Act shall so be interpreted and administered as to give effect to the principles of the <u>Treaty of Waitangi</u>".*
- 3. The Local Government Act 2002 governs the work of Councils and it states that "In order to recognise and respect the Crown's responsibility to take appropriate account of the principles of the <u>Treaty of Waitangi</u> and to maintain and improve opportunities for Māori to contribute to local government decision-making processes, <u>Parts 2</u> and <u>6</u> provide principles and requirements for local authorities that are intended to facilitate participation by Māori in local authority decision-making processes."
- 4. The Resource Management Act 1991 states in Section 8 that "In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the <u>Treaty of Waitangi</u> (Te Tiriti o Waitangi)." In Section 6 the Act requires those exercising powers to recognise and provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga and in 7 to have regard to kaitiakitanga. This is further elaborated for the Top of the South in the Te Tau Ihu Statutory Acknowledgements which insert provisions into the Resource Management Plans of Marlborough District Council, Nelson City Council and Tasman District Council.
- 5. The Ngāi Tahu Claims Settlement Act 1998 provides recognition of particular areas and species of importance to Ngāi Tahu.

The Strategy should be read with reference to the above. Treaty related provisions in plans, policies, and strategies made by Alliance members are also relevant. These include iwi management plans, conservation management strategies and plans, and the plans and strategies of local and regional government under these and related statutes.

## Implementation

The Alliance partners are committed to working together to implement the Strategy. A Memorandum of Understanding (attached as Appendix 3) has formalised the relationship. Each Alliance partner retains its autonomy and authority while aspiring to collaborate to achieve the shared Outcomes. Alliance partners will provide effective governance linking new projects with existing programmes. New partners may be invited to join the Alliance. To become a partner, organisations will commit to the Memorandum of Understanding, the Mission of the Alliance, and to implementing the Strategy. Alliance partners will commit to the Values in the Strategy in their working together.

The Alliance will implement the Strategy in four ways:

#### 1) Alliance Partner alignment

Each Alliance Partner will work to align with the Strategy within their individual entities. This may include using the Strategy as a high-level document to guide more detailed processes in the future such as statutory plans, policies, and business planning. As a non-statutory document, the Strategy cannot direct or require specific content for these documents. Rather it sets high-level guidance and identifies opportunities for collaboration and cooperation.

#### 2) Alliance collaboration on projects and programmes

Implementation of this Strategy will occur through support and advice, as well as ongoing programmes of work. Many will create step changes that enable longer term sustainable action. Community engagement will be integral to achieving our vision and sustaining heritage restoration.

Action and engagement plans will provide specific projects and programmes of work. These will be collectively written by key partners and mana whenua within the programme areas. They will seek to align with the direction and outcomes identified in the Strategy. It is through action plans that indicators to measure progress towards the outcomes will be developed.

#### 3) Alignment with others

The Alliance will individually and collectively engage and seek to align with other relevant regional processes such as the 2077 Te Tau Ihu Regional Growth Strategy, and national processes such as the National Policy Statement on Biodiversity and the New Zealand Biodiversity Strategy.

#### 4) Endorsing and supporting others to implement the Strategy

It is expected that the Alliance may receive requests to support or endorse funding applications from others such as community trusts or community groups. The criteria to identify which projects and programmes the Alliance should support are listed below. They are divided into two parts; characteristics the project <u>must have</u> to merit support and assessment criteria. Each assessment criterion requires a scalable definition for consistent use as the assessment will be on the degree of contribution. Projects gain merit by meeting all <u>must have</u> criteria and by scoring highly on assessment criteria.

#### Must:

- 1. Have clear outcomes that support Strategy implementation.
- 2. Be consistent with all Values set out in the Strategy.
- 3. Be based on best available information, science, and practice.

#### Assessment criteria:

- 4. Contribution to biodiversity value.
- 5. Range of Strategy Outcomes supported.
- 6. Preserves options, avoids irreversible loss, minimises future costs and/or increases ecological resilience.
- 7. Builds knowledge that can be applied more broadly.
- 8. Cost effectiveness.
- 9. Likelihood of achieving stated project outcomes and sustaining the gains.
- 10. Extent of community support, engagement, education, and well-being.
- 11. Increasing opportunities for tangata whenua to practice customs and traditions associated with their natural environments.
- 12. Supporting tangata whenua to have access to culturally important mahinga kai (food gathering areas) and areas of historical and special significance.
- 13. Being consistent with settlement obligations and statutory acknowledgements.
- 14. Making provision for cultural monitoring where projects or programmes may affect significant sites, traditional customary areas, mahinga kai, maunga, or wahi tapu.

#### **Review and Measurement**

The Strategy will be reviewed when the National Policy Statement on Biodiversity and the NZ Biodiversity Strategy are completed, and then fully every 5 years with a progress assessment each year.

Implementation will be assessed with reporting on the actions undertaken to deliver the Strategy back to the Alliance on a regular basis in order to measure progress, provide the opportunity for realignment, and to keep the Strategy live.

Success indicators will be evaluated as a measure of progress and are expected to be developed at the project and programme level. These will be collated to report on progress on the Strategy as a whole. The Strategy will be amended as agreed by Alliance Partners.

## What transformational change looks like

The following sections identify major initiatives for transformational change for the Top of the South Island as a whole and for 11 defined places within the Top of the South Island. The Strategy identifies transformational change without muting the message over social or political constraints, which will need to be taken into account in developing particular projects or programmes. The high-level outcomes defined in the Place section are a starting point, and significant engagement and collaborative processes are required to further inform this direction. Each section provides an overview of the character of the different 'places', what the Alliance wants to achieve, what success looks like, and how the Strategy will help the places get there. It also provides a shared vision for each of the defined places. Sections also identify which outcomes initiatives relates to as outlined in

#### Table 1:

Outcome 1 - Native species, including those found nowhere else, are thriving.

Outcome 2 - Naturally functioning ecosystems are protected, restored and enhanced.

Outcome 3 - Wilderness is sustained.

Outcome 4 - People flourish in harmony with nature.

Outcome 5 - Ecological **connections and resilience** are protected, restored and enhanced.

#### **Places**

The Strategy describes success at the level of the Top of the South as a whole, and for **11 defined places**. While mapped boundaries are provided, these are simply to create the basis for strategic analysis. In reality, the connections between places are as important as the places themselves. The Strategy is designed to encourage collaborative action to emerge at a range of scales. The place sections often identify the same issues at different locations.

**Character** descriptions for each place give a current state of the natural heritage of each part. **Challenges** identify the big issues we are trying to solve. **Building blocks** detail some of the existing initiatives for each place that we can build on. These are not intended to be exhaustive.

Our shared future provides a vision of what we want for each place.

Description of **what we want to achieve** in each place provides detailed goals and each is linked back to the overall outcomes. Many of these are aspirational and in practice cannot be achieved in all places at all times. While we want rivers and streams to flow unimpeded, in some cases we will have to settle for mitigation, such as fish passes on dams. All of these detailed goals are challenging, and few could be achieved by any one party working alone. For each, we describe **what success looks like** and **how to get there.** These are actions necessary to achieve the outcomes. This is not an exhaustive list and many more will be identified as we engage and undertake the collaborative processes required to further inform the projects and programmes of work. As the Strategy is implemented, the 'how to get there' will also be further defined and informed through policies, iwi management plans and long term plans.

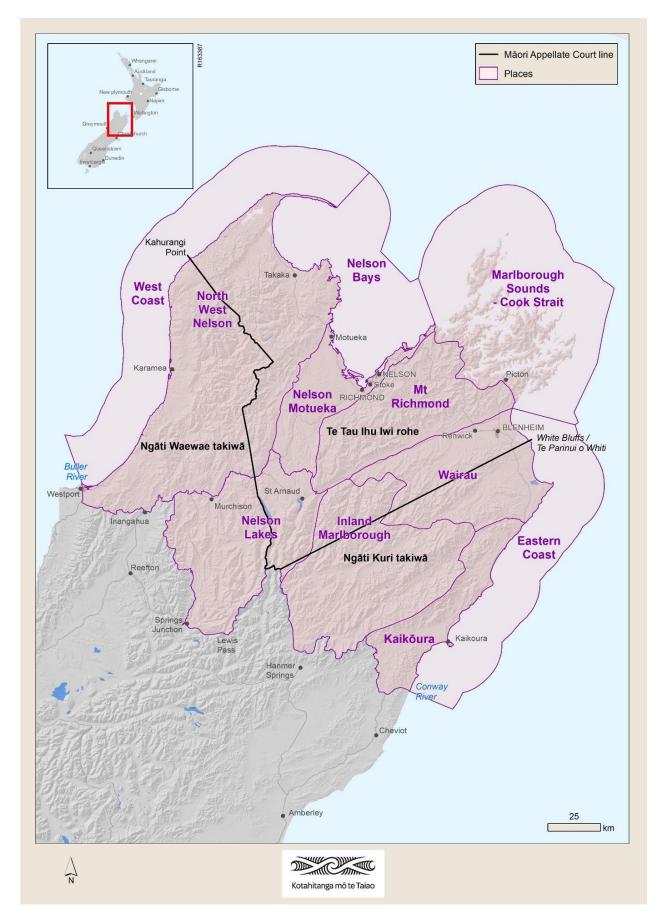


Figure 1 – the places in this Strategy, noting that in nature there are places we relate to, but no hard boundaries

## Top of the South as a whole

This section identifies the character, challenges and major initiatives for transformational change at the level of the whole region. The actions identified here work across places and boundaries. The list is intended as a starting place, and it is expected that more transformational actions will be identified over time.

Character	The Top of the South Island is the most environmentally diverse and ancient part of New Zealand. It is home to hundreds of species found nowhere else in the world and these form unique natural communities. This is the beech forest capital of New Zealand. The Top of the South has temperate marine environments with exceptional diversity of habitats that range from extensive intertidal flats to deep canyons, and very sheltered to wild and exposed coasts. The region has strongholds for a wide range of species and ecosystems which are now rare and threatened elsewhere in New Zealand (e.g. shorebirds, seabirds, Great Spotted Kiwi), and many are found nowhere else in the world (e.g. giant land snails, giant cave spiders, King Shag, Cook Strait tuatara, coastal peppercress). The Top of the South has large rural communities and some small to medium sized towns. Its economic base includes strong primary industries alongside tourism and other sectors. There are nine iwi present in this area, each with its own unique history and relationship to the land.
	<ul> <li>Challenges:</li> <li>Much of our natural heritage is in crisis, as past introductions of pests and ongoing pressures from human use compromise natural functioning ecosystems and disrupt connections.</li> <li>Although the region has large integrated management programmes for pests and major investment by national and local government and by citizens, the scale of the issues is such that further loss and extinction is inevitable without transformational change.</li> <li>Largely natural uplands in the west are degrading under pressures from mammalian predators and herbivores.</li> <li>Dry eastern areas are highly modified by burning and grazing but sustain a suite of unique species in natural remnants.</li> <li>Lowlands throughout the region are highly modified, and most natural ecosystems are now highly threatened or degraded.</li> </ul>
	<ul> <li>Building blocks:</li> <li>Many groups are trying to address these issues but resource limitations prevent landscape level programmes except in a few places. The region is poised to step up to resolving these issues.</li> <li>Communities and individuals have increased their contributions more than tenfold in many places across the region over the last decade.</li> <li>New technologies and understanding are becoming available, and previously intractable problems are being solved.</li> </ul>

#### **Our Shared Future**

We rejoice as our extraordinary natural heritage is flourishing, having been restored over large areas, including where people live. People are informed, and respectful human behaviour enhances the environment in ways that bolster natural ecology, and this enriches their lives. Species and ecosystems thrive. Future generations benefit from a healthy natural world supporting a healthy equitable society and understand how to sustain this. The Top of the South leads innovation in action and respectful human behaviour that acknowledges the interconnected relationship of the natural environment and the health and wellbeing of communities. Iwi customs, traditions, spiritual values are protected, enhanced and maintained through access to healthy, clean, safe and abundant natural environments. Mahinga kai and mataitai have been protected, enhanced, and maintained. Iwi aspirations for the management of te Taiao acknowledge and recognise matauranga Māori and the partnership relationship. Traditional foods, including uncultivated foods, are available for harvest and planting. A peaceful and harmonious working relationship is upheld based on our shared values. Indigenous plants, birds, animals and forests are healthy, abundant and managed sustainably.

What we want to achieve	This is what success looks like	How to get there
<b>TOS 1.0</b> People understand and care for their natural heritage, moving to ecologically sustainable use of their environment and restoring past damage. (Outcome 4)	The majority of citizens, industries, and visitors know what makes the region special and are actively involved in sustaining and restoring nature.	Inspire curiosity about natural heritage and support people to care for it.
		Socialise active support for landscape scale nature restoration.
		Grow understanding of how thriving ecosystems contribute to thriving communities.
<b>TOS 2.0</b> lwi customs, spiritual values, and traditions have been maintained through access to healthy, clean, safe and abundant environments. (Outcomes 2 and 4)	Mahinga kai and mataitai have been protected and maintained. Traditional foods, including uncultivated foods, are available for harvest and planting. Indigenous plants, birds, animals and forests are healthy, abundant and managed sustainably.	Document iwi aspirations for the management of the te Taiao and develop programmes and projects that align with these.
<b>TOS 3.0</b> Beech forest ecosystems functioning is no longer impacted by introduced pests. (Outcomes	Future beech masts are a cause for celebration because the forest floors abound with	Ensure herbivores and predators are eradicated or kept at low numbers.
1, 2, 3 and 5)	seedlings awaiting their opportunity to be part of the	Effective beech mast responses throughout the Top of the South.

	forest canopy. Native birds, reptiles, bats and invertebrates thrive within the forests.	Undertake landscape-scale wasp and possum control.
	Beech forests drip with honeydew and are scarlet with mistletoe.	Utilise technological and operational advances in pest control operations.
	Large areas are predator free.	Efficient and cost effective control of pests.
	Increased control over more pests over greater areas.	Gain social support for new and effective technologies and new increased funding.
<b>TOS 4.0</b> Landscapes free from wilding conifers and invasive weed species. (Outcomes 1, 2 and 3)	Invasive weeds eradicated or at low densities, including conifers outside areas where they are deliberately cultivated.	Landscape scale wilding conifer and invasive weed control.
<b>TOS 5.0</b> Estuaries free of invasive weeds. (Outcomes 2 and 3)	Estuaries dominated by native vegetation.	Eradicate <i>Spartina</i> cordgrass and other invasive weed species from all estuaries.
<b>TOS 6.0</b> Natural ecosystems that are resilient in the face of climate change. (Outcomes 2 and 5)	Natural ecosystems are given space to move inland and south as climate changes.	Plan for managed coastal retreat that allows natural ecosystems to survive.
	Proactive action to reduce future pest pressures before the changing environment allows them to multiply and spread.	Identify potential changes in weed and pest pressures as temperature and rainfall changes, and act proactively to reduce risks.
	Increased buffers around streams and planting of erosion prone hill slopes with permanent indigenous vegetation.	Change land uses to mitigate the effects of increased frequency of high intensity climatic events – e.g. storms and droughts.
	Natural ecosystem requirements are included proactively in planning processes dealing with environmental instability.	Provide for natural ecosystems in planning infrastructure changes required in response to climate change.
<b>TOS 7.0</b> Key land areas that are important to biodiversity are identified and formally protected. (Outcomes 2, 4 and 5)	Area of land managed for biodiversity outcomes has increased.	Encourage mechanisms for land- use change and protection for biodiversity in this region.
<b>TOS 8.0</b> The full range of native species is secured, protected and	All species populations are stable, and no species are	Control pests and invasive weeds.

sustained throughout their natural range and, where	threatened with extinction due to pests and weeds.	
possible, lost species are re- introduced. (Outcome 1)	Habitat degradation and destruction ceases.	Protect habitats are from land clearance and wetland drainage.
	Lost species are being reintroduced and sustained and communities care for them.	Reintroduce species where pest control permits.
	Effective techniques are used at landscape level	Fill knowledge gaps and develop and deploy required new technologies.
<b>TOS 9.0</b> The full range of native terrestrial ecosystems is sustained. (Outcomes 2 and 5)	Pressure from browsers, predators, wasps and invasive weeds is reduced to sustainable levels.	Develop landscape level methods to control a range of introduced pests.
<b>TOS 10.0</b> Internationally important features secured and celebrated. (Outcomes 1, 3 and 4)	The following internationally important features are secure and celebrated: Farewell Spit (Onetahua), glaciated marble landscapes, cave and karst ecosystems, coal plateaux ecosystems, Kaikōura canyon, migratory shorebirds and seabirds and their habitats, seabird/tuatara islands, unique species such as Hutton's shearwater, King Shag and their habitats, and the hundreds of unique plants and animals found nowhere else in the world.	Promote recognition and protection of places and species of international importance and tell their stories to enrich people's experience.
<b>TOS 11.0</b> Our rivers and streams flow clean, plentiful, and unimpeded from the mountains to the sea. (Outcomes 1,2 and 5)	Native freshwater migratory fish are abundant and estuarine and braided river bird numbers are restored.	Restore degraded estuaries, streams and rivers, including their margins, as habitat for native species.
	Freshwater flows and water quality are maintained and restored.	
	Barriers to fish passage are removed or mitigated.	
	People treasure their freshwater resource and its contribution to their health and wellbeing.	

<b>TOS 12.0</b> Secure, sustain and enhance natural freshwater systems and increase their resilience. (Outcomes 2 and 5)	The Top of the South is free of harmful freshwater pests. Riparian margins are dominated by indigenous species.	Eradicate pest fish and aquatic weeds and maintain native species dominance in priority areas. Support and encourage landowners to plant riparian margins and management of weeds and pests.
<b>TOS 13.0</b> Our marine environment receives clean water from the land, and its vulnerable habitats and communities are protected and can recover from past and ongoing damage.	Seabed in Golden and Tasman Bays and the Marlborough Sounds are free of excess fine sediment and direct damage from human uses is at ecologically sustainable levels.	Reduce sediment inputs from land to ecologically sustainable levels.
(Outcomes 2 and 5)	Biogenic habitats and other vulnerable marine communities are thriving.	Use innovative technologies and management approaches to avoid or minimise impacts on vulnerable benthic communities such as biogenic habitats.
	Restored marine ecosystems to support sustainable kaimoana harvests. Pressures on the marine environment reduced to give species and communities room to cope with climate change effects.	Promote integrated multi sector collaborative management of marine resources.
	Estuary condition improves year on year and estuarine areas maintain their ecological structure and function despite the effects of sea level rise.	Restore degraded estuarine and coastal areas as far as possible. Enable estuarine ecosystems to be resilient to the effects of climate change including allowing coastal retreat in response to sea level rise.

## Northwest Nelson

CharacterOne of five major hotspots of biodiversity in New Zealand with a suite of species found nowhere else in the world. About 50% of all New Zealand native plants are located here. A huge diversity of environments linked to complex geology are influenced by warm wet westerly weather. This is the national stronghold for coastal turf communities. The area includes major forested mountains and alpine systems, large swamps, dune lands and lowland forests. It has some of the most important limestone cave and karst systems in New Zealand, including the country's largest freshwater springs and the largest marble ecosystems in southern hemisphere, including glaciated montane areas. Farewell Spit is a unique natural feature and is internationally recognised under the Ramsar Convention. Lowlands in Buller and Golden Bay have significant, although relatively isolated, communities. The area has attracted extensive tourism and associated industries that sit alongside longer established primary industries. Ever increasing understanding of the value of this diverse landscape has led to growing community involvement in its restoration. Challenges in this area include:•Many rare species remain are under threat and some populations of native species found nowhere else in the world continue to decline.•Many natural ecosystem processes are compromised by pests, weeds and		
<ul> <li>Some rare and uncommon ecosystems have lost key drivers (seabird burrowed soils), are threatened by development pressures ( (Buller Coal plateaux) or have been reduced to remnant fragments (lowland alluvial podocarp forests).</li> <li>Building blocks: <ul> <li>Community awareness of conservation challenges and opportunities is growing.</li> <li>Project Janszoon is tackling a range of ecosystem pressures in the Abel Tasman National Park and has inspired a culture of care in the surrounding areas.</li> <li>An increasing number of community organisations are emerging in support of restoration work and there is an opportunity to further link local communities to restoration via taonga species like whio and kiwi.</li> </ul> </li> </ul>	Character	<ul> <li>found nowhere else in the world. About 50% of all New Zealand native plants are located here. A huge diversity of environments linked to complex geology are influenced by warm wet westerly weather. This is the national stronghold for coastal turf communities. The area includes major forested mountains and alpine systems, large swamps, dune lands and lowland forests. It has some of the most important limestone cave and karst systems in New Zealand, including the country's largest freshwater springs and the largest marble ecosystems in southern hemisphere, including glaciated montane areas. Farewell Spit is a unique natural feature and is internationally recognised under the Ramsar Convention. Lowlands in Buller and Golden Bay have significant, although relatively isolated, communities. The area has attracted extensive tourism and associated industries that sit alongside longer established primary industries. Ever increasing understanding of the value of this diverse landscape has led to growing community involvement in its restoration.</li> <li>Challenges in this area include:</li> <li>Many rare species remain are under threat and some populations of native species found nowhere else in the world continue to decline.</li> <li>Many natural ecosystem processes are compromised by pests, weeds and physical damage.</li> <li>Some rare and uncommon ecosystems have lost key drivers (seabird burrowed soils), are threatened by development pressures ( (Buller Coal plateaux) or have been reduced to remnant fragments (lowland alluvial podocarp forests) .</li> <li>Building blocks:</li> <li>Community awareness of conservation challenges and opportunities is growing.</li> <li>Project Janszoon is tackling a range of ecosystem pressures in the Abel Tasman National Park and has inspired a culture of care in the surrounding areas.</li> <li>An increasing number of community organisations are emerging in support of restoration work and there is an opportunity to further link local</li> </ul>

#### **Our Shared Future**

We understand the natural attributes of species and ecosystems in this region including many found nowhere else in the world. A vibrant dawn chorus and diverse taonga species have become the norm for our communities and visitors. The full range of native species of Northwest Nelson are thriving, including the hundreds of species found nowhere else in the world. Natural ecological processes are no longer compromised by introduced species, including those with management challenges such as hares, mice, goats and wasps. Wilderness has been sustained over large areas. Visitors again easily see species once reduced to remnant populations, such as whio (blue duck) and giant land snails. Ecotourism has become a mainstay of the regional economy and provides for a sustainable economic and employment base. People have reconnected with nature in a mutually beneficial way that has restored and linked threatened natural ecosystems.

What we want to achieve	This is what success looks like	How to get there
<b>NN 1.0</b> Fully functioning indigenous ecosystems restored.	Major areas of endemism have had pests eradicated or reduced to very low numbers.	Intensify management of ecosystem pressures in areas of high endemism.
(Outcomes 1,2,4 and 5)	People experience a wide range of endemic species and this impacts positively on their communities through tourism and research partnerships.	Develop predator, herbivore and wasp control programmes using innovative technologies and methods.
	Pest and weed pressures are reduced throughout natural areas.	Trial fresh approaches to control of key threats
<b>NN 1.1</b> Threatened flora populations are secured. (Outcome 1)	Populations of threatened plant species are secure and no longer considered threatened.	Establish an integrated and fully resourced threatened plant programme.
		Establish propagation, seed banking, translocation, fencing and enhancement planting of these threatened species.
<b>NN 1.2</b> Rare and uncommon ecosystems are restored and secured. (Outcomes 1,2,4 and 5)	At risk ecosystems are well represented and fully functioning, and their geological and biological diversity is celebrated.	Reduce development pressures within ecologically significant sites which are impacting ecosystem integrity and resilience.
		Cultivate a stronger understanding of the geological and biodiversity values of under-appreciated ecosystems by providing appropriate interpretation and sustainable visitor opportunities.
		Develop and apply effective predator management strategies which enable restoration of mainland seabird induced ecosystems
<b>NN 1.3</b> Communities flourish in the West Coast lowlands	Communities prosper as they transition to more ecologically sustainable creation of wealth	Support communities to develop opportunities that encourage the use ecologically sustainable practices.

alongside legally protected areas. (Outcomes 2, 4 and 5)	and wellbeing and deal with climate and economic instability.	Support development of appropriate infrastructure and tourism approaches that offer experiences at a sustainable level for domestic and international visitors.
<b>NN 1.4</b> Fragmented lowland ecosystems of Golden Bay and Buller District are secured	Ecological corridors of naturally functioning native vegetation again link the mountains and the sea and fragmented ecosystems	Reduce development pressures in fragmented remnant areas of native vegetation.
and restored. (Outcomes 2, 4 and 5)	are reconnected.	Manage key ecosystem pressures (e.g. weeds, browsers).
		Improve ecosystem resilience by adding buffers around remnants and creating ecosystem corridors.
		Restore riparian margins.
<b>NN 1.5</b> Nationally important ecosystems are restored to full natural function (Outcome 2)	The dune ecosystems of Farewell Spit are fully functioning. Native sand binders, native wetland plants, and native shrublands dominate dune systems. Seabirds and other dune dwellers are thriving.	Eliminate ecosystem pressures including significant weed species, browsers, omnivores and predators.
	The cultural history of the area is interwoven with the natural history and through this Farewell Spit is regarded as a Taonga.	Encourage storytelling and integrating the history into information and management decisions.

## 2. West Coast Marine

Character	<ul> <li>The open coastline of the West Coast offers protection by remoteness. Exposure to the elements has also shaped the landscape. Significant nutrient upwelling off Kahurangi Point causes creates an area of enhanced productivity. It is an important area for shorebirds and seabirds. The coast is home to small communities based around primary industries and tourism, with some natural resource extraction including fishing in the sea and mining, timber, and moss on land. Most of the area is open to trawling and other forms of commercial fishing. Challenges include: <ul> <li>There is little compiled information available on natural heritage values or on pressures from human activity.</li> <li>There are some area based marine protection measures in place, but they are small and insufficient to protect the high wilderness value (e.g. from mining and petroleum exploration).</li> <li>Land use effects are having negative impacts in some estuaries and river mouths.</li> <li>Important estuaries are losing natural functioning such as seagrass beds, but we do not understand the causes.</li> </ul></li></ul>
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#### **Our Shared Future**

We acted in time to preserve opportunities to experience the wild and remote places of the West Coast Marine Area. Wilderness has been sustained, and natural functioning has been protected and restored. Our communities are recognised for their foresight and leadership in allowing people to thrive, while sustaining and benefiting from restored natural heritage. Protection of marine spaces has enhanced our marine ecosystems and contributed to sustaining healthy communities along the coast.

What we want to achieve	This is what success looks like	How to get there
WCM 2.0 The wilderness of the sea is protected commensurate with that on land. (Outcome 3)	Wilderness values are sustained.	Develop a marine wilderness protection plan for the northern West Coast.
WCM 2.1 The impact of land use effects on estuaries is minimised. (Outcomes 2 and 5)	Sedimentation and eutrophication of estuaries is minimised, and estuarine ecosystems are thriving.	Investigate status and trends in estuarine ecosystems (estuaries and river mouths) and take remedial action for pressures identified.
	People understand how to live sustainably around estuaries.	Educate people on sustainable land use around estuaries.

## 3. Nelson Motueka

Character	<ul> <li>The majority of the people of the Top of the South live in the Nelson Motueka area.</li> <li>Few coastal and freshwater wetlands remain. Some coastal ecosystems such as the Nelson Boulder Bank have unique features. Most land is in private ownership, and/or forestry. There are two main river systems (the Waimea and Motueka) and large estuaries. The coast is characterised by barrier islands (such as Rabbit Island), boulder banks (Nelson), tombolos (Cable Bay). The area has a fairly uniform geology in a landscape largely created by glacial outwash.</li> <li>Challenges in this area include: <ul> <li>Natural areas are fragmented in an overwhelming dominance of exotic landscapes.</li> <li>The valleys and hill slopes have lost most of their natural ecosystems and assessments class many of these as "threatened ecosystems".</li> <li>Most significant natural areas remaining are not under active management</li> </ul> </li> </ul>
	<ul> <li>and are degrading.</li> <li>Building blocks: <ul> <li>Citizens are active and working with their Councils to restore natural heritage in urban and rural environments.</li> <li>Significant natural areas remaining have been mapped by the Councils.</li> </ul> </li> </ul>

#### **Our Shared Future**

Nature has come back into people's lives in urban and rural landscapes and people are reconnected with nature. Native remnants and threatened natural ecosystems are restored and reconnected in ways that also connects the wellbeing of communities into the wellbeing of these ecosystems. Resilience against climate change impacts have been developed through revegetation of water catchments and retirement of land near the coast in favour of natural dune lands and wetlands that can move with sea level rise and absorb storm events. Suburban gardens look very different; rich in plants that bring native animals back into the city and with productive plants that lead to local self-reliance in food production. Visitors are welcomed to the region, enhancing the economy and local experiences.

What we want to achieve	This is what success looks like	How to get there
NM 3.0 Remaining alluvial podocarp forests and coastal and freshwater wetlands have been protected and restoration	Net increase in condition, habitat sequences and connectivity of Significant Natural Areas.	Encourage philanthropic investment in large scale threatened ecosystem restoration.
of these last remaining fragments has begun. Riparian margins have been restored with native vegetation creating ecosystem corridors. (Outcomes 1,2 and 5)	Forest remnants are free of invasive weeds and are thriving.	Control invasive weed species with increases funding and more community action.
	All significant natural areas are under active management and riparian margins protected.	Fence and protect remaining remnants and riparian margins.

	Sustained engagement by	Work with communities and
	people in restoring depleted ecosystems, and an increased understanding how these ecosystems benefit the local communities.	landowners to align hearts and minds with ecological restoration.
	Ecological corridors of naturally functioning native vegetation again link the mountains and the sea.	Reconnect natural areas using rivers and streams as corridors.
	Ecological corridors become 'model pathways' for others and attract research and best practice funding to these communities.	Share developing practice with other regions.
<b>NM 3.1</b> Populations of native species are secure and self-sustainable. (Outcomes 1 and 2)	Cessation of local extinctions and reintroduction of lost species. Wildlife flourish and safely return to where people live. Mistletoes bloom across the landscape.	Control predators to protect fauna populations.
		Control herbivores and weeds to secure threatened flora and protect ecosystems.
		Carry out restoration plantings and reintroductions of lost native fauna and flora where predator and browse control permit.
	Communities value and are actively engaged in restoration and this in turn benefits these communities. People have pride in the wildlife and have developed ways of living with diversity at their doorstep.	Encourage and assist community and landowner support for pest control in key areas and educate people how to live positively with more abundant wildlife.
<b>NM 3.2</b> Indigenous migratory fish able to	An increased diversity and abundance of native fish and	Remove fish passage barriers or facilitate alternative pathways.

flourish and migrate freely. (Outcomes 1,2 and 5)	aquatic fauna in all waterways.	
		Evolve more sustainable land use practices on highly erodible soils near waterways.
		Eradicate pest fish.
<b>NM 3.3</b> A production landscape and economy that is thriving whilst protecting natural heritage. (Outcome 4)	Implementation of new economic models on private land that lead to large scale protection of natural heritage areas.	Incentivise better ways of working and encourage wider use of farm nutrient/land management plans.
	People appreciate natural heritage areas for their own right and understand the social benefits of limiting land use intensification and making alternative uses of natural	Promote an attitude to accept change using new economic models where people benefit from retaining natural heritage areas and receive incentives for covenanting them.
	areas.	Work with the visitor sector on messaging that supports recognition of economic reasons to 'retain natural heritage areas' and practices that encourage high value sustainable product offerings.

## 4. Nelson Bays

Character	Semi-protected large bays important for a range of species including seagrass and internationally migrant birds. The Bays are important inshore fisheries and host substantial mussel farming areas. Marine tourism is important particularly around the Abel Tasman National Park. Estuarine areas have backshores and catchments developed for agriculture and horticulture with substantial residential and industrial development including towns and a city. Challenges in this area include:
	• The Bays have been degraded by sediment input and mobilisation through seabed disturbance. There is no effective action underway to reverse the degradation and loss of natural seabed communities across large areas of the Bays. This has seen the loss of a productive scallop fishery and may begin to impact on other species.
	<ul> <li>Large and small estuaries of regional and national importance have been degraded by sediment, nutrients, infilling and loss of natural vegetation on margins.</li> <li>Building blocks:</li> </ul>
	<ul> <li>There are many local initiatives around estuaries and care groups have been founded for many parts of the Bay.</li> <li>Plans are being implemented to restore historic and halt continuing</li> </ul>
	<ul> <li>degradation of Waimea Inlet, the largest estuary providing a model for other areas.</li> <li>The Tonga Island and Hoiorangi Marine Reserves and the Separation Point areas that are closed to trawling and dredging, protect small areas in the Bays.</li> </ul>

#### **Our Shared Future**

We can enjoy locally harvested scallops, oysters, mussels, pipi, and cockles. Naturally functioning seabed and estuarine ecologies restored across large areas with support from citizens and industries. Profitable marine industries using benthic shellfish have been restored. We have averted the spread of pests from our ports. Shorebirds nest safely, and international migrant birds are welcomed here every year. Locals and visitors continue to enjoy and be inspired by coastal and marine experiences adjoining Abel Tasman National Park.

What we want to achieve	This is what success looks like	How to get there
<b>NB 4.0</b> The restoration of shellfish beds to a level where harvesting can be sustained. Sediment inputs from rivers and streams are at levels that enable benthic ecosystems to thrive. (Outcomes 2, 4 and 5)	Shellfish beds are robust enough to sustain harvesting.	Promote and undertake research and adaptive management. Gain a full picture of what remains and what is required to restore natural functioning.
		Promote land-use practices that significantly reduce sediments loads in rivers and streams.

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<b>NB 4.1</b> Estuarine ecologies are restored, and managed, and coastal retreat is provided for as sea levels rise. (Outcomes 2, 4 and 5)	All estuarine sites have a restoration action plan under implementation.	Repeat the work done on the Waimea Inlet Strategy and Action Plan for the other estuarine sites and provide for their implementation.
	Estuarine communities and visitors enjoy the restored spaces and actively contribute to long term health of our natural spaces and sustainable kaimoana harvests.	
<b>NB 4.2</b> Roosting sites for shorebirds are secured. (Outcome 1)	All identified roosting sites are actively protected.	Identify key roosting sites and threats and institute remedial action.
<b>NB 4.3</b> Communities and industries change land-use and sea-based activities to approaches that allow them to flourish while using ecologically sustainable practices. (Outcome 5)	Low impact harvest methods are being used in all fisheries. Seafood harvesting is undertaken at ecologically sustainable levels with ecologically sustainable methods.	Work with industry and recreational fishers to explore alternative harvest methods or strategies which significantly reduce impacts on benthic habitats and communities.

## 5. Nelson Lakes

Character	<ul> <li>Large, relatively unmodified, beech forest with extensive mountainous areas and alpine communities. Large unmodified freshwater systems dominated by the two large glacial lakes and the Buller River. Frost flat and valley wetland communities are an interesting feature. Historically, until relatively recently, a South Island stronghold for long-tailed bats. Highest general altitude area in the region. Visibly glaciated. The Buller is the largest wild river with a National Water Conservation Order and no dams. The area includes good examples of valley floor wetland communities. Rural communities are established around the edge of the national park. The economy includes mostly primary industries with some tourism, especially at gateway sites. The area has a very rich Māori history with sacred trails crisscrossing the mountains. Challenges include:</li> <li>Apart from the Rotoiti mainland island this area has received relatively little predator and herbivore control. This has resulted in gradual decline in forest condition and in key species and due to goats, deer, possums, stoats, deer and other grazers and predators. Frost flat and valley floor communities depleted and degraded.</li> </ul>
	<ul> <li>Rotoiti Nature Recovery Project comprises approximately 5,000 hectares of predominantly red, silver and mountain beech forest. The mainland island is a well established science driven research site with over twenty years of pest control and longitudinal monitoring. Its visibility beyond the science community however has been eroded over time. With 100,000 visitors a year it offers opportunities for awareness, education and tourism and increased participation in restoration of ecosystems. Its Strategic Plan is due for review in 2019.</li> <li>A rich Māori heritage offers additional cultural values that can underpin restoration of taonga species and sites of significance over the area of the Park.</li> </ul>

#### **Our Shared Future**

Nelson Lakes area has forests that again abound with birds and bats. Visitors see kea and kaka throughout the Park and its adjacent forest and mountains. The trails are again safe to walk in summer as wasp numbers have been permanently suppressed. People understand the importance of frost flat plant communities and many of the frost flats have been restored with the support of local land owners. All take-off points for introduced invasive tree species have been controlled. Herbivores are controlled to very low numbers and possums and stoats have been eliminated. The restored ecosystem has engendered sustainable linked land uses and tourism ventures. Restored natural functioning in forest, alpine, frost flat and wetland ecosystems and communities that coexist thrive through their connection to these.

What we want to achieve	This is what success looks like	How to get there
<b>NL 5.0</b> The Rotoiti Nature Recovery Project is a nationally recognised centre	Ten-fold increase in the area under intensive management.	Implement landscape level predator, herbivore and wasp control to further develop based on innovative technologies and methods and prevent invasion by invasive tree species.
of excellence in development of forest and alpine ecosystem restoration tools. (Outcomes 1, 2, 4 and 5)	Model landscape level threat control attracts additional funding for research opportunities that in turn benefits local communities.	
	The site attracts international visitors as a model for restoration.	
<b>NL 5.1</b> Functional and sustained frost flat and valley floor wetland communities. (Outcomes 1, 2 and 5)	Good examples of extensive functional frost flat shrublands are in place and landowners have become advocates/kaitiaki of these	Promote and carry out research to determine how to control swarding grasses.
	special ecosystems.	Restrict stock access to frost flat and valley floor wetland communities.
		Carry out active planting to increase extent of frost flat and valley floor wetland communities.
<b>NL 5.2</b> Small streams, riparian margins and alluvial forests are protected from impacts of land use activity. (Outcomes 2,	Increase in restored stream margins and secure alluvial forest remnants.	Reduce land use intensification and restore riparian margins.
3 and 5)	Land use has been adjusted to allow for sustainable protection of these areas whilst still contributing to the wellbeing of local communities.	
<b>NL 5.3</b> Protection of braided river birds and habitat. (Outcomes 1, 2 and 5)	The number of braided river birds has been restored to levels where the populations are sustainable.	Control predators and invasive weeds.
<b>NL 5.4</b> Restore this area as a long-tailed bat hot-spot of	An increase in bat abundance.	Restore habitat and control predators.

endemism. (Outcome 1)	People have knowledge of the taonga species present, and this increases their sense of belonging.	Educate people about bats and what is needed to sustain them.
<b>NL 5.5</b> To support the local economy by attracting high value visitors to the area. (Outcome 4)	Increased proportion of visitors are high value/low impact.	Promote development of high value visitor products for the area.

## 6. Mt Richmond

Character	This area is central to Top of the South and creates connections amongst other areas. It is the primary catchment for many rivers including the Pelorus/Te Hoiere and influences the water quality of Pelorus/Te Hoiere Sound. It includes the headwaters of the Motueka, Wairoa and Lee rivers. Mt Richmond is largely forested uplands with important forest remnants in the lowlands. In the special mineral belt ecosystems where the soil is toxic to most native trees, a unique shrubland community has evolved. The mineral belt and limestone areas have many special species but are subject to invasion by woody weeds and browsers. This area has geological significance as it links through time to the Red Hills in South Westland and reflects our dynamic landscape shifts. The communities bordering this forest park are mostly primary industry focused with some tourism through the Te Araroa trail. Most of the uplands are conservation park, Nelson City Council land, or plantation exotic forestry, much has been returned to iwi in Treaty settlements.
	<ul> <li>Challenges:</li> <li>The mineral belt and limestone areas have many special species but are subject to invasion by woody weeds and browsers.</li> <li>Mt Richmond features relatively low in Department of Conservation priorities, so goats, possums and predators are largely uncontrolled.</li> <li>The forests are degraded by introduced predators, herbivores and wasps.</li> <li>Building blocks:</li> <li>The Nelson City Council is investing strongly together with local citizen groups in restoring its parts of the environment.</li> <li>The Brook Waimarama Sanctuary offers a core fully protected area around which a halo of restoration and predator suppressed environment is developing.</li> <li>The Brook Waimarama Sanctuary and the Te Hoiere Bat Recovery Project could become the core of larger scale restoration efforts.</li> </ul>

#### **Our Shared Future**

We treasure Mt Richmond Forest Park as a place of connection and belonging and have an ongoing commitment to a pest and weed free forest park. People have invested in turning the tide on pests and weeds. The mineral belt has been secured from further weed invasions and wilding tree species are firmly under control. Mt Richmond Forest Park and contiguous natural area have been secured and restored. Mountain to the sea ecological functioning and connection has been restored. Land uses have become ecologically and economically sustainable throughout.

What we want to achieve	This is what success looks like	How to get there
<b>MR 6.0</b> Change perception of Mt Richmond from a largely unknown area to a treasure at Nelson and Marlborough's back door. (Outcome 4)	People treasure Mt Richmond and care for it.	Educate people around Mt Richmond to understand the importance of the park to their wellbeing and the potential to secure threatened species and reintroduce lost elements.

<b>MR 6.1</b> Mt Richmond Forest Park and contiguous natural areas are restored and enhanced to a self- sustaining level. (Outcomes 1,2 and 5)	Collaborative projects abound, working together and achieving positive outcomes for natural areas and species.	Prepare and implement a comprehensive plan for restoration of Mt Richmond Forest Park and contiguous natural areas.
	The natural heritage ecosystems of Mt Richmond are thriving and self-sustainable.	Control browsers, predators and wasps and of invasive weeds on the mineral belt and on forest margins.
	Natural regeneration of the undergrowth of the forests.	
<b>MR 6.2</b> The Red Hills/Dun Mountain mineral belt geology, ecosystems and species are protected from threats. (Outcomes 1, 2 and 5)	The mineral belt is free of wilding pines and other woody weeds and ongoing seeding is controlled.	Control pines and other woody weeds.
	The mineral belt is known and valued for its unique geological and ecosystem value.	Educate people about the mineral belt and encourage them to value and care for it.
<b>MR 6.3</b> The formal identification and protection of key land areas that are important to biodiversity. (Outcome 2)	There has been an increase in protection of key land areas.	Promote and support land purchase and the creation of reserves.
		Promote and protect Significant Natural Areas in association with landowners.
<b>MR 6.4</b> A secure and thriving long tailed bat population exists providing an educational focal point for our only native land mammal. (Outcomes 1, 2 and 5)	Expanding populations of long tailed bats.	Support and expand the current bat protection programme.
<b>MR 6.5</b> The restoration of wildlife populations, expanding from the hubs of Te Horiere Bat Recovery Project and Brook Waimarama Sanctuary. (Outcomes 2 and 5)	Local communities take an active role in securing populations of existing and reintroduced native wildlife.	Carry out mammalian predator control.
		Encourage and support species reintroductions to these sites and surrounding areas.
MR 6.6 The mauri of Te Hoiere and other rivers are restored, ki uta ki tai (mountains to the sea). (Outcomes 2 and 5)	Lowland native forests are extensive along waterways and sediment input to the Pelorus/Te Hoiere delta has been reduced to sustainable levels.	Work collectively with DOC, iwi, community, forestry to improve riparian margins, alluvial forests, improve water quality and reduce sediment loss.

## 7. Marlborough Sounds/Cook Strait

<ul> <li>Character</li> <li>Extremely intricate interweaving of land and sea with many islands and gradients from wild Cook Strait to highly sheltered Sounds and estuaries. Important island refuges for internationally important wildlife, seabirds and rare species. Complex geology with strong tectonic features including highly mineralised and schist substrates together with the gradients of wind, rainfall and elevation result in unique habitats and plants and animals found nowhere else. These include most of the wild population of tuatara in the world, together with unique amphibians, insects and plants. Islands are important refuges for species such as long tailed bats which have elsewhere become rare. Beaches and terrestrial wetlands are rare as the land rises steeply from the sea in most places. The steep streams are refuges for native fish and all areas outside the Pelorus River catchment are free of introduced fish. These complex patterns on the land are reflected in the sea with great habitat diversity and rare or unique species such as King Shag and Hector's dolphin. The strong connections between the land and sea, including the effects of land run-off, mean the land and sea environments are considered as one in this Strategy. The extensive coastline has resulted in diverse land ownership of many landowners, often limited to water access. Marine tourism is developing in the Sounds and the area hosts important recreational and commercial fisheries as well as the most extensive marine farming areas in New Zealand.</li> <li>Challenges:         <ul> <li>Pelorus Sound has some of the muddiest estuarine areas in New Zealand as a result of land-use practices.</li> <li>Marine management is fragmented amongst multiple agencies and is vulnerable to inappropriate land use.</li> <li>There are numerous opportunities for peninsula secured restoration.</li> <li>There are numerous opportunities for peninsula secured restoration.</li> </ul> </li> </ul>
<ul> <li>Increasing numbers of landowners are showing an interest in both island protection and shore ecology restoration.</li> <li>Some islands are directly managed as refuges by Department of Conservation, and opportunities remain to be developed on larger islands and peninsulas wholly or partly in private ownership.</li> <li>Landscape level restoration is underway with organisations such as the Marlborough Sounds Restoration Trust removing wilding pines over large areas, and local groups are well advanced in restoring defensible peninsulas such as Kaipupu Point and Otohutu Peninsula.</li> </ul>

#### **Our Shared Future**

We are able to enjoy locally harvested scallops, oysters, mussels, pipi and cockles, swim in clear waters, hear bird call echo around the islands. There has been landscape-scale return of native forest and unique ecosystems across the Sounds. Most of the islands of the Sounds and many peninsulas are free of introduced pests and weeds. Landowners across the area are actively supporting restoration and communities benefit from this participation. Seabirds and unique species of plants and animals have re-established in these areas. Marine living habitats such as

rhodolith beds, mussel reefs, bryozoan corals, and tube worm mounds have recovered over a wide area. Seabed and estuarine ecologies are naturally functioning across large areas. The rivers run clear and land-use practices ensure soil is retained on the land. Through ecotourism our local communities are proud to share this thriving relationship with the rest of the world.

What we want to achieve	This is what success looks like	How to get there
MS 7.0 Shellfish beds are restored to a level where harvesting can be sustained. Sediment inputs from rivers, streams and seabed disturbance are at ecologically sustainable levels that allow benthic ecosystems to thrive. (Outcomes 2, 4 and 5)	Land use and/or practices have changed significantly and a reduction in sediment input has occurred.	Support implementation of management measures to minimise damaging practices on land and sea.
	Ecosystem damaging seabed practices are substantially reduced or halted.	
<b>MS 7.1</b> Shellfish and biogenic habitats/communities are protected and restored. (Outcomes 2 and 5)	We understand how to restore shellfish and biogenic habitats and the restoration has commenced.	Promote and support research and adaptive management to determine what is required to restore natural functioning.
<b>MS 7.2</b> Estuarine ecologies are restored and managed, and coastal retreat is provided for as sea levels rise. (Outcomes 2, 4 and 5)	All estuarine sites have a restoration action plan under implementation.	Repeat the work done on the Waimea Inlet Strategy and Action Plan for the other estuarine sites and provide for their implementation.
	Estuarine communities and visitors enjoy the restored spaces and actively contribute to long term health of our natural spaces and sustainable kaimoana harvests.	
<b>MS 7.3</b> Integrated management of land and sea. (Outcomes 2,4 and 5)	People understand their place in a sustainable future leading to integrated management of land and sea implemented.	Support getting full integration of the currently disconnected management regimes.
<b>MS 7.4</b> Communities and industries change land use and sea-based activities to approaches that allow them to flourish, while halting ecologically unsustainable practices. (Outcomes 2,4 and 5)	Sustainable practices are widespread, and this enhances community wellbeing.	Work with communities and industries on land and sea to explore more sustainable practices.
<b>MS 7.5</b> Restoration of native ecosystems on all islands and defensible peninsulas. (Outcomes	Islands and defensible peninsulas are pest, predator, and weed free, and people	Work with communities to progress restoration initiatives.

1 and 2)	have pride in these healthy ecosystems and a commitment to their future.	Develop and deploy landscape- scale effective technologies.
<b>MS 7.6</b> Threatened ecosystems and species are secured and restored. (Outcomes 1 and 2)	Threatened ecosystems are under active management.	Restore and sustain threatened ecosystems and the habitat of threatened species.
<b>MS 7.7</b> The formal identification and protection of key land areas that are important to biodiversity. (Outcome 2)	There has been an increase in protection of key land areas.	Promote and support land purchase and the creation of reserves. Promote and protect Significant Natural Areas in association with landowners.
<b>MS 7.8</b> Landscape-level pest and weed pressures are reduced and this is sustained over time. (Outcomes 2, 3 and 5)	No landscapes that are still dominated by vines, pines, or <i>Spartina</i> cordgrass and communities take a guardianship role in preventing reinvasion.	Sustain and accelerate pine removal, institute invasive weed control, complete <i>Spartina</i> cordgrass eradication.
	Healthy understory throughout native forests.	Control ungulates to levels that allow a healthy understory to be sustained.

# 8. Wairau

Character	<ul> <li>In the Wairau district, dryland, lowland and the coast are influenced by easterly weather patterns, with a warm climate and low rainfall. Substrate, faulting, glaciation and limestone cliffs, scarps and other landforms are special to this area. The east coastline is very important as a haul out site for marine mammals. Wairau Lagoons and remnant freshwater wetlands are regionally important. Lakes Grassmere and Elterwater are important for waterfowl and shorebirds. Waterways are important for native fish, as are lakes where trout are absent. This is the area where human occupation was first recorded in Aotearoa. It has huge historic cultural significance. This is the viticulture centre of New Zealand and includes the second largest urban area in the Top of the South. It is important for a wide range of primary industries and for tourism.</li> <li>Challenges: <ul> <li>Lowland forest remnants are significant, given the highly modified state of this region following burning and land clearance for agriculture. Shrublands are important for threatened species.</li> <li>The majority of wetlands are degraded, so the few wetlands left all are important.</li> <li>Wairau lowlands have very small scattered remnants of natural heritage.</li> </ul> </li> </ul>
	<ul> <li>Much of this is not well understood as to its importance by those managing the landscape.</li> <li>Native vegetation is largely regarded as 'scrub' even though it includes of a diversity of endemic species.</li> <li>The financial and people resources required to implement the</li> </ul>
	recommendations on Significant Natural Areas at a rate required to halt decline are not available. Building blocks:
	<ul> <li>The Significant Natural Areas are small but have been documented by the Marlborough District Council building on earlier Protect Natural Area surveys.</li> <li>Treaty settlements and increased understanding of this valuable area can provide stepping stones for protection and restoration.</li> </ul>

#### **Our Shared Future**

We have restored and reconnected remnant dryland native ecosystems and established land use that is sustainable for both natural and human communities. In this interconnected landscape rare plant and animal communities have been restored and land use is aligned to their protection. Harvest of watercress, eels and other food sources has returned and is managed sustainably. Loss of the last remnants of rare plant and animal communities has been avoided and we have linked the remnants with new plantings, re-establishing native vegetation along river corridors as we went. Grazing, predation and weed pressures on significant natural areas have been reduced throughout.

What we want to achieve	This is what success looks like	How to get there
<b>W 8.0</b> Regeneration of native species into the natural landscape (Outcomes 1, 2 and 5)	Native species are once again thriving in the natural and modified landscapes.	Control browsers and weeds by establishing a landscape level control of goats and invasive weed species as a first step.
		Prevent the intensification of grazing in significant natural areas.
<b>W 8.1</b> Preservation and enhancement of remaining shrublands, with restored connectivity of vegetation fragments. (Outcomes 1, 2 and 5)	Shrublands are formally protected.	Promote the formal protection of existing shrubland areas, re- establish new areas and introduce seed sources.
W 8.2 Restoration of river corridors and wetland systems, e.g. Wairau Lagoons, Lake Elterwater. (Outcomes 1, 2 and 5)	The riparian margins of rivers are dominated by native vegetation and willow removal from wetlands has been completed.	Remove willows and other woody weeds from wetlands and braided rivers and replant with indigenous species.
W 8.3 People appreciate indigenous areas for intrinsic reasons and understand the social benefits of limiting land	Implementation of new economic models and diversified land use on private land that leads to large scale protection.	Promote an attitude to accept change using new economic models where people benefit from retaining shrublands and receive incentives for
use intensification of significant natural areas on private land. (Outcome 4)	People have an understanding of the ecological and cultural significance and this adds to their sense of belonging and wellbeing.	covenanting natural areas.
W 8.4 The formal identification and protection of key land	There has been an increase in protection of key land areas.	Promote and support land purchase and the creation of reserves.
areas that are important to biodiversity. (Outcome 2)		Promote and protect Significant Natural Areas in association with landowners.
<b>W 8.5</b> We know what is special in the dryland ecosystems and understand how to restore its ecological functioning (Outcomes 1, 2, 4 and 5)	Functioning ecological drivers and processes and restored ecological building blocks.	Develop and trial restoration and pressure management tools and methodologies.

# 9. Inland Marlborough

<ul> <li>Inland Marlborough is one of five major centres of species endemism nationally, with a large number of threatened and at-risk species. It is influenced by easterly weather patterns and low rainfall, leading to dryland ecosystem types with a strong rainfall gradient west to east, dropping very quickly – a strong driver. It includes mountainous areas and alpine communities with extremes of wet/dry and hot/cold. The Clarence River is the last relatively unmodified braided river system in the eastern South Island. Inland Marlborough has a diverse network of lakes, tarns and wetlands. This area is thinly populated and economic gains are via farming, tourism and forestry. Community connection and belonging are a key attribute for people living in these areas.</li> <li>Challenges: <ul> <li>The whole area has been burned and grazed to a point where the unique suite of native species and communities are reduced to scattered remnants.</li> </ul> </li> <li>Building blocks: <ul> <li>Molesworth offers an opportunity to create a centre of excellence in dryland ecosystem restoration. This would require major new funding to allow a science-led approach to understanding how to coordinate ecosystem restoration at a landscape level in these dry, poorly understood ecosystems.</li> <li>The area is managed as a Recreation Reserve by the Department of Conservation and the current farming lease expires in June 2020. A review of the management plan is under consideration.</li> </ul> </li> </ul>

## **Our Shared Future**

Te Waiau Toa dryland ecosystem has become the focus of dryland ecosystem management in New Zealand. The Waiau Toa Centre of Dryland Ecosystem restoration has grown from small beginnings to create and model innovative approaches to large scale management of weeds and pests, and transitions to sustainable land uses. Many threatened species have become secure and new species have been discovered, as survey and monitoring has intensified. Ecotourism has developed as a feature of the region, carefully managed to avoid risks of fire and overuse of sensitive areas such as lakes. Rare species and threatened ecosystems survive and are restored to thrive, and communities are able to co-exist with these ecosystems in a sustainable manner.

What we want to achieve	This is what success looks like	How to get there
<b>IM 9.0</b> A landscape free of pest ungulates and exotic woody species (esp.	Wilding trees have been brought under control.	Control wilding tree species.
woody species (esp. wilding conifers) and land uses in harmony with the restored ecosystems. (Outcomes 1,2 and 5)	Native shrublands in dry environments have been restored.	Work with landowners to reduce the impact of domestic stock within significant natural areas and other ecologically significant sites, control pest browsers and weeds to build up native woody

		shrubland species.
	Restored river banks.	Remove willows where appropriate and restore riparian margins with indigenous species.
	Rowan in low densities.	Control rowan at Hanmer Forest.
<b>IM 9.1</b> Braided river bird populations are sustained. (Outcomes 1, 2 and 5)	Sustained numbers of braided river birds.	Control predators to protect braided river birds and waterfowl, and to ensure increased diversity of birdlife as a result of habitat changes.
<b>IM 9.2</b> The formal identification and protection of key land area that are important to	There has been an increase in protection of key land areas.	Promote and support land purchases and creation of reserves.
biodiversity (Outcome 2)		Promote and protect Significant Natural Areas in association with landowners.
<b>IM 9.3</b> The restoration of ecological processes that will allow the natural regeneration of native species. (Outcomes 2 and 5)	Mosaic of native seed sources established throughout.	Protect existing beech forest areas as future seed source. Re- introduce native seed sources. Manage ecosystems recovering post-earthquake. Plant strategically to allow natural processes to happen. Restore wetlands.
IM 9.4 Matauranga Māori and science led restoration. (Outcomes 1, 2, 4 and 5)	Working in partnership with iwi to scope and co-design Waiau Toa Centre of Dryland Ecosystem Excellence.	Create a centre of excellence in dryland ecosystem restoration based in Molesworth Waiau Toa.
		Model what vegetation was previously located in the Molesworth Waiau Toa, research large-scale control techniques for pests and weeds and for staged restoration managing the effects of de-stocking herbivore pressure reduction.

# 9. Kaikōura

Character	<ul> <li>This is the area within the Top of the South with 82 visitor nights per resident population (post-earthquake). This is the highest across the region and the fourth highest in New Zealand. The Kaikõura District is made up of a series of landscapes. Descending from alpine ranges and limestone hill country, to lowland floodplains, sweeping beaches, rugged rocky cliffs and limestone bluffs, the Kaikõura District reflects the geological processes of ongoing fault action. These processes have created dramatic landscapes of contrast where hard rock uplifts cut through soft limestone and where rocky cliffs drop steeply to the ocean waters of the Hikurangi Trench. Active mountain building is influenced by easterly coastal weather patterns and low rainfall. Many Marlborough endemic plant species are present. Isolated Hill is the most extensive lowland limestone area in South Marlborough and has high species diversity. Smaller forest remnants in the lowlands are important due to the heavily modified nature of this part of the region. This region also boasts a world population of Hutton's shearwater, important gull/tern nesting colonies, high reptile diversity, marine mammal and seabird feeding, breeding and resting areas, banded dotterel, and a close backdrop of mountain ranges right beside the Pacific Ocean. Challenges:</li> <li>There is a huge contrast between the wild, natural marine environment of this coast and the highly modified landscapes along the road and rail corridor.</li> <li>Most of the dune lands are dominated by pines and introduced marram grass, hills are scarred by earthquake slips and weeds are invading the new habitats.</li> <li>With a small population struggling to recover after a major natural disaster outside resources are required if significant progress is to be made.</li> <li>Building blocks:</li> <li>Very active groups such as Te Korowai, Hutton's Shearwater Trust and the Kaikõura Marine Guardians.</li> <li>Opportunities for corridors of natural areas from the submarine canyon to mounta</li></ul>
	<ul> <li>These community initiatives are models on how human and natural communities can interact and they are building blocks for a sustainable Kaikoura into the future.</li> </ul>

#### **Our Shared Future**

Kaikōura is known as the marine ecotourism capital of New Zealand. Marine opportunities are integrated with those on the land. The focus has moved from "come and see our wonderful nature" to include "come and be part of our restoration and future". This has seen large scale revegetation and pest and weed control along the SH1 and rail corridor that has transformed the visitor experience. Vegetation corridors have reconnected and restored ecological connection from mountains to the sea. Pride in these accomplishments has led our community to replicate these efforts throughout the rural landscape. These model community restoration initiatives have been shared and lead to similar projects across New Zealand. They are regarded across the world as valued templates. Ways have been developed that allow visitors to take an active role in protection of the ecosystems.

What we want to achieve	This is what success looks like	How to get there
K 10.0 A conservation highway rich in native plants and animals, diversifying the marine focused ecotourism already strong in the area and leading to large scale support for natural heritage restoration in the district. (Outcome 4)	A tourism economy that interconnects and contributes to natural heritage conservation.	Undertake an assessment of the tourism potential that can connect people to, and enhance the conservation values of, the natural landscape.
<b>K 10.1</b> Consolidation of a series of natural connections from coast to mountains, using rivers where possible. (Outcome 5)	Continuous strips of protected natural lands coast to coast.	Secure land, restore riparian margins replant degraded areas, control herbivores and weeds.
<b>K 10.2</b> Naturally functioning dune lands. (Outcomes 2 and 5)	Dune lands dominated by native sand binders and shrubs.	Restoration of the coastal dune lands starting with pine and marram control.
<b>K 10.3</b> Ecosystems on limestone geology secured and sustained. (Outcome 2)	Goat and weed free areas.	Goat and weed control.
<b>K 10.4</b> Limestone and coastal plant communities free of invasive weeds. (Outcomes 2 and 3)	Vine free areas and highways.	Eradicate banana passion vine and control old man's beard in sensitive sites (limestone & coastal).
<b>K 10.5</b> Long term sustainable populations of Hutton's shearwaters. (Outcome 1)	New nesting populations of Hutton's shearwaters.	Work with the Hutton's Shearwater Trust to secure further nesting populations.

# **11. East Coast Marine**

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The East Coast is geologically active with highly productive rocky shores, sand and gravel beaches and estuaries. This coast has an extensive continental shelf dissected by the largest inshore canyon system in New Zealand. Huge diversity of seabirds and marine mammals with unique and rare species. Both natural and human communities are recovering from major earthquakes in 2016. Some aspects of natural heritage on the east coast are highly managed, such as marine mammal tourism at Kaikoura. There is a big seasonal population of tourists in areas with a low resident population (one million tourists in Kaikoura with a resident base of only four thousand, excluding earthquake recovery teams).
Challenges in this area include:
<ul> <li>A low revenue base from rates for local councils to manage the environment of an extensive, important and dynamic coast.</li> <li>Important natural areas such as the Wairau Lagoons receive relatively low attention.</li> <li>In Kaikoura, just developing infrastructure for tourists is hugely demanding.</li> <li>The major earthquakes have exacerbated this and left new issues such as vastly accelerated sediment run-off from land and uplift, which in some key locations has destroyed much of the natural intertidal ecology.</li> <li>The earthquake uplift has provided easier vehicle access to our coastal beach systems, resulting in pressures to native flora and fauna and our special reef ecosystems.</li> <li>Building blocks:</li> </ul>
<ul> <li>The communities here have an active interface with the marine environment and its benefits to the people. They have shown leadership through Te Korowai and other initiatives that build a lasting sustainable relationship between the local people and its biodiversity.</li> <li>Inspiring initiatives such as the Titi Trust, Te Korowai and the High School Lincoln partnership of reseeding the paua beds post-earthquake provide a firm foundation.</li> </ul>

## **Our Shared Future**

We have a thriving ecosystem that has recovered after the earthquakes. This has resulted in a diverse and productive marine environment. Careful management has minimised the impacts of human induced activities, such as vehicle access to our beaches, ongoing sediment effects from accelerated land erosion from highway rebuilding and the thousands of earthquake slips on land. Marine and coastal ecotourism is thriving and sustainable. Rich kelp forests have re-established and paua are again abundant and enjoyed by the community and visitors alike.

What we want to achieve	This is what success looks like	How to get there
<b>ECM 11.0</b> Earthquake recovery and development	Research and support active restoration and interventions to protect significant beach habitats	Rapid recovery of native algae beds, ecosystems and associated flora and fauna.

proceed in ways that allow the natural ecology to recover along with the	from damage by vehicles. e.g. potential of planting native seaweeds along the coast and have	Communities recover their resilience alongside a restored marine environment.
community. (Outcomes 2, 4 and 5)	access restrictions at valued places.	Sustainable practices are embedded for the future.
<b>ECM 11.1</b> Responsible ecotourism development is the cornerstone of regional prosperity. (Outcomes 1, 2, 4 and 5)	A tourism economy that interconnects and contributes to natural heritage conservation.	Undertake an assessment of the tourism potential that can connect people to, and enhance the conservation values of, the marine landscape.
<b>ECM 11.2</b> Sediment input and development around the margins of Wairau Lagoons is reduced, and provision made for managed retreat as sea level rises. (Outcomes 2, 4 and 5)	Wairau Lagoons recover ecologically and can evolve naturally in the future as climate change.	Development of a Wairau Lagoons Action Plan.

# Appendix 1 - Contributing organisations and individuals

# **Design Working Group**

Peter Lawless Phoenix Facilitation Ltd Andrew Baxter Department of Conservation Shannel Courtney Department of Conservation Juliette Curry West Coast Regional Council Skye Davies Tasman Environmental Trust Kian Foh advisor economics Aroha Gilling advisor Treaty settlements Peter Hamill Marlborough District Council Mike Hawes Department of Conservation Tracey Kingi advisor Matauranga Māori Andrew Macalister Project Janzoon Leigh Marshall Nelson City Council Rebecca Martel Ministry for the Environment Debs Martin Forest and Bird Protection Society Kauahi Ngapora Whalewatch Kaikoura Jenny Oliver Fisheries NZ Gisela Purcell Nelson Regional Development Agency Chris Woolmore Department of Conservation

## Science Workshop

Dr Leigh Stevens Salt Ecology Ltd Dr Sean Handley NIWA Dr Susan Walker Manaaki Whenua Landcare Research Dr Conrad Pilditch Waikato University Dr Jim Sinner Cawthron Institute Dr Paul Gillespie Cawthron Institute Dr Rob Schuckard Birds NZ Jan Clayton-Greene DOC Mike Avis MDC

# Appendix 2 – Technical reports supporting the creation of the Strategy

Peter Lawless - Phoenix Facilitation Limited – (July 2018). Kotahitanga Strategy Report on Science Workshop.

Kian Lee (October 2018). Articulating Potential Benefits of the Kotahitanga mō te Taiao Alliance Strategy

Tracey Kingi – KIC Limited (November 2018). Mātauranga Māori – Understanding and applying Māori knowledge systems based on tradition from the Atua.



Kotahitanga mō te Taiao