

Appendix II: Land theme: NZBS objectives and actions

Objective 1.1 Protecting indigenous habitats and ecosystems <i>a) Enhance the existing network of protected areas to secure a full range of remaining indigenous habitats and ecosystems.</i> <i>b) Promote and encourage initiatives to protect, maintain and restore habitats and ecosystems that are important for indigenous biodiversity on land outside of protected areas.</i>	
Actions:	Strategy sections:
a) Complete indigenous biodiversity survey and assessment to identify habitats and ecosystems important for indigenous biodiversity.	6.2.2
b) Add to public conservation lands those habitats and ecosystems important for indigenous biodiversity that are not represented within the existing protected area network or that are at significant risk of irreversible loss or decline, or in situations where public ownership is needed for effective management.	NA but see 6.4.7
c) Encourage and support initiatives to protect and maintain habitats and ecosystems important for indigenous biodiversity on private land using a mixture of mechanisms, recognising the rights, responsibilities and interests of landowners and society, including information, education, voluntary mechanisms, economic incentives, property rights and regulation.	6.2; 6.3
d) Prepare a national policy statement and related material to provide guidance to local authorities on implementing provisions of the Resource Management Act relevant to conserving and sustainably managing indigenous biodiversity ²² .	NA
e) Expand and modify existing national funding mechanisms (the Nature Heritage Fund, Nga Whenua Rahui and Queen Elizabeth II National Trust) to meet current demand by landowners and communities where a priority, to protect habitats and ecosystems important for indigenous biodiversity, and to maintain the condition of protected areas through fencing and pest management.	6.3.3
f) Identify and remove legislative and other barriers to local authorities using economic incentives (such as rate relief and financial contributions for costs), and investigate new joint national and regional/local funding mechanisms to encourage and support the protection of ecosystems and habitats important for indigenous biodiversity on private land.	6.3.5
g) Develop and strengthen information systems to increase access by local authorities, iwi and hapu, sector groups, communities and landowners to indigenous biodiversity survey and ecosystem data and information about indigenous biodiversity management priorities and protection mechanisms.	6.4.6;6.5.2
h) Promote landowner and community awareness of opportunities to conserve and sustainably use indigenous biodiversity, and to protect and maintain habitats and ecosystems of importance to indigenous biodiversity on private land.	6.2;6.3.5;6.3.6
Objective 1.2 Sympathetic management <i>Integrate and use measures in the sustainable management of production lands and urban environments that are sympathetic to indigenous biodiversity.</i>	
a) Incorporate indigenous biodiversity priorities into programmes for sustainable land management including those under the Sustainable Land Management Strategy and related strategies and provide advice on giving effect to these priorities.	6.3.5
b) Encourage and support the protection maintenance and restoration of indigenous biodiversity in urban environments recognising the importance of urban initiatives to enhance community awareness of and involvement in biodiversity conservation.	
Objective 1.3 Pest management in habitats and ecosystems <i>Prevent, control and manage plant and animal pests, to maintain or improve the condition and health of habitats and ecosystems important for indigenous biodiversity.</i>	
a) Develop and implement strategies and plans, including national and regional pest management strategies, to manage those plant and animal pests posing significant threats to indigenous biodiversity.	6.3.3
b) Review and address barriers to agencies integrating an indigenous biodiversity focus in national and regional pest management strategies under the Biosecurity Act (see Theme Five).	6.3.3
d) Increase research into, and development of, new technologies and techniques to combat existing and emergent threats from plant and animal pests to indigenous biodiversity.	6.4.6
Objective 1.4 Terrestrial habitat restoration <i>Restore areas of degraded or scarce habitats and ecological processes that are priorities for indigenous biodiversity</i>	
a) Expand habitat and ecosystem restoration programmes and initiatives (including those on offshore islands, "mainland islands", kiwi sanctuary zones, and other sites within production lands and urban areas) to restore scarce or under-represented indigenous habitats and ecosystems to a healthy functioning state.	6.3.5
b) Develop and implement regionally based restoration strategies identifying priority areas for restoring biodiversity and develop opportunities for collaboration both within and between regions.	6.3.5
c) Encourage community understanding of, and involvement in, programmes and activities to protect, maintain and restore indigenous biodiversity through showcase projects and volunteer programmes, and improve access to information, technology, expertise and resources.	6.3.4
d) Promote the use of local indigenous species for restoration projects and programmes.	6.3.5

Appendix III: Statement of National Priorities for biodiversity on private land

	Sections in this Strategy:
National Priority 1: To protect indigenous vegetation associated with land environments (defined by Land Environments of New Zealand (LENZ) at level IV) that have 20% or less remaining in indigenous cover.	5.5;6.2;6.3;6.4
National Priority 2: To protect indigenous vegetation associated with sand dunes and wetlands; ecosystem types that have become uncommon due to human activity.	5.5;6.2;6.3;6.4
National Priority 3: To protect indigenous vegetation associated with 'originally rare' terrestrial ecosystem types not already covered by priorities 1 or 2.	5.5;6.2;6.3;6.4
National Priority 4: To protect habitats of acutely and chronically threatened indigenous species.	5.5;6.2;6.3;6.4

Appendix IV: Freshwater theme: NZBS objectives and actions

<p>Objective 2.1 Protection and sustainable management of freshwater ecosystems²⁴ <i>a) Ensure that management mechanisms, including mechanisms under the Resource Management Act and protected area statutes, adequately provide for the protection of freshwater biodiversity from adverse effects of activities on land and in water.</i> <i>b) Protect a full range of remaining natural freshwater ecosystems and habitats to conserve indigenous freshwater biodiversity, using a range of appropriate mechanisms.</i></p>	
Actions:	Strategy sections:
a) Provide appropriate national guidance and assistance to decision makers and management agencies on the protection of freshwater biodiversity through a national policy statement on biodiversity the National Agenda for Sustainable Water Management (NASWM) and the Sustainable Land Management Strategy.	6.4.7
b) Develop and apply a comprehensive classification system for freshwater ecosystems in line with the framework and criteria developed under the Environmental Performance Indicators Programme to help identify protection priorities.	NA
c) Progressively protect priority representative freshwater habitats using a suite of protective mechanisms.	6.2
d) Review the range of available protective mechanisms for freshwater biodiversity and determine any required changes to improve their efficiency and effectiveness including the removal of disincentives to protection.	6.3.3
e) Support and where necessary develop joint national and regional/local incentive mechanisms for protecting scarce and under-represented freshwater bodies and their surrounding areas on private land and provide support to landowners to maintain the biodiversity values of these areas (see Action 1.1f).	6.2
f) Provide advice and support to land managers and communities (both rural and urban) who wish to protect freshwater waterways wetlands and habitats in their area to encourage the protection of areas that are a priority for indigenous freshwater biodiversity.	6.3.5;6.3.4
g) Develop clear national criteria for protecting and managing biodiversity in wetlands and geothermal systems through a review of the 1986 Wetlands Policy and 1986 Geothermal Policy and incorporate in a national policy statement on biodiversity (see Action 1.1d).	NA
h) Expand monitoring procedures (and establish new ones) for freshwater bodies (including lakes rivers underground systems wetlands and geothermal systems) important for indigenous biodiversity to enable early action to maintain these ecosystems.	6.5.3
<p>Objective 2.2 Managing pests in natural freshwater habitats and ecosystems <i>Prevent, control and manage plant and animal pests that pose a threat to indigenous freshwater biodiversity.</i></p>	
a) Develop and implement strategies and plans, including national and regional pest management strategies, to manage those plants and animals posing a threat to indigenous freshwater biodiversity and those potential pest species already present in New Zealand but not yet widespread.	6.3.3
<p>Objective 2.3 Freshwater habitat restoration <i>Restore areas of degraded or scarce natural freshwater habitat and ecosystems that are priorities for indigenous biodiversity.</i></p>	
a) Develop and implement regionally based strategies and action plans to prioritise, restore and maintain priority freshwater and riparian ecosystems and to provide opportunities for collaboration between regions and between land and water managers.	6.3.5
b) Compile regional inventories of significant artificial barriers to the migration to and from the ocean of indigenous freshwater species and progress priority actions to restore fish passage.	6.3.7;6.5.3

Appendix V: Coastal and marine theme: NZBS objectives and actions

Objective 3.1 Improving our knowledge of coastal and marine ecosystems <i>Substantially increase our knowledge of coastal and marine ecosystems and the effects of human activities on them.</i>	
Actions:	Strategy sections:
a) Improve our knowledge of marine species, including taxonomy, distribution, habitat requirements, and the threats to species.	6.4.6
b) Survey, assess, and map habitats and ecosystems important for indigenous biodiversity and develop an agreed bioregional classification system ³⁴ .	6.4.6;6.5.4
c) Identify the uniqueness, representativeness, and importance of the biodiversity of New Zealand's coastal and marine ecosystems.	6.2
e) Develop an environmental monitoring system to provide information and a spatial understanding of: the status of marine species; fish stocks; habitats important for indigenous biodiversity; marine environmental health; threats to biodiversity; and the effectiveness of measures to avoid, remedy or mitigate the adverse effects of activities on marine biodiversity. Ensure that this information is readily accessible to all interested groups.	6.5.3;6.5.4
f) Promote individual and community awareness of the effects of activities on marine biodiversity, and the opportunities and responsibilities to protect and maintain habitats and ecosystems of importance to biodiversity.	6.3.4
Objective 3.2 Coordinated marine management <i>Develop processes for a marine management that enable decision makers to consider whole marine ecosystems.</i>	
a) Clarify and agree on comprehensive government policy objectives for marine biodiversity management, considering all stakeholder and public interests. Define agency responsibilities, especially for areas outside of the 12 nautical mile limit, and revise these if necessary.	6.4.2
Objective 3.3 Sustainable coastal management <i>Protect biodiversity in coastal waters from the adverse effects of human activities on land and in the coastal zone.</i>	
a) As part of the review of the New Zealand Coastal Policy Statement (NZCPS), assess its effectiveness, and that of regional coastal plans, in protecting marine biodiversity, and recommend changes accordingly.	6.3.3;6.4.7
b) Expand programmes to mitigate the adverse effects of land use on coastal biodiversity, and incorporate marine biodiversity priorities into programmes for sustainable land use, including the Sustainable Land Management Strategy, National Agenda for Sustainable Water Management (NASWM), and related strategies.	6.3.5
c) Maintain or restore the biodiversity of priority sites in the coastal environment.	6.2
Objective 3.4 Sustainable marine resource use practices <i>Protect biodiversity in coastal and marine waters from the adverse effects of fishing and other coastal and marine resource uses.</i>	
b) Identify the coastal and marine species and habitats most sensitive to harvesting and other disturbances and put in place measures to avoid, remedy or mitigate adverse effects from commercial, recreational and Maori customary fishing activities.	NA
c) In the absence of, or uncertainty about, information required for the sustainable use of marine resources, apply the precautionary principle when setting sustainability measures for fishing or setting controls for other coastal and marine uses.	6.3.7
d) Improve the environmental impact assessment (EIA) of fishing and other marine and coastal resource use, and integrate these EIA into fisheries decision making processes (including sustainability measures and fisheries plans) and other marine management processes.	6.37
e) Avoid, remedy or mitigate the adverse impacts of human activities (such as marine transport and mining) on marine biodiversity and develop habitat restoration programmes where appropriate.	6.3.7
Objective 3.5 Managing marine biosecurity risks <i>Develop an integrated system to identify biosecurity risks to marine biodiversity from exotic organisms and establish appropriate management responses to prevent and reduce these risks and to minimise their impacts.</i>	
a) Enhance border control to prevent harmful species and diseases establishing and being spread within New Zealand's marine environment (by practices such as discharge of ballast water and the de-fouling of ship hulls).	NA
b) Determine responsibilities for the management of established marine pests so that appropriate measures (including preparing and implementing pest management strategies under the Biosecurity Act 1996) can be undertaken promptly and efficiently.	6.3.3
c) Identify the distribution of exotic species and assess the actual and potential impacts of these on marine ecosystems and biodiversity.	NA
d) Increase pest control and management efforts to levels congruent with national biodiversity goals and develop new technologies and techniques to combat existing and emergent threats to marine biodiversity from marine pests.	NA

<p>Objective 3.6 Protecting marine habitats and ecosystems <i>Protect a full range of natural marine habitats and ecosystems to effectively conserve marine biodiversity, using a range of appropriate mechanisms, including legal protection.</i></p>	
a) Develop and implement a strategy for establishing a network of areas that protect marine biodiversity, including marine reserves, world heritage sites, and other coastal and marine management tools such as mataitai and taiapure areas, marine area closures, seasonal closures and area closures to certain fishing methods.	6.4.2
b) Achieve a target of protecting 10 percent of New Zealand's marine environment by 2010 in view of establishing a network of representative protected marine areas.	6.4.2
d) Promote and encourage individual and community initiatives to protect, maintain and restore habitats and ecosystems that are important for marine biodiversity.	6.3.4
<p>3.7 Threatened marine and coastal species management <i>Protect and enhance populations of marine and coastal species threatened with extinction, and prevent additional species and ecological communities from becoming threatened.</i></p>	
(a) Review the threatened species priority setting systems and extend them to assess coastal and marine species.	NA
(b) Identify and protect threatened species and their key habitats.	NA

Appendix VI: NZBS actions: Biosecurity, Maori, Community and Information

Note: This appendix only includes those actions where local authorities or regional councils were listed in the New Zealand Biodiversity Strategy as key players.

a. Actions from Biosecurity Theme of NZBS:	
<p>Objective 5.2 Methods of assessing and managing biosecurity risks <i>Establish effective methods of assessing and managing risks from unwanted organisms to indigenous biodiversity in conjunction with those methods for introduced species.</i></p>	
<p>a) Assess the probability and likely scale of adverse effects on indigenous biodiversity from potential pest species, including species that are:</p> <ul style="list-style-type: none"> • not in New Zealand, but may be accidentally introduced through international trade and travel; and • already in New Zealand, but which have not become widespread . 	NA, although see 6.3.3
<p>c) Develop and implement indicators under the Environmental Performance Indicators Programme and strategies for assessing the effectiveness of biosecurity management in protecting indigenous biodiversity and important introduced species.</p>	6.5.3
<p>Objective 5.5 Managing potential pest species <i>Eradicate or contain introduced species that have the potential to become serious threats to New Zealand's indigenous biodiversity and important introduced species.</i></p>	
<p>b) Raise public awareness about introduced species that pose a potential threat to indigenous biodiversity.</p>	6.3.4
b. Actions from Maori and Biodiversity theme of NZBS	
<p>Objective 7.1 Partnerships in biodiversity management <i>Develop partnerships between Maori and Crown agencies in the conservation and sustainable management of biodiversity, consistent with the principles of the Treaty of Waitangi.</i></p>	
<p>a) Improve current management to encourage iwi and hapu participation in processes for managing biodiversity within their rohe, including management of conservation areas, and resource management processes applying outside of these areas, and recognise iwi and hapu resource management plans that address biodiversity issues within their rohe.</p>	6.4.3
<p>b) Negotiate and establish protocols and arrangements with iwi and hapu at regional and local levels with respect to the management of specific habitats or particular species within their rohe, as a basis for building and maintaining effective working relationships and partnerships.</p>	6.4.3
<p>Objective 7.2 Matauranga Maori <i>Recognise and respect the role of matauranga Maori in biodiversity management and provide for its retention and protection.</i></p>	
<p>b) Recognise the knowledge and role of Maori as kaitiaki in the conservation and sustainable use of biodiversity, including the cooperative management of public conservation areas and local authority resource management processes.</p>	6.4.2;6.4.3
<p>c) Enable Maori to incorporate traditional values and practices within tikanga-based biodiversity projects (such as the DoC Tikanga Atawhai projects) as part of their role as kaitiaki, and as a means of promoting and reviving matauranga Maori.</p>	6.4.4;6.4.3
<p>Objective 7.3 Treaty of Waitangi claims settlement processes <i>Ensure policy development in relation to the conservation and sustainable use of biodiversity is responsive to the outcomes of Crown Treaty settlements and that Treaty settlement proposals are advanced in ways that enable the conservation and sustainable use of biodiversity.</i></p>	
<p>a) Monitor Treaty settlements and ensure Treaty settlement provisions and biodiversity management policies are compatible and complementary.</p>	6.4.3
<p>b) Advise parties negotiating Treaty settlements on the biodiversity implications of settlement options.</p>	NA
<p>Objective 7.4 Science and research <i>Recognise and provide for Maori interests and involvement in government-funded scientific research about biodiversity.</i></p>	
<p>a) Develop a process for incorporating Maori biodiversity research needs into priority setting for research at national, regional and local levels.</p>	NA
<p>b) Encourage partnerships between science providers and Maori in undertaking appropriate government-funded research.</p>	6.4.6

c. Actions from Community Participation and Awareness NZBS theme

Objective 8.1 Community awareness and involvement

Enhance and broaden individual and community understanding about biodiversity (in particular, New Zealand's indigenous biodiversity) and increase community involvement in the conservation and sustainable use of New Zealand's biodiversity.

a) Make information about biodiversity available to people and communities, relevant to their local environments (that is, on the extent and management needs of ecosystems, habitats and native species), to enable them to make decisions and take action to support the conservation and sustainable use of biodiversity.	6.3.4
b) Develop a public awareness programme about New Zealand's lesser known or appreciated indigenous ecosystems, habitats and species important for biodiversity conservation.	6.3.4
c) Encourage greater community involvement and partnerships in management programmes and participatory projects to conserve and sustainably use biodiversity.	6.4.2

Objective 8.2 Role of resource managers

Encourage natural resource managers and users and landowners to adopt realistic and pragmatic steps to conserve and sustainably use biodiversity.

a) Support, and where necessary develop, joint national and regional/local incentive mechanisms to encourage land, freshwater and marine management practices that lead to the conservation and sustainable management of biodiversity (see also Actions 1.1f and 2.1e).	6.4.2
b) Promote and support, in partnership with the Landcare Trust, landcare groups and other community-based groups, the integration of biodiversity considerations into sustainable land and water management initiatives.	6.4.2
c) Support activities through the Sustainable Management Fund that enhance landowner and community understanding of ways to avoid or minimise the effects of human activities on biodiversity, and encourage community involvement in practical initiatives that help achieve the sustainable management of biodiversity.	6.3.5
e) Develop and use national and regional "biodiversity awards" to reward notable efforts or achievements by landowners, businesses and community groups to conserve and sustainably use indigenous biodiversity.	6.3.4

Objective 8.3 Environmental education

Expand and enhance education about biodiversity as a key element in developing environmental education programmes and activities.

c) Promote and coordinate the role of environmental education in the conservation and sustainable use of biodiversity (as part of the implementation of the New Zealand Environmental Education Strategy) and encourage the active participation of local authorities, iwi and hapu, businesses, and environmental and community groups in developing and implementing environmental education activities.	6.3.4
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d. Actions from Information, knowledge and capacity NZBS theme

Objective 9.1 Expand the research frontier

Identify and fill critical gaps in scientific knowledge, including applied research, and prioritise and coordinate future research to address key issues and threats to biodiversity.

a) Develop and implement a coordinated research strategy to identify and fill gaps in our knowledge and understanding of biodiversity relevant to key threats.	6.5.4
b) Invest in relevant research that contributes to better management of introduced pests and enhanced management of indigenous biodiversity.	6.5.4

Objective 9.2 Use ecosystem-based methods to map our indigenous biodiversity

Develop and implement effective approaches to map indigenous biodiversity at ecosystem scales and inform management actions and research.

a) Develop effective methods of ecosystem classification and mapping biodiversity and for identifying and monitoring key biodiversity issues and threats.	6.2.2
b) Accelerate biodiversity survey, identification and assessment of threats to key ecosystems. (See also Actions 1.1a, 2.1b and 3.1b).	6.2

Objective 9.3 Keep track of change

Use consistent measures and methods to monitor and provide information on key changes in the extent and condition of indigenous biodiversity.

a) Clarify agency accountabilities for monitoring and reporting on indigenous biodiversity.	NA
b) Develop, select and use cost-effective methods (including indicators) for monitoring indigenous biodiversity and threats to indigenous biodiversity.	6.5.3

Objective 9.4 Reporting and adaptive management

Ensure that local, regional and national reporting on the state of indigenous biodiversity informs ongoing priority setting for biodiversity management and research as a key part of an adaptive management approach.

a) Use monitoring results to provide local, regional and national views on the state of New Zealand's indigenous biodiversity, to report on progress towards achieving biodiversity goals, review and re-focus management action, and inform research to fill critical information gaps.	1.5
Objective 9.5 Share Information and best practice <i>Consolidate and share existing and new information, methods, technologies and management experiences so that others can benefit from relevant knowledge about indigenous biodiversity.</i>	
a) Develop resources and systems that promote the consolidation and sharing of information about indigenous biodiversity and hands-on biodiversity management.	6.5.3
Objective 9.6 Build capacity <i>Enhance the capacity of people and organisations to fulfill their responsibilities to conserve and sustainably manage New Zealand's indigenous biodiversity.</i>	
a) Document codes of practice and expected performance standards for use of the most cost effective techniques for managing biodiversity and provide for the evaluation and continuous improvement of these techniques and the sharing of information on best practice.	6.2.7;6.3.8; 6.4.8;6.5.5
b) Incorporate biodiversity values into sector- and industry-based environmental management systems, performance standards, guidelines, environmental policies and codes of practice, with the help of advice and information from government agencies.	6.4.4
c) Ensure that biodiversity management agencies review and monitor their capacity to implement best practice management techniques, enhance their competencies and share these experiences with others.	6.4.2
d) Ensure appropriate skills training and education to enhance the capacity of people and relevant management agencies to manage indigenous biodiversity.	6.3.2
Objective 9.7 Valuing biodiversity <i>Improve the knowledge of market and non-market values of indigenous biodiversity and develop methodologies to evaluate the full cost of activities in terms of their impacts on these biodiversity values.</i>	
a) Review mechanisms that have been used in other countries to value biodiversity, and where practicable, develop ways to apply these techniques in New Zealand.	NA
b) Investigate and raise awareness of the range of incentives (including financial, information and property-based mechanisms) which resource managers can use to encourage and reward sympathetic management of indigenous biodiversity (see also Actions 1.1e, 1.1f and 2.1e).	6.3.5