Nelson Biodiversity Strategy

Reviewed 2017/2018



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Preface

It is now ten years since the Council adopted the Nelson Biodiversity Strategy. That decade has seen quantum change in the way our community approaches the management and protection of biological diversity. Citizens, and their Council, have committed to eliminating threats and restoring ecosystems.

The New Zealand Biodiversity Strategy has been revitalised and our community is fully behind achieving its goals. Mainstreaming biodiversity across society is Goal A nationally in the Strategy for 2020. In Nelson, we achieved that goal in 2017. We are ready to do even more on Goal B; reducing pressures on biodiversity and sustainable use. We know we can do more on Goal C; safeguarding ecosystems, species, and genetic diversity, particularly in the sea. In doing so we will achieve Goal D; enhancing the health, culture, and prosperity of all our citizens.

This Strategy, the Nelson Biodiversity Forum, and Council commitments are the hub of our collective efforts. This is the third review of the Strategy and it builds on our successes while acknowledging what is still required.

The ten projects of Nelson Nature represent a big step forward over the last three years. Completion of the Brook Waimarama Sanctuary fence has created the second largest predator free mainland island in New Zealand. Project Maitai/Mahitahi has resulted in significant gains for the river. At the same time our citizens have stepped up, and projects to control pests and weeds and restore threatened ecosystems are springing up everywhere.

A significant gap remains in commencing actions to restore the Tasman Bay ecosystem. Progress on this will require stronger networks across the Top of the South and with Central Government. The outputs from the Sustainable Seas Science Challenge will assist in building a sound platform for action.

Resolution of Treaty claims allows and requires us to engage more substantially with Te Tau Ihu iwi. The Kotahitanga mō te Taiao Alliance will be a foundation enabling more effective engagement and integration.

We can look forward to the next three years as a time of consolidation and of new initiatives.

I am proud to release this reviewed and updated Strategy as a commitment for effective action to sustain our biological heritage in Nelson and in Te Tau Ihu o te Waka a Maui.

Brian McGurk Chair Nelson Biodiversity Forum

Introduction

The purpose of this Strategy is to continue to build a biologically rich and sustainable future for Nelson through aligned action on biodiversity. After nine years of operation the Strategy has been revised and updated.

Vision

Our vision is that Nelson is celebrated as the gateway to a region richly endowed with natural places that teem with native plants and animals.

The *mauri* (life force) and *wairua* (spirit) of ecosystems and species of significance to tangata whenua, and to the community as a whole, are protected and enhanced.

Nature is accessible in and around the City.

Tangata whenua customary use of ngā taonga tuku iho (the treasured resources) is a recognised and accepted part of the wider integrated management of biological diversity in Whakatū.

Valued exotic species thrive in appropriate places, and pests and weeds are controlled and/or eradicated.

How this strategy works

This strategy is founded on the proposition that aligned action by responsible agencies and committed individuals will lead to achieving our biodiversity vision for Nelson. The Strategy works through a 'Whole of Environment', 'Whole of Council' and 'Whole of Community' approach.

- Whole-of-Environment approach: Partners to this Strategy commit to building a network of partnerships with overlapping interests, particularly within our bio-geographic region; Te Tau Ihu o te Waka a Maui.
- ❖ Whole-of-Council approach: The principles, goals and objectives of the strategy will be considered whenever Council policies and projects are developed, implemented, and reviewed.
- Whole-of-Community approach: Partners to this strategy will work through the Biodiversity Forum to create a better biodiversity future for Nelson by committing to aligned action under the principles, goals, and objectives of the strategy.

The Strategy builds on the initiatives and actions that already exist, linking them together under a common vision; and it introduces some new actions that address the priority issues related to biodiversity management in the region.

Principles

The eight principles for biodiversity management action by the parties to this Strategy have been reaffirmed as:

- 1. Our unique ecological heritage will be protected now and for future generations.
- 2. Action will contribute to the sustainable management of Nelson ecosystems and take into account our national and global responsibilities.
- 3. The biodiversity foundations of Nelson's prosperity will be protected and enhanced.
- 4. The precautionary principle will be used in making decisions to allow for the limits to our understanding of biological complexity.
- 5. Costs, benefits, and risks, including environmental effects, will be rigorously assessed to enable best use of limited resources.
- 6. Nelson's sense of community and its capacity for cooperative enterprise will be fostered.
- 7. Action will encourage individual responsibility, participation, equity, and humane treatment.
- 8. Partners will work within their organisations to ensure that these commitments are discussed, understood, and acted on by all appropriate staff.

Achievements to March 2017

The biggest achievement over the last three years was the establishment of Nelson Nature by the Nelson City Council¹, supported by Project Maitai/Mahitahi. This has vastly accelerated implementation of this Strategy for land and freshwater environments and for public awareness in our community.

Over 2013 to 2017 one action was completed:

 Establishing a local assistance programme to connect people with appropriate advice and the resources they need to be able to provide a better biodiversity future for Nelson.

Over 2013 to 2017 sixteen actions were **substantially progressed**:

- Encouraging further agencies and sectors to sign up as partners to the Strategy.
- Protecting and restoring the natural communities of the Nelson Boulder Bank on the land.

¹See http://nelson.govt.nz/environment/biodiversity-2/nelson-nature/whats-happening/achievements-year-1

- Improving community knowledge of coastal and marine environments.
- Pursuing ecological restoration of the Maitai River.
- Supporting the Stoke Streams Rescue Project.
- Protecting and restoring alluvial, riparian and coastal ecosystems of the Maitai Valley.
- Protecting and restoring alluvial, riparian, and coastal ecosystems of Delaware Bay including Paremata Flats.
- Supporting the Brook Waimarama Sanctuary restoration.
- Protecting and restoring alluvial, riparian, and coastal ecosystems of the Kokorua dune complex.
- Integrated upland pest and weed management programmes for the publicly owned uplands.
- Completing projections for sea level rise.
- Publicly recognising and celebrating the work of citizens in sustaining biodiversity.
- Providing information programmes for community, professional and commerce/industry groups.
- **Publicising** biodiversity issues, options and successes through regular seminars, mail drops and media releases.
- Sponsoring annual public participation events that focus on the three action plans.
- Monitoring the environmental health of our estuaries.

Over 2013 to 2017 a start was made on ten actions:

- Protecting and restoring the natural communities of the publicly owned portions of the Wakapuaka sand flats, both in the sea and on the land.
- Collating, ordering and analysing information about Nelson marine biodiversity.
- Identifying critical habitats for longfin eel, giant kokopu, koaro and other "at risk" species.
- Increasing the range and security of lowland totara and fernbird.
- Developing plans to enhance the City with continuous strips of vegetation (biodiversity corridors).
- Advocating for biodiversity goals in planning for sustainability.
- Working for integration of Biodiversity effort across the wider Top of the South region.

- Implementing high value, low risk opportunities for restoration.
- Hosting workshops for partners, practitioners, and volunteers on practical skills for effective biodiversity action.
- Focusing integrated public education and awareness on biodiversity around flagship sites

Over the same period little progress was made on five actions:

- Leading stakeholders and institutions to develop integrated management of greater Tasman Bay
- Undertaking surveys of benthic marine habitats in Tasman Bay
- Completing a full stock take of current community actions aiding freshwater biodiversity.
- Compiling details on special places, ecosystems and taonga species important to tangata whenua iwi.
- Mapping the location and extent of Nelson's original (pre-1840) waterways.

Over 2013 to 2017 the progress on the following three actions was **hard to** assess:

- Identifying and correcting impediments to the natural flow of water into and through the coastal environment.
- Reducing land-based pollution of the sea.
- Improving monitoring and enforcement of Resource Management Act consent conditions for freshwaters.

Nelson Biodiversity Forum

The Nelson City Council will continue to convene and host the Nelson Biodiversity Forum.

Each Partner will determine the actual work to be done by its organisation in a given year as part of its overall planning and budgetary cycle. Each will consult on and coordinate its efforts through its engagement in the Biodiversity Forum. Each partner will report its progress on the priority actions to the Forum annually and these will be compiled and published on the Council's website.

The Partners have in this review agreed on structured Goals, Objectives, and Outcomes to align their actions and enable effective monitoring and reporting. These are set out on the next page together with Intermediate Outcomes that detail the pathway to the outcome in the environment. The following sections set out the actions agreed to achieve each Intermediate Outcome.

Goals, objectives, outcomes and intermediate outcomes

Goal 1 Active protection of native biodiversity

Ngā taonga tuku iho (the treasured resources), native species, and natural ecosystems of Nelson/Whakatu are protected and restored.

Goal 2 Ecologically sustainable use of biodiversity

The community has the living resources it needs and has minimised adverse effects on valued biodiversity.

Objective 1

Ecological health, mauri, and wairua of natural ecosystems are sustained and native biological diversity is restored, enhanced and, where appropriate, connected.

Objective 2

Biodiversity use is ecologically sustainable and biodiversity resources are available for the community to prosper including tangata whenua customary use of ngā taonga tuku iho.

Outcome 1 Nationally and regionally threatened indigenous species are sustained or restored.

Nationally and regionally

threatened species are

under active management.

Intermediate Outcome 1.2

Predator free and

predator suppressed areas

are sustained as refuges

for vulnerable species.

examples of native communities are protected and restored. Intermediate Outcome 1.1

Intermediate Outcome 2.1 At least 10% of the original area of all lowland

Outcome 2

Rare and representative

communities is functioning, resilient, and connected.

Intermediate Outcome 2.2 At least 10% of the area of all marine communities is represented in marine protected areas.

Outcome 3 Indigenous biodiversity is ecologically connected to sustain its functioning.

Intermediate Outcome 3.1 **Biodiversity corridors** connect hill to coastal ecosystems.

Intermediate Outcome 3.2 Impediments to freshwater flow and fish migration are removed.

Intermediate Outcome 4.2 Ecological functioning, water quality, habitat, flows, and amenity values are progressively restored in all streams, rivers. wetlands and estuaries.

Outcome 4

Degraded indigenous

ecosystems are

restored and then

sustained

Intermediate Outcome 4.1

The condition of

indigenous hill country

ecosystems is improved

and their area increased.

Intermediate Outcome 4.3 Biological diversity, sensitive habitats, and biological communities are restored in greater Tasman Bay.

Outcome 5 **Biodiversity is resilient** in the face of climate change.

Intermediate Outcome 5.1 Biodiversity, natural features, and ecosystems are sustained as temperatures rise, sea level rises, severe weather events occur more frequently, and pest and disease issues are exacerbated.

Outcome 6 **Ecologically** unsustainable use is prevented.

Intermediate Outcome 6.1 Biosecurity risks are averted and threats managed.

Intermediate Outcome 6.2 Sediment, nutrient, and contaminant input from the land to freshwaters and the sea are reduced to sustainable levels.

Outcome 7 Valued resources are available for use.

Intermediate Outcome 7.1 Biodiversity resources important to the community, the economy and tangata whenua are sustained and restored.

Intermediate Outcome 7.2 New ecologically sustainable opportunities are created utilising biodiversity in productive landscapes.

Actions

Actions are grouped below under Intermediate Outcomes.

Each action has a lead identified in (brackets). Being a "lead" commits the agency representative on the Forum to act as a focal point for initiating or coordinating activity on the action and keeping the Forum up to date on progress. Being a lead does not mean that an agency will be the primary provider of resources to complete an action, and other Forum members (or agencies outside the Forum) may contribute to its delivery. The Forum itself is identified as the lead for some actions which involve collaboration between all members.

Almost every action contributes to more than one outcome. To illustrate this symbols beside the action show outcomes that are relevant.

The key is below:

	Outcome	Symbol
1.	Nationally and regionally threatened indigenous species are sustained or restored.	•
2.	Rare and representative examples of native communities are protected and restored.	•
3.	Indigenous biodiversity is ecologically connected to sustain its functioning.	_
4.	Degraded indigenous ecosystems are restored and then sustained.	•
5.	Biodiversity is resilient in the face of climate change.	*
6.	Ecologically unsustainable use is prevented.	+
7.	Valued resources are available for use.	0

Nationally and regionally threatened Outcome 1 indigenous species are sustained or restored.

Intermediate Outcome 1.1 Nationally and regionally threatened species are under active management.

- Action 1.1.1 Update threatened species lists for Nelson and identify the active management needs and critical habitats of each species. (Lead: Department of Conservation).
- Action 1.1.2 Identify, and where necessary, recreate critical habitats for "nationally threatened" and "at risk" freshwater species including short jawed kokopu², lamprey³, longfin eel⁴, giant kokopu⁵, and koaro⁶, and implement physical and legal protection to safeguard habitats of these species. (Lead: Nelson City Council).
- Action 1.1.3 Increase the range and security of the rare, threatened, and/or iconic lowland totara⁷, fernbird⁸, banded rail⁹, giant land snail¹⁰, and back beach beetle¹¹. (Lead: Nelson City Council).

Intermediate Outcome 1.2 Predator free and predator suppressed areas are sustained as refuges for vulnerable species.

- Action 1.2.1 Continue community collaboration and support for the ecological restoration of the predator-free Brook Waimarama Sanctuary and enhancement of the biodiversity values in the surrounding areas (halo). (Lead: Brook Waimarama Sanctuary inside the fenced sanctuary; Nelson City Council in the halo).
- Action 1.2.2 Reintroduce regionally extinct species into the Brook Waimarama Sanctuary. (Lead: Brook Waimarama Sanctuary).

 • •
- Action 1.2.3 Lead Nelson's engagement with Predator Free 2050 initiatives (Department of Conservation).

² Galaxias postvectis

³ Geotria australis

⁴ Anguilla reinhardtii

⁵ Galaxias argenteus

⁶ Galaxias brevipinnis

⁷ Podocarpus totara

⁸ Megalurus punctatus

⁹ Gallirallus philippensis

¹⁰ Powelliphanta hochstetteri consobrina

¹¹ Bembidion (Zecillenus) tillyardi

Outcome 2 Rare and representative examples of native communities are protected and restored.

Intermediate Outcome 2.1 At least 10% of the original area of all lowland communities is functioning, resilient, and connected.

Action 2.1.1 Protect and restore existing alluvial, riparian, and coastal ecosystems of the Maitai Valley and the urban area of the city, Wakapuaka Valley and Delaware Bay including Paremata Flats, and Whangamoa Valley including the Kokorua dune complex. (Lead: Nelson City Council).

Action 2.1.2 Develop a plan for restoration of coastal cliff ecosystems. (Lead: Nelson City Council).

Action 2.1.3 Protect and restore the natural communities of the Wakapuaka sand flats and associated estuarine and freshwater environments. (Lead: Forest and Bird).

Action 2.1.4 Implement high value, low risk opportunities for restoration and protection, particularly on land where the results will be legally protected and where public land is gained as part of land-use intensification. (Lead: Nelson City Council).

Action 2.1.5 Protect and restore the natural communities of the Nelson Boulder Bank both in the sea and on the land. (Lead: Department of Conservation).



Intermediate Outcome 2.2 At least 10% of the area of all marine communities is represented in marine protected areas.

Action 2.2.1 Advocate for review of existing coverage and for undertaking surveys of benthic marine habitats in Tasman Bay mapping both biodiversity hot spots and risk zones. (Lead: Nelson City Council)

Outcome 3 Indigenous biodiversity is ecologically connected to sustain its functioning.

Intermediate Outcome 3.1 Biodiversity corridors connect hill to coastal ecosystems.

Action 3.1.1 Develop and implement plans for biodiversity corridors linking the hills to the coast. (Lead: Nelson City Council).

Intermediate Outcome 3.2 Impediments to freshwater flow and fish migration are removed.

Action 3.2.1 Identify and correct impediments to the natural flow of water into and through the coastal environment. (Lead: Nelson City Council).

Outcome 4 Degraded indigenous ecosystems are restored and then sustained.

Intermediate Outcome 4.1 The condition of indigenous hill country ecosystems is improved and their area increased.

- Action 4.1.1 Continue and extend integrated upland pest and weed management programmes for the publicly owned uplands with predominantly native cover, including the nationally rare mineral belt ecosystem integrated between NCC and DOC with links to forestry company programmes, to ensure overall natural
 character of these areas is sustained. (Lead: Nelson City Council).
- Action 4.1.2 Retire Council owned forestry areas back into native forest where this buffers existing native vegetation and opportunities allow. (Lead: Nelson City Council)

Intermediate Outcome 4.2 Ecological functioning, water quality, habitat, flows, and amenity values are progressively restored in all streams, rivers, wetlands, and estuaries.

- Action 4.2.1 Continue ecological restoration of the Maitai River and its tributaries. (Lead: Nelson City Council).
- Action 4.2.2 Continue to support the Urban Streams Project to restore ecological functioning, water quality, habitat, flows, and amenity values in city streams. (Lead: Nelson City Council).
- Action 4.2.3 Continue to monitor and enforce Resource Management Act consent conditions and Nelson Plan rules for freshwaters. (Lead: Nelson City Council).
- Action 4.2.4 Restore ecological functioning, water quality, habitat, flows and amenity values in rural streams. (Lead: Nelson City Council).
- Action 4.2.5 Improve protection of freshwaters and of significant freshwater sites through Resource Management Act policies and plans and use of other legal protection mechanisms. (Lead: Nelson City Council).
- Action 4.2.6 Monitor the environmental health of estuaries using specific indicators for assessing estuary health that align with the Ministry for the Environment national attributes and state variables for managing and monitoring upstream impacts on estuaries. (Lead: Nelson City Council).

- Action 4.2.7 Identify key threats and plan actions required to protect and restore estuaries, for example increasing natural terrestrial margin, saltmarsh, and seagrass habitat, reducing fine sediment inflows, reducing faecal contamination, and reducing wildlife disturbance. (Lead: Nelson City Council)
- Intermediate Outcome 4.3 Biological diversity, sensitive habitats, and biological communities are restored in greater Tasman Bay.
- Action 4.3.1 Lead stakeholders and institutions to develop integrated management of Tasman and Golden Bays in a way that sustains or enhances its biological diversity and protects sensitive habitats, biological communities, and species. (Lead: Tasman Bay Guardians).
- Action 4.3.2 Collate existing monitoring information about Nelson marine biodiversity and identify gaps. (Lead: Nelson City Council).



Outcome 5 Biodiversity is resilient in the face of climate change.

Intermediate Outcome 5.1 Biodiversity, natural features, and ecosystems are sustained as temperatures rise, sea level rises, severe weather events occur more frequently, and pest and disease issues are exacerbated.

Action 5.1.1 Complete an inventory of biodiversity and natural features at risk from sea level rise as a basis for future planning of staged coastal retreat for sea level rise with biodiversity objectives included.

(Lead: Nelson City Council).

Outcome 6 Ecologically unsustainable use is prevented.

Intermediate Outcome 6.1 Biosecurity risks are averted, and threats managed.

- Action 6.1.1 Promote alignment of pest management in the region by developing pest management plans, promoting public support for pest management and facilitating communication and cooperation among those involved in pest management to enhance effectiveness, efficiency, and equity of programmes. (Lead: Nelson City Council).
- Action 6.1.2 Advocate for the preparation of a bio-strategy for Nelson-Tasman and wider top of the South Island to provide an integrated overview of pest management that incorporates both regulatory and non-regulatory approaches. (Lead: Nelson Biodiversity Forum)

Intermediate Outcome 6.2 Sediment, nutrient, and contaminant input from the land to freshwaters and the sea are reduced to sustainable levels.

Action 6.2.1 Reduce land-based pollution of the sea by:

- Obtaining information about land use activities to identify where sediment is coming from, and estimate sediment accumulation rates as a basis for a review of land use management practices.
- Continued assessment of contaminated land impacts on marine environments.
- Assessing all urban storm water for contaminants and initiating action to correct issues, including adopting low impact design for sustainable urban drainage systems (e.g. rain gardens, wetlands, swales, rainwater collection, detention ponds).
 (Lead for all three bullet points: Nelson City Council)

Outcome 7 Valued resources are available for use.

- Intermediate Outcome 7.1 Biodiversity resources important to the community, the economy, and tangata whenua are sustained and restored.
- Action 7.1.1 Promote responsible plant and animal husbandry. (Forest and Bird and Natureland)
- Action 7.1.2 Develop initiatives for fisheries and habitat enhancement. (Fish and Game)
- Intermediate Outcome 7.2 New ecologically sustainable opportunities are created utilising biodiversity in productive landscapes.
- Action 7.2.1 Coordinate Nelson's response to the Government's tree planting initiatives and create a city-wide plan to enable funding to be gained for implementation. (Nelson City Council)
- Action 7.2.2 Hold a public workshop on enhancing the biological richness of Nelson's productive landscapes. (Landcare Trust)

Public Awareness and Advocacy

- Goal 1 Enhance Partners' effectiveness in creating awareness and engagement for biodiversity.
- Action 8.1.1 Create and implement an integrated programme of two significant shared engagement activities each year. (Lead: Nelson Biodiversity Forum).
- Action 8.1.2 Advocate for biodiversity goals in planning for sustainability and in responding to wider issues such as climate change where these issues adversely affect biodiversity. (Lead: Nelson Biodiversity Forum).
- Goal 2 Grow partnerships for biodiversity action across broader sectors of our community.
- Action 8.2.1 Engage with tangata whenua in their context and the context of the Treaty and history. (Lead: Nelson Biodiversity Forum).
- Action 8.2.2 Encourage further agencies and sectors to engage with the Forum, including Ministry for Primary Industries, the NZ Transport Agency and industry groups such as commercial fishers. (Lead: Nelson Biodiversity Forum).
- Goal 3 Work for strategic integration across the wider Top of the South region.
- Action 8.3.1 Work for strategic integration of Biodiversity effort across the wider Top of the South region. (Lead: Nelson Biodiversity Forum).

Monitoring and review

The Strategy will be reviewed every three years in advance of the Nelson City Long Term Council Community Plan.

The Forum will monitor progress at two levels:

- 1. Actions
- 2. Outcomes

and unify these through a standard report card and reporting through Land and Water Aotearoa (LAWA).

Progress on actions will be periodically reported by Forum partners who have agreed to lead on each action.

Progress on each outcome will be reviewed by the forum once during each three-year period and on the whole Strategy at the end of each three years.

At present, dispersed monitoring across partner organisations does not allow effective reporting at the level of outcomes, or even identification of gaps in the data. Therefore, an iterative approach will be used to report while building a comprehensive framework in which decisions can be made on further investing in monitoring and reporting.

The iterative approach is to begin reporting in the standard report card format at each forum meeting and at the same time developing a comprehensive framework. Fortunately, much of the framework has been developed nationally for regional councils for particular aspects such as terrestrial biodiversity. These parts need to be brought together, related to the Nelson context, and populated with information on the data already being collected. This is a substantial task and will require commitment of resources by partner organisations. Once the framework is completed and populated the Forum partners will be able to decide on investment priorities if gathering and collating data to track progress on outcomes.

A template for the Standard Report Card for each outcome is set out below. Each meeting of the forum will focus on one outcome in a sequence that means all have been addressed over three years. A draft report card will be prepared for that meeting using the information available and the Forum will decide on the how gaps might be filled before the end of the three-year term of the Strategy. A final version of each report card will be prepared in the third year as part of the next review of the Strategy.

The Report Card template is illustrated for Outcome 1 below:

Threatened Species

Outcome: Nationally and regionally threatened indigenous species are sustained or restored.

Narrative context: Sets out how this fits into the national and the wider Nelson biodiversity context

State: Change in number or status of threatened species, number of species under active management, trends, narrative

Pressure: Increase or reduction in pressures on threatened species, narrative

Intermediate Outcome: Nationally and regionally threatened species are under active management: progress on actions, barriers and opportunities

Indicator species: fernbird. More detailed discussion of how this is going and what it means

Intermediate Outcome: Predator free areas are sustained as refuges for vulnerable species: progress on actions, barriers and opportunities

Analysis and recommendations

A similar report card will be developed for each of the other six outcomes. Starting in 2018 each of the Outcomes will form the focus of a Forum meeting.

The following process will be followed to develop monitoring for the Forum's purposes:

- Mid2018 proposed monitoring framework presented and agreement on process for populating it with existing monitoring programmes
- Later in 2018 a gap analysis and degree to which biodiversity outcomes will be reported with current monitoring data described, decision by partners on investment in monitoring, standardisation, archiving, analysis and reporting.

GLOSSARY

Active management means the long-term protection of species, including managing all threats to secure species from extinction and ensuring their populations are buffered from the impacts of loss of genetic diversity, and longer term environmental events such as climate change.

At risk species are not considered threatened but could quickly become so if declines continue or if a new threat arises. At risk species are either declining but not uncommon, or uncommon but not declining.

Biodiversity is the natural diversity of all life, including diversity in genes, species, populations and ecosystems.

Connected biodiversity is found where ecological pathways allow natural flows of biological resources between parts of the environment with related biological processes.

Ecosystem refers to a dynamic complex of plant, animal, and micro-organism communities and their non-living environment interacting as a functional unit.

Enhance in relation to ecosystem connections means to improve the capacity for natural ecosystem processes (such as the migration of animals or the dispersal of plants) to function between different parts of the environment.

Eradicated in relation to pests mean removed from the environment where a natural or artificial barrier prevents their spread back into the area without active management intervention.

Equity is the equal treatment of people regardless of their personal circumstances and characteristics.

Exotic species are those that have evolved elsewhere and been brought by people to this place.

Goals set out what we want to achieve. In the context of this strategy they have a fifty to hundred-year timeframe.

Habitat is the environment in which a species or community of organisms lives.

Humane treatment of animals is action that avoids unnecessary pain and suffering and respects the dignity of individuals.

Indigenous species are the native plants and animals of a place.

Integrated public education and awareness activities bring together the management, motivational and education activities of partners to the Strategy into a coordinated programme.

Invasive weeds and pests are those with a capacity to establish in native ecosystems and adversely affect their natural functioning.

Kaitiaki are tangata whenua who have an inherited responsibility of to look after the mauri (life force) of ngā taonga tuku iho (treasured resources). It includes protecting biodiversity and the maintenance of resources for present and future generations.

Mauri is the life force of places and natural things.

Nationally threatened species are those at the greatest risk of extinction. They are either extremely rare, rare following severe historical decline, declining at an extremely high rate, or both uncommon and declining.

Naturally functioning in relation to ecosystems means sustaining the capacity of the ecosystem to support the range of life that evolved and is naturally present in this context; sustaining the potential for natural biological productivity, the functioning of natural ecosystem processes such as nutrient and water cycling, and the resilience of ecosystems to retain their recognisable form in the face of natural perturbations.

Nga taonga tuku iho are the treasured resources (particularly natural) of this area.

Objectives are the things we strive towards over the next 10 years to achieve our goals.

Pests are organisms that threaten our valued biodiversity resources.

The **precautionary principle** is a moral and political principle which states that if an action or policy might cause severe or irreversible harm to the public, in the absence of a scientific consensus that harm would not ensue, the burden of proof falls on those who would advocate taking the action.

Protect in relation to a resource, means its maintenance, as far as is practical, in its current state and includes its restoration to some former state and its augmentation, enhancement, or expansion.

Restore in the context of indigenous biodiversity means to re-introduce elements that have been lost, reinstate ecological processes that have been interrupted, and re-create natural biotic patterns that have been modified. It seeks to sustain the biological elements that gave Nelson its original natural character whilst recognising that a return of our ecology to a pre-human condition is impractical.

Species are groups of genetically closely related organisms that naturally interbreed.

Sustainable means the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural wellbeing and for their health and safety while:

 Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations;

- b. Safeguarding the life-supporting capacity of air, water, soil and ecosystems; and
- c. Avoiding, remedying, or mitigating any adverse effects of activities on the environment.

Sustained integrated pest and weed management is management that treats the suite of pests and weeds at a site causing adverse environmental effects, where that management is sustained over decades.

Tangata whenua, literally the people of the land, means the original people of a place, the local people or hosts.

Taonga species are plants and animals treasured by tangata whenua.

Threatened native species are those officially listed by the Department of Conservation as being in danger of extinction if action is not taken to prevent this.

Vision is an image of the ideal future we would like to reach.

Wairua means spirit.

Current biodiversity partners to the Strategy Updated August 2018

Biodiversity Partners have committed to being actively involved in creating a positive biodiversity future for Nelson. Signatories align their efforts with others through the Forum. Partners support one another to make most efficient use of the resources available. The Partners are recognised for their leadership and will work for wider community support of the principles, goals and objectives of the Strategy.

Current partners:

- 1. Nelson City Council
- 2. The Department of Conservation
- 3. The Royal Forest and Bird Protection Society of New Zealand
- 4. Te Rūnanga o Ngāti Kuia
- 5. Te Rūnanga o Ngāti Tama
- 6. Te Rūnanga o Ngāti Kōata
- 7. Port Nelson Limited
- 8. QE II National Trust
- 9. Nelmac Limited
- 10. Nelson Environment Centre
- 11. Federated Farmers of New Zealand Nelson Province
- 12. Brook Waimarama Sanctuary Trust
- 13. National Institute of Water and Atmospheric Research (NIWA)
- 14. The Cawthron Institute
- 15. Cawthron Institute Trust Board
- 16. Fish and Game [Nelson/Marlborough Region]
- 17. Nelson/Tasman Tourism
- 18. Nelson Forests Ltd
- 19. Kaitiaki o Ngahere
- 20. Fish & Wildlife Services Ltd
- 21. Tasman Pine Forests Ltd
- 22. Friends of Nelson Haven & Tasman Bay Inc.
- 23. Nelson Tasman Weedbusters

- 24. The Ornithological Society of NZ (Nelson Branch)
- 25. Waimea Inlet Forum
- 26. The Boathouse Community Trust
- 27. Southern Inshore Fisheries Management Company Ltd
- 28. Friends of the Maitai
- 29. Natureland Wildlife Trust
- 30. Tasman Environmental Trust
- 31. Tasman and Golden Bay Guardians
- 32. New Zealand Landcare Trust