

Proposed National Policy Statement on Indigenous Biodiversity

Evaluation under section 32 of the Resource Management Act 1991

New Zealand Government

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Preface

This document contains an evaluation for the Minister for the Environment of the proposed National Policy Statement on Indigenous Biodiversity ('the NPS'), as required under section 32 of the Resource Management Act 1991 (RMA). A section 32 evaluation considers the appropriateness, alternatives, costs and benefits of a proposed national policy statement, and its objectives and policies.

This section 32 evaluation presents an initial assessment of the NPS – it is expected that the NPS will undergo further refinement following public submissions. This report and a summary of public submissions on it are intended to help further assessments of the NPS.

Five questions are posed in the document and your feedback on these core matters is appreciated as part of your written submission, alongside any other comments you may wish to make. See the submission form in Appendix 4.

A second section 32 evaluation will be completed following this inquiry process (as set out in sections 51 and 52 of the RMA) and a report and recommendations has been provided to the Minister on the proposed NPS.

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Proposed National Policy Statement on Indigenous Biodiversity

Preamble

This national policy statement sets out the objective and policies to manage New Zealand's natural and physical resources to maintain indigenous (native) biological diversity (biodiversity) under the Resource Management Act 1991 ('the Act').

This preamble aims to help with interpreting the national policy statement.

New Zealand has a unique natural heritage. Our land is young and geologically unstable. It has been separated from other major land masses for some 80 million years. In this isolation and geological instability our ecology has evolved to be genuinely unique. We have high endemism (species found nowhere else on the planet) and, in the absence of land mammals, such distinct ecosystems that New Zealand has been described as the closest scientists will come to studying life on another planet.

Yet, in just 700 to 800 years, humans have wrought huge change through our use of land and other natural resources, and through our introduction (deliberate or otherwise) of exotic species that have become pests outside their natural environments. As a consequence, many indigenous species have been lost and many that remain are now highly vulnerable and may also be lost unless we intervene to protect them from the many threats they face. We do this because biodiversity plays an important part in the quality of New Zealand's environment and in our social, economic, and cultural well-being.

However, maintaining our biodiversity is one of our greatest environmental challenges. In 2000, a national strategy¹ (prepared in accordance with the International Convention of Biological Diversity) identified, and sought to respond to, a decline in indigenous biodiversity. Government responses to the decline have been many and varied. One was to strengthen the Act's (and thereby local authorities') role in biodiversity protection. Delivering on that role has, however, proved challenging for local authorities because:

- areas and habitats of native species occur on private land and there are inevitable tensions between the aspirations of private landowners for land use and development and the need to protect habitats in those areas
- ecosystems are not always confined to definable sites; maintaining native biodiversity requires more than protecting sites of especially high biodiversity value
- the need to have regard to biodiversity is pervasive and relevant to the exercise of a wide range of functions under the Act
- there is a specific function within the Act for both regional councils and territorial authorities to maintain native biodiversity. This is the only function within the Act that has an objective embedded within it ("maintain")
- the costs of protecting areas and habitats are local and often specific to an individual yet the benefits are local, regional and national

¹ Ministry for the Environment, Department of Conservation. 2000. *The New Zealand Biodiversity Strategy: Our Chance to Turn the Tide*. New Zealand Government, Wellington.

- the distribution of remaining native vegetation and habitat types means the responsibility for maintaining biodiversity does not fall uniformly across all regions and districts
- responses under the RMA are just part of a wider programme of actions by both public and private entities engaged in funding and managing protection, restoration, and a range of recovery programmes
- overall success relies on the goodwill and sympathetic management of the many private landowners on whose properties native species and ecosystems remain. That needs to be remembered in the way we manage for biodiversity under the Act.

This national policy statement aims to:

- bring more clarity to local authorities' role in managing biodiversity under the RMA than may be apparent on the face of the Act itself
- support the existing good work of local authorities and secure the gains made in regional and local plans
- encourage local authorities that operate below best practice to enhance their efforts by introducing a 'bottom line' category of site whose values are to be recognised and protected through the RMA
- help decision-makers appropriately balance the protection of native biodiversity, the interests and values of tangata whenua, the rights and responsibilities of landowners and the broader national interests that may be at stake in future resource management decision-making. One way to achieve this is through biodiversity off-sets.

In pursuing these aims, the national policy statement seeks to strengthen the contribution the RMA makes to "halting the decline" of native biodiversity. However, some areas and habitats identified as significant under section 6(c) of the RMA will not be identified using the criteria promoted by this national policy statement. Examples are sites valued for conservation in a more general sense; sites valued for landscape, amenity or cultural reasons; or sites already identified by virtue of existing criteria for section 6(c) matters. This national policy statement does not limit section 6(c), but rather, it makes it clear that at least one reason an area or habitat may be significant is for its contribution to maintaining biodiversity. It seeks to ensure the most critical areas and habitats are recognised. It is important to note this national policy statement does not imply local authorities cannot go beyond this in identifying and protecting sites should they so wish.

This national policy statement also seeks to recognise the traditional relationship developed over centuries of close interaction by Māori with New Zealand's indigenous biodiversity. It also acknowledges the role that Māori have as kaitiaki who are involved in all aspects of biodiversity management including conservation, customary and commercial uses. The recognition of the above will assist in developing stronger working relationships between the Crown and Māori.

The national policy statement is to be applied by decision-makers under the Act. The objective and policies are intended to guide them in drafting plan provisions that recognise and protect biodiversity values, and in making decisions under the Act about activities that may affect native biodiversity.

However, the national policy statement does not substitute for, or prevail over, the Act's statutory purpose or the statutory tests already in existence. Further, the national policy statement is subject to Part 2 of the Act.

The national policy statement is intended to be a relevant consideration to be weighed along with other considerations to achieve the sustainable management purpose of the Act.

Proposed National Policy Statement on Indigenous Biodiversity

Pursuant to section 46 of the Resource Management Act 1991 the Minister for the Environment proposes the following National Policy Statement –

1. Title

This National Policy Statement is the Proposed National Policy Statement on Indigenous Biodiversity.

2. Commencement

This national policy statement comes into force on the 28th day after the date on which it is notified in the Gazette.

3. Interpretation

In this National Policy Statement, unless the context otherwise requires -

Act means the Resource Management Act 1991.

Biodiversity has the same meaning as biological diversity as included in the Act.

Biodiversity values means those attributes of an ecosystem that determine an area or habitat's importance for the maintenance of biodiversity nationally. Biodiversity values include species composition, habitat structure and ecosystem function.

Biodiversity offset means measurable conservation outcomes resulting from actions which are designed to compensate for more than minor residual adverse effects on biodiversity, where those affects arise from an activity after appropriate prevention and mitigation measures have been taken. The goal of biodiversity offsets is to achieve no net loss and preferably a net gain of biodiversity on the ground with respect to species composition, habitat structure and ecosystem function.

Community means a group of organisms growing or living together in a given area.

Customary use means, according to tikanga, the extractive use of indigenous plants or animals by tangata whenua for traditional uses including food gathering, carving, weaving, and rongoa (traditional medicine).

Ecosystem means an ecological community together with its environment, functioning as a unit; an interacting system of living parts and non-living parts such as sunlight, air, water, minerals and nutrients.

Habitat means the area or environment where an organism or ecological community lives or occurs naturally for some or all of its life cycle or as part of its seasonal feeding or breeding pattern.

Indigenous species means a species or genetic variant found naturally in New Zealand, including migrant species visiting New Zealand on a regular or irregular basis.

Indigenous vegetation means any local indigenous plant community through the course of its growth or succession consisting primarily of native species and habitats normally associated with that vegetation type, soil or ecosystem or having the potential to develop these characteristics. It includes vegetation with these characteristics that has been regenerated with human assistance following disturbance or as mitigation for another activity, but excludes plantations and vegetation that have been established for commercial harvesting.

Land environment means a region or area classified under the Land Environments of New Zealand system.

Matter has the same meaning as defined in section 141 of the Act.

Provisions means objectives, policies, methods, rules or ancillary information (such as criteria) included within a regional policy statement or district or regional plan.

Restoration and enhancement means the active intervention and management of degraded biotic communities, landforms and landscapes in order to restore biological character, ecological and physical processes.

Maintenance means 'no net loss' as achieved by the protection of existing areas and habitats and/or the restoration and enhancement of areas and habitats as may be required through biodiversity off-sets or other initiatives.

No net loss means no overall reduction in:

- a. the diversity of (or within) species
- b. species' population sizes (taking into account natural fluctuation), and long-term viability
- c. area occupied and natural range inhabited by species
- d. range and ecological health and functioning of assemblages of species, community types and ecosystems.

Public conservation land refers to land administered by the Department of Conservation for whatever purpose. It excludes land administered under conservation legislation by other parties.

Threatened species means a species facing a very high risk of extinction in the wild and includes nationally critical, nationally endangered and nationally vulnerable species as identified in the New Zealand Threat Classification System lists.

At risk means a species facing a longer-term risk of extinction in the wild (either because of severely reduced or naturally small population size or because the population is declining but buffered by either a large total population or a slow rate of decline) as identified in the New Zealand Threat Classification System lists.

Any term or expression that is not defined in this National Policy Statement, but that is defined in the Act, has the meaning given to it by the Act.

4. Application

This national policy statement applies to land owned by any person except that it does not apply to public conservation land.

This national policy statement does not apply to the coastal marine area. Biodiversity in the coastal marine area should be managed in accordance with relevant policies of the New Zealand Coastal Policy Statement.

This national policy statement is not intended to be a statement of all that is required in order to fulfil obligations under section 6(c) of the Act. Instead it requires the recognition that at least one of the reasons an area or habitat may be significant for the purposes of section 6(c) is for its contribution to maintaining biodiversity.

5. Matter of national significance

The matter of national significance to which this national policy statement applies is the need to maintain New Zealand's indigenous biological diversity.

6. Objective

To promote the maintenance of indigenous biological diversity by protecting areas of significant indigenous vegetation and significant habitats of indigenous fauna, and to encourage protection and enhancement of biodiversity values more broadly while:

- supporting best practice of local authorities
- recognising the positive contribution of landowners as guardians/kaitiaki of their land
- recognising that the economic, social and cultural well-being of people and communities depends on, amongst other things, making reasonable use of land.

7. Policies

POLICY 1

For the purpose of this national policy statement, an area of significant indigenous vegetation or a significant habitat of indigenous fauna is an area or habitat whose protection is important for the maintenance of indigenous biological diversity.

POLICY 2

In considering the effects of any matter, local authorities shall, in addition to any area of significant indigenous vegetation or a significant habitat of indigenous fauna identified in, or by, provisions of any relevant regional policy statement, or regional or district plan, regard the following as significant indigenous vegetation or significant habitat of indigenous fauna:

- a. the naturally uncommon ecosystem types listed in Schedule One
- b. indigenous vegetation or habitats associated with sand dunes

- c. indigenous vegetation or habitats associated with wetlands
- d. land environments, defined by Land Environments of New Zealand at Level IV (2003), that have 20 per cent or less remaining in indigenous vegetation cover
- e. habitats of threatened and at risk species.

POLICY 3

Any regional policy statement notified after the date on which this national policy statement takes effect, shall, in addition to any other provisions it has. or is required to have relating to section 6(c) of the Act, include criteria for the identification of areas of significant vegetation and significant habitat of indigenous fauna that include, as a minimum, the areas and habitats identified in Policy 2a–d.

POLICY 4

District plans and any relevant regional plans shall identify, using (where practical) maps and/or schedules, areas of significant indigenous vegetation and significant habitats of indigenous fauna. In identifying these areas, decision-makers must include in their plans the criteria of the relevant regional policy statement and, within five years of this national policy statement taking effect, the criteria of Policy 2a–d (to the extent that these may be broader in scope than those of the relevant regional policy statement) and 2e (to the extent that existing information enabling the application of this criteria is available).

For the purpose of this policy, a relevant regional plan is a regional plan that controls activities that could adversely affect areas of significant vegetation and significant habitat of indigenous fauna.

POLICY 5

In addition to the inclusion in plans of any other provisions that the plan has or is required to have relating to section 6(c) of the Act, local authorities must manage the effects of activities through district and relevant regional plans (or be satisfied that the effects are managed by methods outside of district or regional plans) to ensure 'no net loss' of biodiversity of areas of significant indigenous vegetation and significant habitats of indigenous fauna by:

- a. avoiding adverse effects and
- b. where adverse effects cannot be avoided, ensuring remediation and
- c. where adverse effects cannot be remedied, ensuring mitigation and
- d. where adverse effects cannot be adequately mitigated, ensuring any residual adverse effects that are more than minor, are offset in accordance with the principles set out in Schedule 2.

For the avoidance of doubt, in accordance with the principles of Schedule 2, there are limits to what can be offset because some vegetation or habitat and associated ecosystems, is vulnerable or irreplaceable. In such circumstances, off-setting will not be possible and local authorities will need to take full account of residual adverse effects in decision-making processes.

POLICY 6

To promote the maintenance of biodiversity outside of identified areas of significant indigenous vegetation and significant habitats of indigenous fauna, and to support the resilience and viability of populations and species assemblages within identified areas and habitats, decision-makers should:

- a. recognise the contribution that all remaining areas of indigenous vegetation make to the maintenance of indigenous biodiversity and encourage the retention of as many elements as possible
- b. recognise the full range of potential adverse effects on indigenous biodiversity including, but not limited to, population fragmentation, degradation of non-living components (eg, water and soil), interruption to breeding cycles and migratory pathways, and increased exposure to invasive introduced plant and animal species that pose a threat to indigenous biodiversity
- c. encourage the retention of existing vegetation, whether indigenous or not (but not including recognised pest plants), that provides:
 - i. habitat for indigenous species
 - ii. seasonal food sources for indigenous species
 - iii. ecological linkage between areas and habitats identified in accordance with Policy 4
 - iv. a buffer to indigenous vegetation for areas and habitats identified in accordance with Policy 4
- d. when the retention of existing vegetation and habitat will not achieve sustainable management, encourage measures that mitigate and offset adverse effects on indigenous species during, and subsequent to, removal or modification of that vegetation or habitat through harvest or clearance or other activity that may threaten the survival of affected species populations
- e. encourage the planting of naturally occurring, locally sourced indigenous species and the creation of habitats for indigenous species as well as plant and animal pest control
- f. encourage the establishment of additional indigenous riparian vegetation as a means of increasing connectivity and enhancing freshwater habitat for indigenous species
- g. ensure human-made structures do not adversely impact on indigenous species by interfering with their natural migratory movements
- h. consider both regulatory incentives (such as bonus development rights in exchange for protection and enhancement of vegetation and habitats) and non-regulatory incentives (such as technical advice and practical help) to support and encourage landowners to make appropriate land management decisions.

POLICY 7

To recognise and provide for the role of tangata whenua as kaitiaki, when developing and implementing regional policy statements and regional and district plans local authorities shall provide for:

a. tangata whenua values and interests to be incorporated in to the management of biodiversity

- b. consultation with tangata whenua regarding the means of protecting and enhancing areas and habitats identified in accordance with Policy 4 that have particular significance to tangata whenua
- c. active involvement of tangata whenua in the protection of cultural values associated with indigenous biological diversity
- d. customary use of indigenous biodiversity according to tikanga.

POLICY 8

During the development of biodiversity-related provisions of regional policy statements, district plans and relevant regional plans (including prior to notification), local authorities will consult with, and provide reasonable opportunity for, the input of:

- a. those whose properties would be affected by the proposed plan
- b. the public
- c. tangata whenua.

Schedule 1: Naturally uncommon ecosystems

Tentative 'common' name	Definition (ie, diagnostic classifiers) and notes	Vegetation structure
Coastal systems		
Dune deflation hollow	Raw/sand/depression/excessive drainage/coastal	Open land
Shell barrier beaches	Raw/shells/plain/coastal	Grassland, herbfield
Coastal turf	Raw/atmospheric salinity/coastal, extreme exposure	Open land, herbfield
Stony beach ridges	Raw-recent/gravel-cobbles/beach ridge/coastal	Scrub, shrubland, open land
Shingle beaches	Raw-recent/gravel-cobbles/beach/ coastal	Open land
Coastal rock stacks	Raw/silicic-intermediate and mafic bedrock/tor/coastal	Open land, herbfield, lichenfield, shrubland
Coastal cliffs on calcareous rock	Raw/calcareous rock/cliffs/coastal	Open land, lichenfield, herbfield, scrub, shrubland tussockland
Ultramafic sea cliffs	Raw/ultramafic/cliffs/coastal	Scrub, herbfield, lichenfield, open land
Coastal cliffs: quartzose, acidic and basic	raw/quartzose, acidic or basic rock/cliffs/coastal	open land, lichenfield, herbfield, scrub, shrubland tussockland
Marine mammal influenced sites	Seabirds and marine mammals- trampling and grazing/coastal	Open land – forest
Inland and alpine systems with r	aw or recent soils	
Screes of calcareous rock	Raw/calcareous/gravel-cobbles/talus/ (excessive drainage – near permanently saturated; inland-alpine)	Open land
Recent lava flows (<1000 years)	Raw/silicic-intermediate (volcanic)/ boulders-bedrock (numerous landforms)	Scrub, shrubland, treeland, forest, herbfield, mossfield, open land
Old tephra (>500 years) plains (= frost flats)	Silicic-intermediate (volcanic)/ depression/seasonally fluctuating water table/inland, >200 frost days year	Shrubland, scrub, tussockland
Frost hollows	Terrace/>200 frosts per annum	Shrubland, scrub
Cliffs, scarps and tors of mafic rock	Raw/mafic/cliff, scarp and tor/inland- alpine	Open land, herbfield, tussockland, shrubland
Calcareous cliffs, scarps and tors	Raw/calcareous/cliff, scarp and tor/ inland-alpine	Open land, herbfield, tussockland, shrubland
Inland outwash gravels	Raw-recent/silicic/sand-boulders/ plain/inland	Open land, herbfield, treeland
Braided riverbeds	Raw-recent/ sand-boulders/plain/ periodically flooded (see Johnson and Gerbeaux, 2004, p56)	Open land, herbfield
Sandstone erosion pavement	Raw/quartzose sandstone/bedrock/ hillslope, hillcrest	Open land
Recent volcanic debris landforms: dunes	Raw/acidic rock (volcanics)/sand/dune	Open land
Recent volcanic debris landforms: lava flows, boulderfields, debris flows and tephra	Raw/acidic rock (volcanics)/silt-sand- gravel-cobbles-boulders-bedrock-talus	scrub, shrubland, treeland, forest, herbfield, mossfield, lichenfield, open land

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Cliffs, scarps and tors: quartzose to acidic	Raw/quartzose or acidic rock/bedrock/cliff, scarp and tor/inland- alpine	open land, herbfield, tussockland, shrubland
Ultrabasic landforms (incl. hills, cliffs, screes, boulderfields	Ultrabasic rock/inland	open land, lichenfield, herbfield, tussockland, shrubland, forest (very limited extent)
Boulderfields of selected rock types (acidic and calcareous)	Raw/acidic or calcareous rock/boulders/talus	open land, lichenfield, shrubland
Limestone erosion pavements	Raw/limestone/bedrock/hillslope, hillcrest/(alpine)	Open land
Other inland systems		
Inland saline (salt pans)	Groundwater salinity/semi arid/ depression (see also Johnson and Gerbeaux, 2004, pp 20, 22)	Herbfield, grassland
Leached terraces	Overmature/sand-gravel/terrace- plain/inland	Open land, herbfield, shrubland
Cloud forest	High cloud cover (<1500 sunshine hours and >200 rain days per annum)/inland	Forest
Geothermal systems		
Heated ground (dry)	Geothermal-excessive heat	Open land, mossfield, shrubland, scrub
Hydrothermally altered ground (now cool)	Geothermal-acid soils, toxic elements	Open land, shrubland, scrub
Acid rain systems	Geothermal-acid rain	Open land, scrub, treeland, forest
Fumeroles	Geothermal-superheated steam/acid rain/depression	Open land, shrubland
Geothermal streamsides	Geothermal-excessive heat/near permane	ently saturated (but water table not high)
Subterranean or semi-subterran	ean	
Sinkholes	Raw/limestone, marble, dolomite/doline	Open land, shrubland, tussockland, flaxland
Cave entrances	Raw/limestone, marble, dolomite/cave entrance	Open land, herbfield

Schedule 2: Principles to be applied when considering a biodiversity offset

1. *No net loss:* A biodiversity offset should be designed and implemented to achieve in situ, measurable conservation outcomes which can reasonably be expected to result in no net loss and preferably a net gain of biodiversity.

The offset design will demonstrate that:

- a. the key biodiversity components affected by the activity are identified, and an explanation provided as to how this was done, the basis for doing so, and how the key biodiversity components have been included in the offset design
- b. the anticipated losses of biodiversity at the site of the activity and the anticipated gains at the offset site have been calculated to determine "no net loss" and preferably "net gain" and documented
- c. appropriate measures/metrics that address the quality and quantity of biodiversity have been identified and used in the loss-gain calculations
- d. a suitable basis for assessing a 'like-for-like-or-better' approach to equivalence has been identified and used for the offset design
- e. any temporal loss of biodiversity between the time of the project's impact and the time the offset will mature has been considered and addressed
- f. intended conservation outcomes for biodiversity components within the offset are explicitly described
- g. uncertainty and risk is explicitly built into the loss-gain calculations.
- 2. *Additional conservation outcomes:* A biodiversity offset should achieve conservation outcomes above and beyond results that would have occurred if the offset had not taken place. Offset design and implementation should avoid displacing activities harmful to biodiversity to other locations.

The offset design will demonstrate that:

- a. conservation gains have been predicted without the offset project ("without-offset") and with the offset, and on this basis, evidence is provided to show that the anticipated conservation outcomes would not have occurred without the offset.
- 3. *Adherence to the mitigation hierarchy:* A biodiversity offset is a commitment to compensate for significant residual adverse impacts on biodiversity identified after appropriate avoidance, minimisation and on-site rehabilitation measures have been taken according to the mitigation hierarchy.

The offset design must demonstrate:

- a. how the activity addresses direct and indirect effects on specific components of biodiversity by:
 - i. avoidance measures
 - ii. minimisation measures
 - iii. on-site rehabilitation measures

- b. that the biodiversity offset only addresses the residual effects of the activity, namely those effects left after all the appropriate avoidance, minimisation and rehabilitation actions have been taken.
- 4. *Limits to what can be offset:* There are situations where residual effects cannot be fully compensated for by a biodiversity offset because the biodiversity affected is vulnerable or irreplaceable.

These situations will be demonstrated when:

- a. a comprehensive assessment has been undertaken to determine whether, and if so which, highly vulnerable and irreplaceable biodiversity components are present and are affected by the activity. In determining when offsetting is not appropriate, local authorities should have regard to whether the vegetation or habitat:
 - i. represents a non-negligible proportion of what remains of its type
 - i. is now so rare or reduced that there are few options or opportunities for delivering the offset
 - ii. is securely protected and in good condition so there is little opportunity to offset the biodiversity components in a reciprocal manner
 - iii. is threatened by factors that cannot be addressed by the available expertise.

If there are residual effects on biodiversity that are not, or seem likely not, to be capable of being offset, any measures taken to address them, by way of environmental compensation or otherwise, should not be considered to be a biodiversity offset for the purposes of Policy 3.

5. *Landscape context:* A biodiversity offset should be designed and implemented in a landscape context to achieve the expected measurable conservation outcomes taking into account available information on the full range of biological, social and cultural values of biodiversity and supporting an ecosystem approach.

The offset design will demonstrate that:

- a. it contributes to and complements biodiversity conservation priorities/goals at the landscape and national level.
- 6. *Long-term outcomes:* The design and implementation of a biodiversity offset should be based on an adaptive management approach, incorporating monitoring and evaluation, with the objective of securing outcomes that last at least as long as the project's impacts and preferably in perpetuity.

The offset design will demonstrate that:

- a. management arrangements, legal arrangements (eg, covenants) and financial arrangements (eg, bonds) are in place that allow the offset to endure as long as the effects of the activity, and preferably in perpetuity
- b. a biodiversity offset management plan is prepared and implemented which:
 - i. contains specific, measurable and time-bound targets for the biodiversity offset
 - ii. predicts when no net loss/net gain will be achieved

- iii. provides mechanisms for adaptive management of the offset, using the results of periodic monitoring and evaluation against identified milestones to determine whether the offset is on track and rectify if necessary
- iv. establishes roles and responsibilities for managing, governing, monitoring and enforcing the offset
- c. where milestones are not achieved, an analysis is undertaken to identify the causes of non-achievement and to revise the offset management plan to avoid similar occurrences
- d. a decision-making process has been established to correct problems that arise and enable adaptive management of the biodiversity offset for the timeframe over which the offset's measurable conservation outcomes will be achieved and maintained.
- 7. *Transparency:* The design and implementation of a biodiversity offset, and communication of its results to the public, should be undertaken in a transparent and timely manner.

Executive summary

The threat to biodiversity from the use and development of private land has been recognised in law since 1991, with the enactment of the Resource Management Act 1991 (RMA). Government responded to the decline of biodiversity, identified by The State of New Zealand's Environment Report² (1997) and the New Zealand Biodiversity Strategy³ (2000), in a variety of ways – one of which was a sharper focus on the role of local government in maintaining biodiversity using the RMA.

A review of the state of New Zealand's biodiversity, conducted as part of this section 32 report, has found no evidence the decline in biodiversity has arrested. Although information is incomplete, that which is available clearly indicates the decline continues. Further, the use of geographic information system (GIS) methodologies⁴ reveals that 468,000 hectares of private land with native vegetative cover is within LENZ environments that have 20 per cent or less of their original (native) cover remaining. Such environments are regarded as priorities for protection. Although there has been some increase in public ownership and private covenanting of native vegetation in recent years, the reality is that the long-term protection of the 468,000 hectares (and other priority vegetation and habitat) depends on the quality of management it receives under the RMA.

It is important to recall, however, that many of these areas and habitats are already managed under the RMA. Every day for the past 19 years, councils around the country have been making decisions about how native vegetation will be managed. At the broader level, they make these decisions when setting the framework for biodiversity protection (and the use of associated natural resources) through their plans and policies. On a day-to-day basis, these decisions are made in response to project-scale applications (ie, resource consents, designations, plan change requests, etc). Such applications may involve clearing land for development or other intensive land uses, or a wide range of other activities with less direct consequences for biodiversity.

The following characteristics make such decisions challenging:

- the task of managing resources to maintain biodiversity is multi-faceted. It requires biodiversity to be considered in a wide range of resource management decision-making contexts and in the exercise of a range of functions
- biodiversity management is frequently controversial; inevitable tensions arise between economic or socio-economic aspirations (of individuals or the wider community) and environmental outcomes
- while councils often seek to minimise tensions, the science associated with biodiversity management can be complex and contested. Non-statutory guidance has not proved effective to date
- there is frequent debate about what protection means and whether methods other than rules are adequate.

² The Ministry for the Environment. 1997. *The State of New Zealand's Environment 1997*. Wellington: GP Publications.

³ Ministry for the Environment, Department of Conservation. 2000. *The New Zealand Biodiversity Strategy: Our Chance to Turn the Tide*. New Zealand Government, Wellington.

⁴ The Land Cover Database, used in conjunction with the Land Environment of New Zealand (LENZ) classification tool. Both are explained in Appendix 2.

- the identification of areas and habitats in plans and their protection has often been the subject of debate and appeals, leading to significant costs and delays in getting plans settled
- while biodiversity protection can prevent economic development opportunities if pursued inflexibly, there is also debate about how much flexibility is appropriate given the finite nature of biodiversity values. Biodiversity offsets can have a valid role to play here. The concept is not specifically provided for in law, but is possible under provisions of the RMA. While there is pressure to adopt this approach, there are no established principles for using biodiversity offsets.

The Government is seeking to achieve:

- a. a better (more uniform) level of protection for biodiversity around the country
- b. reduced administrative churn for local government (and participants in RMA processes relating to biodiversity)
- c. flexibility in the management approaches adopted at local and regional levels to ensure sensible decision-making in the overall interests of New Zealand.

The options to achieve the Government's goals are:

- continuing with current practice
- amending the Act
- increasing funding to existing non-regulatory programmes, providing further non-statutory guidance
- targeted assistance to the most in need councils
- a national environmental standard (NES)
- a national policy statement (NPS).

Of these options, only a NPS can effectively deliver the direction that can help statutory decision-making under the RMA, while maintaining the appropriate degree of local and regional discretion needed to make sensible, locally-responsive and relevant decisions.

The objective of the proposed NPS is appropriate as it directly addresses a matter that is central to the purpose of the Act. The three caveats – supporting the good practice of local authorities; recognising the positive contribution of landowners; and recognising that the well-being of people and communities relies on making reasonable use of land – are important in ensuring biodiversity maintenance is pursued in a reasonable and achievable manner.

All seven policies of the NPS are considered to be the most appropriate to deliver efficiency and effectiveness. The key reasons for this can be summarised as:

• Policy 1 states that, for the purpose of the NPS, an area of significant native vegetation or a significant habitat for native animals is an area or habitat whose protection is important for maintaining biodiversity. It aims to ensure the NPS does not cut across what local authorities might be doing in respect of section 6(c) for reasons other than biodiversity, while clarifying that at least one legitimate measure of "significance" is whether an area or habitat contributes to the maintenance of biodiversity. It will be effective simply because the NPS will have statutory weight in policy and regulatory decision-making under sections 55, 67, 75, 104 and 171 of the RMA. It will be efficient because it is considered to have little cost, but provides the benefit of avoiding confusion (and reduced protection) that might occur if the NPS was introduced without such a policy in place.

- Policy 2 sets out four core criteria to be applied to identifying significant vegetation and habitats, and one criteria for threatened species. It requires these to be applied at the time of any resource consent application (or similar project-scale process). It is appropriate because it introduces a degree of bottom-line consistency across local authorities that is essential if biodiversity is to be maintained at the national scale. It is more effective than the status quo because the criteria are more specific and less open to subjective interpretation. It is efficient because it avoids district-by-district debate about what criteria should be applied, and because the criteria are already used (in some form) by 46 of the 75 district plans. That leaves a maximum of 29 districts (and possibly many fewer) where the criteria are likely to result in the identification of additional sites (and therefore added cost), although identifying habitats of threatened species may affect a wider number of local authorities.
- Policy 3 requires regional policy statements (RPSs) notified after the NPS is in place to include the criteria of Policy 2. It is effective because it will ensure a seamless policy framework where the cost of doing so is low. The cost of the policy is low since recently notified RPSs do not need to be changed, while the criteria will still take effect through regional and district plans and (even before those plans are changed) through Policy 2, and the consideration of criteria in the context of any resource consent applications or similar matter.
- Policy 4 requires district plans to identify significant native vegetation and significant habitats of native fauna. Having sites identified is a prerequisite to being able to manage them (and any impacts on them) in a proactive way. The policy will be effective because it will ensure all districts identify significant sites. The cost of this policy for regional and district councils is in the mapping and/or scheduling of sites. Currently 64 per cent of district plans already use maps and a further 16 use (or are developing for use) schedules. Thus, the cost of mapping will largely fall on the 10–20 per cent of local authorities who currently do not use maps, although some local authorities who currently do identify sites may need to identify a greater number than previously. The benefit is greater transparency and an improved ability to manage risks to significant sites.
- Policy 5 sets out an effects management hierarchy and establishes the obligation for local authorities to manage the effects of resource use to achieve no net loss in biodiversity values within significant areas and habitats. It is effective largely because it introduces a fourth effects-management option the 'biodiversity offset'. This has the potential to greatly increase the effectiveness of policy since it is common for there to be residual effects that is, effects that cannot be avoided, remedied or mitigated. When this occurs, applications must either be declined or adverse effects tolerated. In the context of biodiversity loss (in particular) neither option is necessarily in the best interests of New Zealand. Policy 5 provides the option of achieving win-win (or at least win, no loss) outcomes, and therefore adds to the potential effectiveness and economic efficiency of RMA intervention.
- Policy 6 promotes the protection and enhancement of native biodiversity more widely than just identified significant areas and habitats. Ecological theory suggests the resilience of ecosystems requires attention to wider landscape issues. Effectiveness in maintaining biodiversity long term means achieving sympathetic management. In that sense, Policy 6 is critical to the NPS being focused on native biodiversity and not simply isolated high-value sites. Given that the policy is not worded to be strictly enforceable, assessing its effectiveness and efficiency is not possible. The policy could result in costs associated with greater restrictions on land use, but these would be subject to local section 32 analysis.
- Policy 7 provides for the involvement of tangata whenua in biodiversity management in recognition of the Treaty relationship and role of tangata whenua and kaitiaki. It aims to mirror commitments of the NZ Biodiversity Strategy by supporting involvement of tangata

whenua, recognising their values and interests and providing for customary use of indigenous species in accordance with tikanga. The effectiveness of the policy will inevitably depend on factors outside the NPS's control but the obligation of the NPS is clear and local authorities will be required to give effect to it. The efficiency of iwi involvement from an administrative perspective will be determined by the quality and workability of arrangements determined regionally and locally. While there may well some additional administrative/process cost arising from this policy there are also clear benefits associated with meeting Treaty obligations and enhancing outcomes.

• Policy 8 requires consultation with landowners, the community and tangata whenua when developing biodiversity-related provisions. Consultation with those affected is widely regarded as critical to effective planning for biodiversity. This is evidenced by past examples of planning responses that have met strong public opposition through lack of effective consultation. While there is a cost associated with consultation, this is more properly attributed to the RMA itself, as such consultation is required under the First Schedule of the Act.

This analysis has been limited by incomplete information. Ideally, there would be better information available to assess the marginal difference between current practice and what this NPS requires. Such information is, however, difficult to acquire, in part due to New Zealand's highly devolved management system.

Notwithstanding the absence of complete information, what is known establishes a *prima facie* case that the section 32 tests requiring objectives and policies to be effective and efficient can be met.

1. Introduction

1.1 Purpose

The Minister for the Environment has proposed the National Policy Statement on Indigenous Biodiversity (the proposed NPS).

A national policy statement is a tool under the Resource Management Act 1991 (the RMA) to provide statutory guidance to decision-makers, including local authorities. The purpose of a national policy statement is to state objectives and policies on matters of national significance that are relevant to promoting the sustainable management of natural and physical resources.⁵

The proposed NPS is expected to lead to enhanced ability for local authorities to effectively deliver their existing function to maintain indigenous biological diversity by:

- providing clearer direction to local authorities on their obligations under the RMA
- setting the minimum expectations regarding the identification of areas and habitats to be considered important for the maintenance of biodiversity
- promoting a nationally consistent approach to biodiversity protection by clarifying the hierarchy that should apply to managing adverse effects and the place of biodiversity offsets
- recognising and providing for the existing good practice of local authorities.

Section 32 of the RMA⁶ requires the Minister for the Environment to evaluate the objectives and policies of the proposed NPS and prepare a report summarising that evaluation. This report presents the section 32 evaluation for the proposed NPS.

1.2 Section 32 evaluation and methodology

A section 32 evaluation is required for policies and plans prepared under the RMA, including national policy statements. The purpose of the evaluation is to assess the benefits and costs of a proposed NPS, and its objectives and policies in particular, against the purpose of the RMA.

Specifically, section 32 states that:

- (3) An evaluation must examine—
 - (a) the extent to which each objective is the most appropriate way to achieve the purpose of this Act; and
 - (b) whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods are the most appropriate for achieving the objectives.
- (4) For the purposes of the examinations referred to in subsections (3) and (3A), an evaluation must take into account—
 - (a) the benefits and costs of policies, rules, or other methods; and
 - (b) the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.

⁵ The purpose of the RMA is to promote the sustainable management of natural and physical resources.

⁶ Section 32 is reproduced in full in Appendix 1 of this report.

The section 32 evaluation is a critical aspect of the NPS development process. Section 32A allows submissions to challenge an objective, policy, rule or other method on the grounds that section 32 has not been adequately complied with. For this reason, it is essential that an appropriate evaluation process be used.

1.2.1 Methodology

Section 32 of the RMA does not explicitly require an evaluation of whether the NPS is 'desirable'. That assessment is required separately under section 45 of the RMA. Section 32 does, however, require an assessment of alternative approaches to the proposed NPS. The key alternative to the proposed NPS is the *status quo*. The *status quo* therefore serves as the baseline for this evaluation, which focuses on the differences, in terms of benefits and costs, between the *status quo* and the proposed alternative.

In accordance with the requirements of section 32, this evaluation describes how native biodiversity outside public conservation land is currently managed (ie, the *status quo*) and then asks the following questions:

- What is the problem that needs to be addressed?
- What are we trying to achieve?
- Is this an appropriate outcome to be achieving under the RMA?
- What are the policy and regulatory options, and why is a NPS the preferred option?
- Is the objective of the proposed NPS the best policy option to achieve the purpose of the RMA when compared to other potential interventions?
- Will the proposed policies be effective and are they the most appropriate way to achieve the proposed objective (in terms of benefits and costs) when compared to alternative policies?
- What are the risks of acting or not acting to address the resource management issues?

In considering the appropriateness of the objective of the proposed NPS, regard is given to:

- the purpose of the objective, which is to state the outcome sought by resolving a resource management issue
- whether, by resolving that issue, the objective will help achieve the purpose of the RMA, which is to promote the sustainable management of natural and physical resources.

Having considered the appropriateness of the objective, the related policies are then evaluated, including the assessment of alternative approaches to achieving the objective. In evaluating the policies, regard is given to:

- the costs and benefits of each policy and, having considered these matters, how *efficient* the policy would be in achieving the objective
- how *effective*, or successful, the policies will be in achieving the objective and thereby resolving the relevant issue.

Finally, it is important to note that for the purposes of a section 32 evaluation under the RMA, the terms 'costs' and 'benefits' take broad meanings and include environmental, social, cultural and economic matters.

1.2 Structure of this report

The document is structured as follows.

- Chapter 1: Introduction. This sets out the purpose and structure of this report. It also explains what the RMA requires in terms of a 'section 32 evaluation' and the methodology used in this instance.
- **Chapter 2: Status quo.** This chapter provides an overview of the legislation and other tools currently used to manage native biodiversity, on both public conservation land and on private land.
- Chapter 3: Situation under the status quo. This chapter examines the case for further intervention. It does this by looking at trends and issues relating to biodiversity protection and asking whether there really is an issue we should be concerned about.
- Chapter 4: What are we trying to achieve? This chapter looks at what we are trying to achieve and considers whether it is an appropriate outcome under the RMA.
- Chapter 5: Alternatives to the status quo. This chapter evaluates the regulatory and policy interventions that could be used to achieve the desired outcome for indigenous biodiversity outside public land. It also examines the risk of acting, or not acting.
- Chapter 6: Is the proposed objective appropriate in achieving the purpose of the Act? This chapter evaluates the extent to which the objective of the proposed NPS is the most appropriate way to achieve the purpose of the RMA and, specifically, to address the resource management issue identified in chapter 3. It does this by assessing alternative methods of achieving the objective.
- Chapter 7: Will the policies be effective and efficient in achieving the objective? This chapter assesses the benefits and costs of the proposed and alternative policies, or other methods. It examines whether they are the most appropriate policies given their likely effectiveness and their likely cost, relative to the benefit that they are likely to deliver. It also assesses the risk of not acting where there are uncertainties about the nature and extent of the problem(s) the proposed policies are seeking to address.
- Chapter 8: Conclusions. This summarises the findings of the section 32 evaluation.

2 The status quo

This chapter provides an overview of the legislation and other tools used to manage biodiversity.

The RMA is the key legislation for managing the effects of land use on biodiversity on private land. The RMA also applies to the approximately 32 per cent⁷ of New Zealand's land area managed for conservation purposes, but biodiversity management in those areas is mainly influenced by legislation such as the Conservation Act 1987, Reserves Act 1977 and National Parks Act 1980.

Private and Māori land is also managed for conservation under covenants, such as those established as Queen Elizabeth II National Trust open space covenants (under the Queen Elizabeth the Second National Trust Act 1977) and kawenata covenants through Ngā Whenua Rāhui.

Other legislation is also important, including the Local Government Act 2002 (under which local authorities can purchase parks and reserves) and the Biosecurity Act 1993 (under which regional councils undertake pest control).

2.1 Legislative protection of biodiversity

2.1.1 The Resource Management Act 1991

The RMA is the principal legislation governing the use of New Zealand's land, air, water, ecosystems and built environment. Because almost all forms of resource use affect native biodiversity, it therefore has a key role in managing New Zealand's biodiversity. Under the Act, local government has a major part to play in environmental protection.

Biodiversity is recognised in the RMA in many ways.

- Section 5 is relevant because all plants and animals come within the definition of natural resources. Section 5(1)(b) refers to safeguarding ecosystems.
- Section 6(c) is the section most identified with the maintenance of biodiversity because it refers to the protection of areas of significant native vegetation and significant habitats of native animals. However, this section represents just one dimension of managing indigenous biodiversity.
- Section 7(d) refers to the intrinsic values of ecosystems. The definition of 'intrinsic values' includes values derived from biological and genetic diversity.
- Section 30(1)(c)(iiia) provides that it is a function of regional councils to control the use of land to maintain and enhance ecosystems in water bodies and coastal waters.
- Section 30(1)(ga) provides that it is a function of regional councils to establish, implement and review objectives, policies and methods for maintaining native biodiversity.

⁷ About 8.7 million hectares out of New Zealand's total land area of 27.05 million hectares is managed as 'public' conservation land.

• Section 31(b)(iii) provides that it is a function of territorial councils to control the effects of the use of land on the maintenance of native biological diversity.

In 2003, the RMA was amended to clarify that:

- both regional councils and territorial authorities have responsibilities for maintaining native biodiversity
- local authorities must consider the consequences of all effects on native biodiversity, not simply the significance of the species or habitat.

2.1.2 Other legislation

Biosecurity Act 1993

This Act provides for the exclusion, eradication and effective management of pests and unwanted organisms. The Biosecurity Minister is able to notify a national pest management strategy under this Act, and individual local authorities are able to prepare regional pest management strategies (RPMS). Section 76(4) of the Biosecurity Act requires these strategies not be inconsistent with any regional policy statement or regional plan prepared under the RMA.

A number of initiatives under the Biosecurity Act make a significant contribution to managing biodiversity. In particular, these include plant and animal pest control carried out in accordance with RPMSs prepared under the Biosecurity Act.

Conservation Act 1987

The Conservation Act promotes the conservation of New Zealand's natural and historic resources. The Act provides the mandate for the activities of the Department of Conservation (DoC). Functions include managing the conservation estate, conservancy advocacy and education, and fostering the use of resources for recreation and tourism. The main policy documents include the Conservation General Policy 2005, conservation management strategies prepared by conservancies, and management plans for sites of particular importance. A conservation management strategy provides a plan for the integrated management of all areas administered by DoC.

DoC exercises its conservation advocacy function by, amongst other things, participating in plan making and resource consent decision-making processes under the RMA.

Forests Act 1949, Forests Amendment Act 1993

The Forests Act 1949 was amended in 1993 to bring an end to unsustainable harvesting and clear felling of indigenous forest. Under the Forests Amendment Act, native timber can only be produced from forests that are managed in a way that maintains continuous forest cover and ecological balance.

National Parks Act 1980

The purpose of the National Parks Act is to forever preserve for their intrinsic worth and for the benefit, use, and enjoyment of the public, those parts of New Zealand that "contain scenery of

such distinctive quality, ecological systems, or natural features so beautiful, unique, or scientifically important, that their preservation is in the national interest".

DoC administers this Act. Under section 4 of the RMA, the Crown is not bound by section 9(1) of the RMA for any work or activity of the Crown within the boundaries of any area of land held or managed under the Conservation Act or other acts specified in the First Schedule to that Act. The First Schedule of the Conservation Act includes the National Parks Act.

Reserves Act 1977

DoC administers this Act. Section 3(1)(b) of the Reserves Act identifies the need for the establishment of an ecologically representative, protected natural areas system in New Zealand. An objective of this legislation is:

Ensuring as far as possible, the survival of all indigenous species of flora and fauna, both rare and commonplace, in their natural communities and habitats, and the preservation of representative samples of all classes of natural ecosystems and landscapes which in their aggregate originally gave New Zealand its own recognisable character. (Section 3(1)(b), Reserves Act 1977).

An implementation method of the Reserves Act is the Protected Natural Areas Programme, which provides criteria for identifying the best examples of the full range of natural areas within defined ecological districts and/or regions. The focus of this programme has traditionally been on terrestrial and wetlands habitats. District councils use protected natural area surveys to identify significant natural areas.

Wildlife Act 1953

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This Act is administered by DoC and provides for the protection of certain species of wildlife, including the establishment of wildlife reserves.

2.2 Convention on Biological Diversity and national strategies

2.2.1 Convention on Biological Diversity

New Zealand ratified the international Convention on Biological Diversity in 1993. The Convention has three main goals:

- conservation of biological diversity
- sustainable use of the components of biodiversity
- sharing the benefits arising from the commercial (and other) use of genetic resources in a fair and equitable way.

Signatory nations are required to prepare national strategies or plans that set national goals to implement these goals.

2.2.2 The New Zealand Biodiversity Strategy and related initiatives

The 2000 New Zealand Biodiversity Strategy (NZBS) establishes national goals to:

- turn the tide on the decline of the country's indigenous biodiversity
- maintain and restore a full range of remaining habitats and ecosystems, and viable populations of all native species.

The NZBS sets out a comprehensive range of actions needed to achieve the goals. Among these is the preparation of a national policy statement and related material to provide direction to local authorities on implementing provisions of the RMA relevant to protecting and sustainably managing native biodiversity.

At about the same time the Government prepared the NZBS, it also funded a Ministerial Advisory Committee (MAC) to consult widely about biodiversity and private land. This public consultation considered whether a NPS on biodiversity was desirable and what complementary measures might be warranted. Seven core proposals were developed. These included the establishment of a biodiversity advisory service, a fund aimed at improving the condition of sites, additional funding for existing protection mechanisms (such as the QEII National Trust), a capacity building programme for local government, a NPS under the RMA and clarification of the local government's biodiversity role under the RMA (culminating in an amendment to the RMA in 2003).⁸

A funding package of \$187 million was provided for the period 2000–2005 towards achieving the goals of the NZBS. This incorporated the specific recommendations of the MAC. These are discussed further in chapter 2.3.

2.2.3 The New Zealand Biosecurity Strategy and related initiatives

In 2000, the Government published the New Zealand Biosecurity Strategy⁹ with the vision that "New Zealanders, our unique natural resources, our plants and animals are all kept safe and secure from damaging pests and diseases".

The Biosecurity Strategy is a high-level document that deals with broad biosecurity risks (not just risks to biodiversity) and more than pest management. However, it did commit to clear and effective national leadership and coordination, the Crown meeting its pest management obligations as a landowner, and other matters.

In order to make progress against these commitments, in 2009 the Government initiated the Future of Pest Management Programme to review current arrangements and improve pest management systems to meet New Zealand's needs over the next 25 years. A National Plan of Action (including legislative changes) is currently being developed.

⁸ As detailed in the Ministry for the Environment publication: Ministry for the Environment. 2001. *Biodiversity outside public conservation lands: the Government's response*. Wellington: Ministry for the Environment. INFO 16.

⁹ John Hellström J, Moore D, Young N, Goddard S. 2003. *Tiakina Aotearoa: Protect New Zealand. The Biosecurity Strategy for New Zealand*. Wellington: Biosecurity Council.

2.3 Non-statutory guidance, trusts and funds

Government funds 20 programmes to help achieve outcomes in the New Zealand Biodiversity Strategy. A Governance and Coordination Programme establishes the administrative mechanisms necessary to coordinate the Strategy's implementation, monitoring and review. It is coordinated by a secretariat within DoC. Programmes that relate to private land are outlined below.

Trusts and funds

In December 2000, the Government announced a package of policy measures to enhance the management of native biodiversity outside public conservation lands. In relation to funds, the package included:

- increased funding to the QEII National Trust, Ngā Whenua Rāhui and the Nature Heritage Fund
- the establishment of a Biodiversity Condition Fund to help private landholders and community groups to protect areas, habitats and species on private land
- the establishment of a Biodiversity Advice Fund.

The package added \$40.6 million over five years to support native biodiversity protection on private land, with the bulk going into increased funding for protection via Ngā Whenua Rāhui, the Nature Heritage Fund and QEII National Trust. The money allocated to the Biodiversity Condition Fund was \$6.5 million, while \$3.6 million was allocated to the Biodiversity Advice Fund.

Biodiversity Advice Service Fund

The Biodiversity Advice Fund began in the 2001/02 financial year. It provides information and advice on native biodiversity and management options available to private land managers. Local authorities, land care groups and other organisations can apply for funding to set up advisory services. The fund is administered through DoC.

Biodiversity Condition Fund

This fund is for improving the condition of native biodiversity on private land through ongoing pest and weed management. It also began in 2001/02. Individuals and groups can apply for funding for projects designed to improve the condition of areas and habitats. This fund is administered through DoC.

Non-regulatory guidance

General advice

DoC makes some technical advice available to local government. The Ministry for the Environment (MfE) has issued good practice biodiversity protection guidance via the Quality Planning website.

National priorities for protecting rare and threatened native biodiversity on private land

In 2005, Cabinet decided not to proceed with a NPS on Biodiversity. Instead, the Government developed and published a non-statutory guideline which described the national priorities for protecting rare and threatened native biodiversity on private land. This aimed to focus conservation efforts on private land where the need is greatest.

Enhancing capacity in local government

A concerted effort to up skill local government followed the Biodiversity MAC process of 2000. The Action BioCommunity project was established in 2001, sponsored through Local Government New Zealand and paid for by MfE's Sustainable Management Fund. Its aim was to build local authority capacity in native biodiversity management, promoted by sharing good practice and establishing a Quality Planning website. The project came to an end in 2004.

On the whole, the level of non-regulatory guidance to local government is low.

2.4 Efforts to protect biodiversity under the current framework

As summarised above, central government's efforts to maintain native biodiversity fall into two categories. First, conservation (including species recovery) programmes on public conservation land (under conservation legislation); and second, advocacy, financial and technical assistance to support biodiversity off public conservation land.

Central government has also contributed by funding the development of geographic information and monitoring systems and tools (such as LENZ¹⁰) that provide better information on which to base management efforts.

DoC has also committed \$15 million over the next three years to produce the system and operational work required to measure biodiversity baselines, the subsequent natural changes in species and ecosystems, and the impact future development activities will have on these.

However, in the context of the proposal for a NPS, it is the efforts of local government – regional councils and territorial authorities – that is most critical as it is the nature and level of these efforts that a NPS can influence.

2.4.1 Local government efforts

Local authorities have specific legislative responsibilities under the RMA to manage native biodiversity. They also have the ability under the Biosecurity Act to prepare regional pest management strategies. These can be prepared for pests that have impacts on native biodiversity.

Local authorities use a wide range of measures to fulfil their legislative obligations and maintain the mandate given to them by their constituents, including:

- developing and implementing strategies and plans
- collecting information, including identifying areas of importance for native biodiversity
- providing financial assistance, including contestable funding for landowners
- biosecurity activity
- regulation and enforcement action.

¹⁰ LENZ (Land Environments New Zealand) is explained in Appendix 2.

Since 1991, most territorial authorities have expended considerable effort to identify areas and habitats in accordance with section 6(c) of the RMA, and/or to provide varying degrees of legal protection to native vegetation by way of rules in plans. This focus on native vegetation was largely absent from the 'district schemes' that pre-dated plans prepared under RMA.

As a result, it is now commonplace for territorial authorities to address biodiversity and consider the significance of vegetation in the context of resource consent applications.

Most regional councils have included criteria in regional policy statements that are to be applied through district and regional plans and/or in the context of resource consent applications. As well, on a daily basis regional councils consider impacts on ecosystems and biodiversity when assessing a broad range of regional council-determined consent applications (such as discharge, water take/diversions and soil disturbance applications).

Despite this level of effort by local authorities, there is little uniformity in approach and the comprehensiveness of the effort is patchy across New Zealand. This is discussed further in Chapter 3.2.4.

2.4.2 Voluntary efforts

In addition to the efforts of public authorities, there is a substantial voluntary effort by environmental non-government organisations, catchment groups and individuals. These tend to focus on pest management and site restoration/replanting. The extent of this contribution is not well documented. However, while there are numerous significant voluntary programmes and projects that have value at a local scale, the overall impact of this effort on the national goal of halting the decline is likely to be small.

Question 1

Does the information covered in chapter 2 provide a full account of the measures in place to manage biodiversity?
3 Situation under the status quo

One of the inherent difficulties in managing native biodiversity is the absence of complete, reliable and relevant information about its current state and trends. Generally speaking, when we monitor and report on native biodiversity, we are forced to use surrogate measures – such as the extent of native vegetation remaining or legally protected – or take a case study approach. While there are many ecological surveys, they relate to highly localised areas, are patchy in their availability and often use differing methodologies. This all makes it difficult to draw generic conclusions.

Despite this, there is general acceptance that New Zealand's native biodiversity is in serious decline. Considerable work to compile various information sources and expert opinion at the time the NZBS was developed (2000) led to that conclusion and, as noted earlier, this was broadly accepted by ecological professionals and by the Government (which, as a consequence, boosted funding by \$187 million). The conclusion echoed a principal finding of the 1997 New Zealand State of the Environment report¹¹ that biodiversity loss was New Zealand's "most pervasive environmental issue".

The lack of a measurement tool that could empirically demonstrate the extent of the decline at a national scale led to the development of $LENZ^{12}$ as a better (though still limited) assessment tool.

The information that follows draws on LENZ and is the best available, but continues to suffer from the limitations discussed above. As in 1997 and 2000, this assessment needs to draw on multiple sources to assess the *status quo* and trends in New Zealand's native biodiversity.

3.1 Overview

At the broad scale, out of the 33 Organisation for Economic Cooperation and Development (OECD) countries, New Zealand has the highest proportion of its land area protected for conservation purposes -33.4 per cent of our total land area.

As of July 2009, 8,763,300 hectares of New Zealand's land was legally protected (by public ownership or covenants over private land) for the primary purpose of protecting native biodiversity. Legally protected public land (managed by DoC and regional councils) accounted for 8,525,000 hectares, and private land (protected by the QEII Trust or Ngā Whenua Rāhui) accounted for 238,300 hectares.¹³ These figures do not account for land protected by rules prepared under the RMA.

Of the 8.763 million hectares, 8,401,500 hectares have native land cover. 'Native land cover' includes land with native vegetation as well as naturally occurring non-vegetative covers, such as permanent snow and ice, alpine gravel and rock, and waterways.

¹¹ The Ministry for the Environment. 1997. *The State of New Zealand's Environment 1997*. Wellington: GP Publications.

¹² LENZ (Land Environments New Zealand) is explained in Appendix 2.

¹³ Ministry for the Environment. 2020. Legally Protected Conservation Land in New Zealand – Environmental Snapshot. Wellington: Ministry for the Environment.

Recent trends show that protection by public acquisition and covenanting is increasing. Over the three-year period between 2006 and 2009:

- legally protected public land increased from 8,138,500 hectares to 8,525,000 an increase of 386,500 or 4.7 per cent. About three-quarters of this increase was from land acquired and protected through high country tenure review in the South Island
- legally protected (by covenant) private land increased from 216,200 hectares to 238,300 hectares in 2009 an increase of 22,100 hectares or 10.2 per cent.¹⁴

3.2 Risks and challenges

These broad-scale figures tell us little about the real state of native biodiversity protection. This requires an understanding of what *type* of vegetation has been protected, what remains unprotected, how important for biodiversity this unprotected land is, and what the condition (and trends) of vegetation and habitat on that unprotected land might be.¹⁵

When those matters are considered, it is apparent there remain significant challenges for biodiversity protection outside public land. GIS analysis shows New Zealand has done well protecting upland areas – more than 90 per cent of three montane (mountainous) environments within the LENZ classification (permanent snow and ice, Southern Alps and ultramafic soils) are legally protected. However, there has been little progress in protecting biodiversity in lowland areas of the country where many of the principal challenges and threats arise. This is not unexpected, given that lowland areas are generally more commercially valuable and conservation therefore comes at a greater opportunity cost for landowners (and a higher price for public agencies considering land acquisition).

3.2.1 National information showing biodiversity state and decline

Legally unprotected vegetation

The LENZ and 2002 Land Cover Database¹⁶ (LCDB) show that, at the national level, there are 566,348 hectares of native vegetation in national priority 1 environments (ie, in 'environments' that have less than 20 per cent of their original land cover remaining).¹⁷ Of this, 98,276 hectares (17.3 per cent) is already legally protected through public ownership or binding conservation covenant, but 82.7 per cent of national priority vegetation remains at risk.¹⁸

The un-representativeness of New Zealand's protected area network, and the issues this poses for the network's ability to secure biodiversity goals, are highlighted by some areas and

¹⁴ Ibid.

¹⁵ It also requires an assessment of biotia (plant and animal populations) within these areas.

¹⁶ LENZ and the LCDB are explained in Appendix 2.

¹⁷ It should be noted that although 20 per cent is considered a key ecological threshold, the majority of environments with less than 20 per cent vegetation remaining actually have less than 10 per cent remaining. Of the 100 environments identified at LENZ level 2 scale, 37 have less than 20 per cent vegetation remaining, and of these, 24 have less than 10 per cent vegetation remaining.

¹⁸ A portion of this will be subject to rules imposed by regional or district plans, but the extent of this is unknown.

habitats existing only (or almost only) outside of public conservation land or protected areas on private land.

The Ministry for the Environment's Legally Protected Conservation Land in New Zealand Environmental Snapshot (April, 2010) identifies that, of the 20 LENZ environments analysed, eight had less than 20 per cent of the original cover remaining. At this scale (LENZ level I), the most seriously under-protected are the relatively flat environments of the 'eastern South Island plains', 'central well-drained recent soils' and 'western and southern North Island lowlands', in which less than 1 per cent of native land cover is legally protected. This is shown in figure 1.

Analysis using LENZ and the LCDB not only highlights types of environment that are underprotected, it also identifies significant inter-regional variation in the level of formal legal protection. At LENZ level IV, the level of unprotected priority 1 vegetation ranges from 54 per cent in the West Coast region to 91 per cent in the Otago region. This is shown in figure 2.

Inter-regional variation in the level of formal protection of wetlands shows even greater differences. Although the national average is 38 per cent, this ranges from 87 per cent in Tasman, to just 10 per cent in Gisborne.

Figure 1: The most seriously under-protected environments, shown by Land Environments of New Zealand (LENZ) level 1





Figure 2: The level of protected and unprotected priority 1 vegetation, at LENZ level IV

Indigenous vegetation loss

The Ministry for the Environment's Land: Land Use Environmental Snapshot¹⁹ (January 2010) provides further data on land-use change over the period 1990 to 2008. This is based on the Land Use Carbon Analysis System (LUCAS) mapping which was designed to enable New Zealand to meet its Kyoto Protocol reporting obligations.

While the snapshot information is much coarser in its classification of vegetation types than LCDB²⁰ and is less revealing of biodiversity implications, it provides a useful overview of general land-use change. Key findings are that between 1990 and 2008 New Zealand has lost:

- 50,700 hectares of natural forest a trend attributed to the replacement of natural forest with planted forest
- 311,000 hectares of low-producing grassland (a mixture of exotic and native grassland with lower productivity vegetation)
- 125,100 hectares of scrubland (scattered scrub within or near grassland not protected or managed for regeneration)
- 100 hectares of wetland.

This clearly indicates that, notwithstanding the RMA's identification of the national importance of protecting significant native vegetation and habitat, its loss has continued.

Manaaki Whenua – Landcare Research

In 2006, Manaaki Whenua – Landcare Research published research on the recent loss of native land cover in New Zealand.²¹ That research remains the most comprehensive work on the state of, and rate of loss of, native vegetation in New Zealand that applies the LENZ categories used in the *Statement of National Priorities*.²²

Key findings (from the abstract of the paper) are:

- extreme (>70 per cent) historic loss of native cover in 57 per cent of land environments
- poor protection (<20 per cent land area protected) in more than two-thirds of LENZ environments
- loss of native cover has continued, with 49 per cent of environments having lost native cover between 1996/97 and 2001/02, with the highest rates occurring where native cover was already most depleted.

The research showed that net loss of native cover in the five years between 1996/97 and 2001/02 was 17,200 hectares. Conversion to exotic forestry accounted for 65 per cent of the

¹⁹ Ministry for the Environment. 2010. Land: Land Use Environmental Snapshot, January 2010. Wellington: Ministry for the Environment. This is available at: http://www.mfe.govt nz/environmental-reporting/reportcards/land-use-environmental-snapshot/2010/land-use.pdf

²⁰ The most recent LCDB information is not available at this time. The most recent LCDB data available is from 2002.

²¹ Susan Walker S, Price R, Rutledge D, Stephens RT, Lee WG. 2006. Recent loss of indigenous cover in New Zealand. New Zealand Journal of Ecology 30(2): 169–177.

Although this research contains some compelling data, some care should be taken in its use to justify an NPS. It was produced for DoC and was available before the 2006 decision not to proceed with an NPS was made.

loss, felling for timber 11 per cent, conversion to high-producing pasture 6 per cent, and conversion to low-producing pasture 16 per cent. Further, over the same period, almost 30,000 hectares of low-producing grassland changed to non-native cover. This will also have had biodiversity loss, since much of this was a mix of native and exotic species.

The conclusion to the paper states:

Overall, the data suggest that public awareness and education, voluntary protection, Resource Management Act (1991) provisions, and formal legal protection of remaining indigenous biodiversity have not halted the removal and/or displacement of vulnerable indigenous biodiversity in much reduced and poorly protected ecosystems and habitats. This may arise from a continuing perception that only pristine ecosystems are important or significant for biodiversity (eg, Norton and Roper-Lindsay 2005). This fails to recognise that a high proportion of New Zealand's most threatened species survive only in depleted and highly modified ecosystems in threatened environments; therefore, protection of highly modified habitats is essential to prevent the extinction of many species.²³

Research on South Island grasslands

The absence of a more recent LCDB has restricted the ability to update the research cited above, but its author (Susan Walker, Maanaki Whenua – Landcare Research) has more recently considered the loss of native grasslands in the South Island as part of evidence for the intensive dairy farming proposals recently considered in the Mackenzie Basin.

In her evidence, Walker made the point that neither LCDB1 nor LCDB2 identifies most land cover change in grasslands since 1990. The estimates in the 2006 report mainly represent losses to afforestation (which was assessed in the making of LCDB2) and do not include the loss of less-developed grasslands to intensive pasture development.

To get a better understanding of grassland loss since 1990 (and to bring the data as up to date as possible) Walker draws on the work of a doctorate study of the 4.3-million-hectare eastern South Island grassland zone. She reports:

The student's preliminary, unpublished estimates suggest some 80,000 ha of less-developed grasslands were converted in this zone between 1990 and summer 2007/08. Of this, the student estimates that 66 per cent (about 52,500 ha) was converted for pasture or cropland, and almost half of this conversion (c. 25,000 ha) occurred in six years between the summers of 2001/02 and 2007/08.

These unpublished estimates suggest the average rate of conversion of less-developed grasslands, shrublands and wetlands in the eastern South Island grassland zone for pasture and cropland <u>may have recently increased from about 2,500 ha per annum between 1990 and 2001, to about 4,200 ha per annum between 2002 and 2008</u>. These rates are consistent with accelerating livestock numbers published by MAF and Statistics New Zealand, and support the statement that New Zealand is undergoing 'record rates of agricultural intensification' (Murdoch 2009). In my opinion, this development may represent the most significant wave of direct loss and modification of habitats of indigenous species in New Zealand in modern times, and will likely exacerbate the threat status of many of its species.

²³ Walker S, et al (2006).

In the Mackenzie Basin alone, Walker reports 12 per cent (35,000 hectares) of native grasslands have been converted since 1990^{24} by irrigation or cultivation or over-sowing and topdressing (excluding areas in the process of conversion but not yet fully converted). Her evidence states:

This recent conversion probably represents the most rapid rate of indigenous ecosystem loss and landscape transformation within any single ecological region in New Zealand in modern times. A spatial overlay indicates that parts (>10ha) of at least twenty-nine of the 103 RAPs²⁵ identified in the Mackenzie Ecological Region Protected Natural Areas Programme survey (Espie et al 1984), and nine sites of special wildlife interest (SSWIs) have been converted. Most of this conversion has occurred since 1990.

3.2.2 National information showing biodiversity decline

Further sources of information on the state of New Zealand's native biodiversity are regional council:

- state of the environment reports (SERs)
- reports on the effectiveness of policy statements and plans.

While these studies are also often limited by a lack of availability of recent LCDB data, conclusions are based on a mix of local (sub-regional) studies and local knowledge, and can be revealing.

The availability of these reports is patchy, and a review of those that are available shows mixed results. Some (such as those listed in Appendix 1) are open about the trend in biodiversity. Others either cannot, or choose not to comment on trends, except at a very general/long-term level. Greater Wellington Regional Council's SER (2005) sums up the challenge well when it says:

We don't really know if we are making a difference for biodiversity and we need to develop means of measuring change in ecosystems.

Other regional councils SERs, in particular Auckland and Waikato, also indicate a continuing decline despite efforts to date. Excerpts from the reviews of some SERs are provided below.

Northland State of the Environment Report 2007

Overall biodiversity conclusion: "Less than 5 per cent of Northland's wetlands remain as a result of drainage and disturbance. Some wetland types are now close to being lost forever Overall the biodiversity of indigenous vegetation is declining with a decrease in the land area covered in indigenous vegetation from 1997 to 2002 and indigenous plant species becoming nationally or regionally threatened, with some species already extinct in Northland. Many once common habitat types, such as riverine floodplain forest and dunefields, are now critically threatened due to land development pressure."

²⁴ While Walker's evidence does not say how recent the loss has been, in personal comments she advises that "much of this is very recent (in the last 3–4 years)". The methodology for this study involved "ground truthing by over flight".

²⁵ Recommended areas for protection under the protected natural area programme (PNAP).

Auckland State of the Environment Report 2010

Overall biodiversity conclusion: "At the regional scale, native habitats and threatened species will continue to decline in unprotected or unmanaged areas due to habitat loss, fragmentation and invasive species."

The Auckland SER highlights that examples of vegetation loss are not restricted to rural New Zealand. For example, it reports a local study of vegetation loss in the highly urbanised North Shore City which shows that between 2001 and 2006, 59 hectares of significant vegetation were cleared, representing 2.63 per cent of the vegetation that had been present in 2001 (with an overall drop in vegetation in the city from 2234 hectares to 2152 hectares).

Progress toward achieving Environment Waikato's Regional Policy Statement objectives: Biodiversity and natural heritage (2007)

Overall biodiversity conclusion: "The biodiversity and natural heritage objectives are generally not being achieved due to pests, land-use intensification, water pollution and lack of riparian protection, loss of connectivity, undervalued natural systems such as wetlands, and lack of formal protection for some ecosystem types."

Taranaki Regional Council RPS review (2009)

Taranaki's review of its RPS notes: "Notwithstanding the above [list of regional responses] the Council's State of the Environment Report concludes that there are continuing threats to our native forests, biodiversity and ecosystems. Many habitat types, such as coastal and lowland forests and wetlands, are poorly represented in Taranaki and are fragmented The issue is one of the most important facing the region..."

The Taranaki SER also provides a good example of the use of local studies. It notes, for example, that: "Changes in the extent of indigenous vegetation in Taranaki have been measured for the hill country through the Council's sustainable land monitoring programme (see chapter 3.1). The total area of indigenous forest decreased in the monitored sites from 3,380 ha in 1994 to 3,295 ha in 2007, a decrease of 3 per cent."

3.2.3 Native biodiversity on private land

The most recent ecological assessment of the state of native biodiversity outside public land was undertaken in 2002.²⁶ This review found that some native biodiversity is largely or totally dependent on private land for its survival. While the review also found that active conservation management was increasing on private land, it concluded that, despite this, there was ongoing decline and loss of native biodiversity.

Other conclusions from the 2002 review included the following:

- in terrestrial environments, something of the order of 60–70 per cent of threatened vascular plant species appear to be dependent on private land. Some species are entirely reliant on private land
- coastal and lowland forests and scrublands, dune systems, freshwater wetlands, streams and indigenous riparian habitat are largely dependent on private land
- about 50 per cent of Auckland region's threatened plants occur in shrublands and regenerating forests on private land. In Hawke's Bay, non-beech mistletoes and other

²⁶ Ministry for the Environment. Unpublished. The State of Indigenous Biodiversity Outside Crown Conservation Lands in New Zealand. Prepared for the Ministry for the Environment by M Davis, 2002.

species, including *Pittosporum obcordatum* and *Coprosma pedicellata*, occur largely outside conservation lands. In Wellington region, species entirely confined to private land include the regionally threatened orchid *Spiranthes novae-zelandiae* and all wild populations of the nationally vulnerable *Muehlenbeckia asonii*. In Marlborough, the Ward Daisy (*Brachysone* "Ward") and the chalk cress (*Cheesemania* "Chalk Range") are found only on private land. A large array of insects depend solely on *Olearia* shrubs found principally on private land in central Otago. In Southland, coastal turf communities are nearly all on private land, while the only wild population of *Gunnera hamiltonii* is on privately owned duneland

- North Island kiwi and kererū are species that move between public and private lands
- for some rare ecosystems, very little is in public conservation lands. For example, in the Waikato region, only 1.6 per cent of flax wetland is protected; and in central Otago, only 0.3 per cent of the original extent of kowhai-kanuka savannah is protected.

Although this review has not been updated, there is no reason to suggest its conclusions are no longer valid, especially in relation to the importance of private land for indigenous biodiversity.

3.2.4 District plans vary in their approach to protecting biodiversity

There have been two national reviews this decade into the adequacy of RMA plans to protect native biodiversity - an in-depth survey in 2004, and a more recent update of that survey in 2010.

The 2004 review of district plans²⁷ concluded that the quality and breadth of native biodiversity provisions varied considerably. It found that about 20 per cent of plans and regional policy statements had comprehensive and detailed provisions for identifying significant sites and habitats, backed up by a range of methods to protect them. About 20 per cent of plans had minimal (or no) means for identifying significant sites and/or a lack of adequate provisions to recognise and provide for their protection. Most plans were found to fall somewhere between these two poles, and 45 per cent did not include any criteria for identifying significant areas or significant habitats. While most district plans (61 out of 77) did have rules covering the clearance and disturbance of significant sites, the identification of these sites was sometimes inadequate and rudimentary. Also, while 41 plans had general clearance rules, these rules were not necessarily backed up with criteria for assessing applications.

In July 2010, MfE commissioned a study to update the 2004 review, with particular emphasis on establishing the extent and strength of biodiversity provisions in district plans.²⁸ Summaries of the key findings from this review are:

• A number of councils now have biodiversity strategies in place and appear to be making good progress towards achieving statutory requirements. Selwyn, Thames-Coromandel, Christchurch, Hurunui and Nelson councils all provided good examples, although others are also making progress.

²⁷ Ministry for the Environment, Department of Conservation, Local Government New Zealand. 2004. A Snapshot of Council Effort to Address Indigenous Biodiversity on Private Land: A report back to councils. Wellington: Ministry for the Environment, Department of Conservation and Local Government New Zealand.

²⁸ AWT New Zealand. *District plans and the Protection of Biodiversity: an update*. Prepared for the Ministry for the Environment by AWT New Zealand Ltd. Wellington: Ministry for the Environment.

- Some councils appear to be significantly more advanced than others. At one end of the spectrum, councils such as Thames-Coromandel, Waimakiriri and Marlborough, have rigorous protection mechanisms and strategies in place. On the other hand, some councils have no or only limited provision for protection. Examples include, but are not limited to, councils on the east coast of the North Island eg, Hastings, Gisborne, Napier, Wairora and Whakatane councils.
- There is a significant range in plan development for biodiversity protection. While many plans have been updated since the 2004 review, there is little change in the number of plans that have rules governing the clearance and/or disturbance of significant sites of native plants and animals (ie, 61 in 2004; 63 in 2010). However, there does appear to be an increase (from 41 to 59) in the number of plans with general clearance/disturbance rules, which may (in part) be accounted for by the inclusion of riparian clearance rules in the 2004 study.
- There has been an increase in the number of district plans with stated criteria for the purpose of identifying significant natural areas (60 out of 75 plans, or 80 per cent). However, there appears to have been little change or no change in the types of criteria used 13 plans identify significant natural areas but do not specify criteria; while two plans (Auckland City and Napier District) do not include criteria or identify sites.
- Only minor change was evident in the specificity of monitoring provisions across plans in relation to biodiversity (38 to 41).
- A wide range of techniques are used to identify significant native plants and animals, with different criteria applied. The most commonly used criteria are those relating to DoC's Protected Natural Areas Programme or a variant on these. Other plans use criteria such as those identified by Norton and Roper (1999)29, while yet others continue to use rudimentary criteria.
- 84 per cent of plans (63 out of 75) have rules targeted at protecting significant areas (including wetland and special ecological zones), and most plans (59 out of 75) contain provisions targeting the protection of biodiversity outside section 6(c) requirements. These include measures such as general clearance controls, controls on pest species, controls on certain activities (eg, deer and goat farming), controls on earthworks and controls on riparian activities.
- Non-regulatory biodiversity protection measures cited in plans include education, advocacy, financial incentives/assistance and land acquisition or swaps. Some councils are very specific about such measures eg, Selwyn District Council has set up an annual contestable fund of \$30,000, while Banks Peninsula District Council will consider offsetting by establishing new areas of equal environmental value.

Local Government New Zealand has also recently undertaken a survey of regional councils to determine the extent to which the national priorities³⁰ influenced regional councils' biodiversity programmes. The results indicated little influence. Similarly, a MfE review of RPSs found that the priorities had little influence on policy statements and plans. It should be noted, however, that most plans/RPSs pre-dated the release of the national priorities. There was some evidence of at least one recently notified RPS reflecting the national priorities, and some others that demonstrated a degree of coincidence between regional criteria and the national priorities. Overall though, it cannot be concluded that the national priorities have been a significant influence.

²⁹ Norton D, Roper-Lindsay J. 1999. Criteria for assessing ecological significance under Section 6(c) of the RMA 1991. Final draft discussion paper prepared for the Ministry for the Environment.

³⁰ As described on page 25.

3.2.5 Community attitudes towards protecting biodiversity

Having established that there is evidence of loss of biodiversity and that the approaches used by councils to protect biodiversity vary in their effectiveness, it is important to ask whether this loss is something that really matters to New Zealanders.

In signing the international Convention on Biological Diversity in 1992 and preparing the New Zealand Biodiversity Strategy in 2000, successive governments have resolved that native biodiversity does matter. The high level of native biodiversity that is only found in this country (endemic biodiversity) makes an important contribution to global biodiversity and places an international obligation on us to ensure its continued existence.

Maintaining a landscape with a recognisable New Zealand character requires an approach directed at maintaining the survival of native species in their natural communities and habitats, and preventing the loss of any class of natural ecosystems. Studies over the last decade have attempted to obtain an estimate of how we, as a nation, value our native biodiversity. Of particular relevance were the results of a study conducted by Massey University (2001) of 2000 over-18-year-olds,³¹ which demonstrated:

- 49.6 per cent of people considered the loss of species was "very serious", while another 37.7 per cent thought it was "serious". It was unclear from the survey, however, whether that reflects people's views about the importance of species or people's understanding of the risk
- New Zealand's unique plants and animals were valued "very much" by 77.3 per cent of those surveyed, "moderately" by a further 20.9 per cent, "a little" by 4.8 per cent and "not at all" by just 0.6 per cent.

Respondents to the Massey University survey were also asked their attitudes towards environmental regulation. The study found that nearly 60 per cent of New Zealanders believe the Government should pass laws to protect the environment, even if it interferes with people's rights to make their own decisions, and more than 80 per cent believe the Government should pass laws to make businesses protect the environment.

Submissions (response cards) to the Rio ± 10 community programme, conducted by MfE,³² back up the results of the Massey University survey -82 per cent of respondents believed biodiversity protection should have high or medium priority.

3.2.6 Likely future issues

All available evidence suggests that the biodiversity has continued to decline since the introduction of national priorities in 2007.

While it is also possible to identify many anecdotes of individual and community group projects that have successfully protected or restored particular sites (and regional reports do a great deal of this), such efforts need to be seen against a backdrop of broad-scale national decline in native vegetation on private land.

³¹ *New Zealanders and the Environment* Massey University 2001 – conducted as part of the International Social Survey Programme.

³² Ministry for the Environment, 2007. *Findings of the Rio+10 community programme*, Wellington, Ministry for the Environment.

Even if this was not the case and existing planning efforts were 'holding the tide', it is important to look forward and determine whether they are likely continue to do so in the face of foreseeable change in economic and social pressures. The following issues are emerging as potentially significant threats to biodiversity that current plans are unlikely to be well placed to address.

- The 2008 introduction of forests into the Emissions Trading Scheme (ETS) has some potential to create incentives for land clearance in order to establish exotic forests. There could, for example, be a risk to biodiversity if deforested land is worth more in an alternative use (eg, exotic forestry) than if left under native vegetation.
- There has been long-standing and ongoing concern about whether the process of South Island high country tenure review is producing net biodiversity benefits. Recent decisions by Cabinet (CAB Min (09)26/7C) to modify the tenure review process (and in particular remove the 'lakeside policy') explicitly rely on addressing gaps in district plans as the alternative means of preventing unsustainable or inappropriate development. One way identified in the Cabinet paper is for the Crown to submit on the 8 to 10 district plans as they are reviewed. A complementary way would be to have a NPS that ensures the key impacts of biodiversity are appropriately identified and managed.
- It is likely that current patterns of land-use intensification will continue to place pressure on native grassland and shrubland conversion; for example to provide for further urban development and meet the needs of a growing dairy industry.
- Regional and district councils are likely to face increasing pressure with competing priorities for financial and administrative resources. For example, the recent emphasis on water management at the regional level has led to many regions shifting their focus and resources to address complex water issues. While this is important, it is likely to divert attention from issues such as biodiversity, which many communities may perceive as of lower priority.

Spatial match between risk and biodiversity vulnerability

There is an apparent correlation between likely future pressures and the presence of biodiversity values and vulnerability.

Walker (2007)³³ ranked territorial authorities according to the extent of native cover not legally protected in the five threatened LENZ environment categories. The top 10 councils (those with the greatest unprotected threatened environments) are as follows:

Local Authority	Rank
Central Otago	1
Queenstown Lakes	2
Waitaki	3
Mackenzie	4
Far North	5
Gisborne	6
Southland	7
Marlborough	8
Hurunui	9
Ruapehu	10

³³ New Zealand's remaining indigenous cover: recent changes and biodiversity protection needs, Science for Conservation, Department of Conservation, 2007.

The four councils with the greatest extent of threatened native cover are all high country districts potentially affected by tenure reform. Waitaki and Mackenzie are also subject to the dairy expansion. The next two highest ranked councils (Far North and Gisborne) are probably those councils at some of the greatest risk from the ETS and forestry sector expansion. Southland, Marlborough and Hurunui will also have extensive areas potentially subject to tenure review. Southland is a focal point of dairy expansion.

This suggests that, at least at the broad scale, those parts of the country with the greatest extent of threatened native cover are also the parts facing, or likely to face, the greatest pressure for land-use change.

3.2.7 Status quo: Conclusions

- There is a lack of full, comprehensive data of vegetation loss (a surrogate measure for biodiversity loss). The most recent data is either broad-scale vegetative cover change or particular case studies.
- All the information we have indicates there was a decline in native biodiversity on private land until the early 2000s. Since then, we have no reason to think that decline has been arrested, and some evidence to suggest it has accelerated.
- This decline in biodiversity is occurring despite almost all district plans having RMA provisions in place designed to protect significant vegetation. This suggests that, overall, those RMA plans are not effective and need revisiting.
- There is a significant range in plan development for biodiversity protection, together with a wide range of protection measures, techniques and criteria. Consequently, some councils are well advanced in providing for biodiversity protection, while others provide little or no protection.
- Emerging land-use trends are likely to place increasing pressure on native biodiversity, which will in turn put increasing pressure on regional and district councils to provide for biodiversity protection at a time when they already face competing priorities for financial and administrative resources.
- RMA plans need to be improved to more fully address the current and future risks of biodiversity loss. This is amplified by the correlation between the biodiversity importance of places and the risk faced in those places.

Question 2

- a. Do you think chapter 3 has fully described the issues? Are there other things that should be addressed?
- b. Are you aware of any more evidence for or against the issues raised in chapter 3?

4 What are we trying to achieve?

The discussion in chapter 3 demonstrates that, on the basis of available information, biodiversity remains in decline and that there are some broad-scale indications that pressures on biodiversity may increase in the future, rather than diminish (notwithstanding recent additions to the public conservation estate and other types of legal protection).

In some ways, the RMA anticipates ongoing pressure on biodiversity and seeks to address this through its provisions and the functions ascribed to regional councils and territorial authorities. The key question then, is what are we trying to achieve by further intervention by way of a NPS? Or, put another way, why isn't the existing intervention and legislative mandate sufficient?

4.1 What are the main issues?

The previous chapter identified the main resource management issue we need to address: the ongoing decline in biodiversity outside of public conservation land. This is challenging for regional councils and territorial authorities to address because of the following inherent characteristics of biodiversity protection.

- The task of managing resources to maintain biodiversity is *multi-faceted*. It requires biodiversity to be considered in a wide range of resource management decision-making contexts and in the exercise of a range of functions (ie, land use, soil disturbance, discharges to land and water, abstractions, etc). Because the biodiversity function was added some 12 years after the RMA was first enacted, the relationship of this function to other relevant provisions is not as clear as it might be. Currently, there is some confusion about whether the biodiversity maintenance function can be adequately exercised simply by protecting significant sites and habitats in accordance with section 6(c) of the Act.
- Maintaining biodiversity is frequently *controversial*. Inevitable tensions arise between the aspirations of private landowners for the use and development of their land and the desirability of protecting native vegetation and habitat.
- The *burden of protection* falls unevenly and inequitably across both landowners and local authorities. The reasonableness (and therefore acceptance) of land-use restrictions on landowners tends to depend on the proportion of a property affected. The existence of biodiversity values does not respect property or administrative boundaries. Often the benefit of protection is national or regional but the cost is at the individual property or local level. Paradoxically, those who are 'penalised' through restrictions on land use are those who have retained vegetation and maintained habitat. Those that escape the cost of restrictions do so because they (or previous owners) have already exacted the benefits from vegetation and habitat loss or modification.
- One way local authorities seek to minimise conflict and controversy is to *rigorously prioritise* what needs to be protected. However, this is itself a complex matter in which there is no established professional consensus, meaning it is debated repeatedly. Further, in order to minimise conflict (and associated cost) there is an incentive for (particular poorly resourced) local authorities to minimise the number and/or extent of areas to be protected potentially at the expense of national priorities. There is little evidence that the non-statutory statement of national priorities has been influential.

- There is also frequent debate about what *protection* entails and the appropriate means by which protection can be assured. That debate is centred around whether the restrictive rules are essential or whether councils are entitled to rely on other methods (such as QEII covenants or incentive-based rules such as those that provide added development rights in exchange for legal protection).
- The issues described above mean the identification of areas and habitats in plans and their means of protection has often been the subject of *appeal and significant cost*. The Crown itself (through DoC) has been party to many such appeals in the past. With a new round of plans likely in the near future, it is likely that these matters will be relitigated.
- Finally, section 5 of the RMA promotes the idea that the environment is to be protected while (at the same time) the social, economic and cultural well-being of people and communities is enabled. Section 6(c) on the other hand, refers to the protection of areas and habitats as being a matter of national importance. Pursued relentlessly and inflexibly, implementing section 6(c) can foreclose rather than enable well-being (when, for example, it thwarts an otherwise acceptable development project). This can lead to a debate about whether (and in what circumstances) it is appropriate to allow vegetation or habitat to be adversely affected (thereby enabling an important development project) provided no net loss in biodiversity can be secured by the project proponent engaging in biodiversity offset activity.³⁴ The place of this approach in the RMA is currently not well established and local authorities therefore operate in an environment of some uncertainty as to the legitimacy of the approach. Without flexibility in the means of protection (through an acceptance of offsetting in appropriate situations) there is a risk that further promotion of biodiversity could have implications for some economic growth opportunities.

4.2 What are we trying to achieve?

4.2.1 Desired outcomes

Based on the analysis of issues already discussed, the outcomes the Government wants to pursue for enhanced RMA practice as it affects native biodiversity are as follows:

- clear central government direction to regional and district councils on their responsibilities under the RMA to maintain native biodiversity outside public conservation land. This includes clarification that protecting sites under section 6(c) is necessary but not sufficient in the exercise of the 'maintenance of biodiversity' function
- strong national policy support for those councils that wish to do more for biodiversity protection but may feel constrained by contentious, time-consuming and costly decision-making processes
- better specification of minimum criteria for identifying areas and habitats important to the maintenance of native biodiversity, especially for those councils that have inadequate or non-existent criteria. This would constitute a 'bottom line' in local government performance
- clear national policy guidance to landowners and communities about the Government's minimum expectations for biodiversity protection, together with practical options to assist with the tradeoffs that will be required in order to achieve these expectations.

³⁴ A biodiversity offset might be some appropriate compensatory conservation activity on the same or another site, such as revegetation, pest control, species recovery programme, etc.

In short, the Government wants:

- 1. a better (more uniform) level of biodiversity protection
- 2. reduced administrative churn for local government (and participants in RMA processes relating to biodiversity)
- 3. flexibility in the management approaches adopted at local and regional levels to ensure sensible decision-making in the overall best interests of New Zealand.

4.2.2 Scope: what this NPS will not address

Indigenous vegetation is important to New Zealanders for reasons other than maintaining biodiversity. Many local authorities already recognise and protect vegetation and habitat because of (for example) local conservation, landscape, recreational and cultural values. Although the Government recognises the legitimacy of that protection when endorsed through the RMA processes, the NPS on biodiversity does not address vegetation values for those other reasons.

Similarly, the NPS is not about what happens on DoC-managed public conservation land. Although the RMA does apply to DoC-managed land in certain circumstances, the provisions of the applicable conservation legalisation are regarded as offering sufficient recognition and protection.

The New Zealand Coastal Policy Statement (NZCPS) addresses matters of marine biodiversity as are relevant under the RMA (noting that some aspects are managed under fisheries legislation) and the NPS on Biodiversity need not, therefore, apply in the coastal marine area.

4.3 Are these outcomes appropriately addressed under the RMA?

The outcomes described in 4.2.1 are primarily about improving the RMA policy and planning processes in order to maintain native biodiversity within the broader statutory purpose of sustainable management. Biodiversity protection is integral to the purpose and principals of the RMA, including several matters specified in section 6 and 7, most notably section 6 (a), (b) and (c) and section 7 (d). Maintaining biodiversity is also central to regional functions under section 30(1) (ga), and territorial authorities under section 31(1) (b) (iii).

Clearly, therefore, the outcomes described in 4.2.1 fall within the scope of the RMA and are appropriately addressed within its ambit.

Question 3

Do you think the aims of chapter 4 are appropriate things to try to achieve, given the issues described?

5 Alternatives to the status quo

The previous chapters have discussed the need to improve the RMA planning framework to better address the current and future risks of further loss of native biodiversity on private land; and that this is an appropriate outcome to be achieving under the RMA. The next step in this section 32 report is to identify and evaluate the regulatory and policy interventions that could be used to address these risks.

Policy tools available to the Government fall into three categories:

- regulatory tools, such as national environmental standards under the RMA
- *policy tools*, such as non-statutory guidance or a national policy statement
- *funding tools* for further biodiversity protection and information services.

5.1 Evaluation of the alternatives

5.1.1 Status quo: Continue as we are

This option would rely on current programmes, including MfE non-statutory guidance, council programmes, DoC advocacy on district plans and resource consent applications, and support to landowners and councils through the existing Biodiversity Condition and Advice Funds, Nature Heritage Fund, QEII National Trust and Ngā Whenua Rāhui.

However, for the reasons outlined previously, this approach would not be an effective or efficient means of achieving the desired outcomes, and is likely to make the desired outcomes even more difficult to achieve over the medium to long term.

5.1.2 Amend the RMA

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The RMA could be amended to be more specific on planning requirements for biodiversity, such as requiring that local authorities plan for native biodiversity outside public conservation land in regional plans and/or district plans, and providing specific methods to be applied.

The advantage of amending the RMA is that it provides a clear, unambiguous legal obligation. However, this option would be contrary to the existing RMA framework, which generally sets out processes and principles rather than prescribing matters of technical detail. It would also require significant amendments to be made to the RMA, and the introduction of a specific regime for planning for native biodiversity.

For these reasons, amending the RMA is not considered the most effective means of achieving the desired outcomes.

5.1.3 Increased funding

Increasing existing Government funds and Government-assisted funds would accelerate protection of ecosystems and habitats through voluntary mechanisms. The existing funds could be realigned to target the threatened ecosystems and land environments.

Government funding, at present, is in two streams. The first is funding for direct purchase of land (Nature Heritage Fund) and assistance to achieve legal protection (QEII Conservation Trust, Ngā Whenua Rāhui). The second is funding physical protection (Biodiversity Condition Fund).³⁵

Funding land purchase and other legal protection is effective in dealing with direct threats to the protected sites, but much less effective in addressing indirect threats from unsympathetic management within the wider landscape.

Funding physical protection through fencing and pest control can effectively address key threats, but again is much less effective in addressing indirect threats unless coordinated with other initiatives.

Although increasing funding may influence the ability for local authorities to amicably secure protection of particular areas in a limited number of additional cases, funding cannot be realistically increased to remove all tension, and therefore cannot be seen as a substitute for the RMA.

Also, none of the existing funding tools can address the issues about policy certainty cost and consistency in the way local authorities exercise their functions under the RMA.

For these reasons, increased funding for biodiversity is not considered the most effective means of achieving the desired outcomes.

5.1.4 Targeted assistance to local authorities

Central government could target councils which are struggling to meet their biodiversity responsibilities under the RMA with assistance to help them lift their performance in biodiversity maintenance and protection.³⁶ This could involve appointing officials to work with specific councils to assist them with planning, monitoring and engagement with land owners.

While such an approach may serve to lift the profile of biodiversity within a select number of councils it would be unlikely to influence RMA decision-making which is determined by elected councillors, independent commissioners and the Courts. The Act itself, national policy (or absence of it), case law and community views would likely remain more influential of statutory decisions.

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³⁵ Some funding under Ngā Whenua Rāhui and the Nature Heritage Fund is also available for some physical protection.

³⁶ This can manifest itself in a number of ways, including weak biodiversity plan provisions, or poor enforcement or monitoring. Councils may struggle to fulfil their responsibilities under the RMA for a number of reasons, including under-resourcing (some small district councils have only one planner, for example), lack of political will.

Targeted assistance is potentially a very useful tool and could contribute to some of the outcomes sought. But it is unlikely to be able to deliver the broad influence of RMA decision-making that is essential to meeting the desired outcomes.

5.1.5 Provide further non-statutory guidance

The potential effectiveness of non-statutory guidance is always difficult to determine. In this case, however, various guides have been published over a number of years. These include the Norton and Roper-Lindsay report on Criteria for Assessing Ecological Significance in 1999,³⁷ various iterations of advice on the Quality Planning website and, most recently, the national priorities.

On the basis of that experience, it seems unlikely that further non-statutory guidance will deliver the outcomes sought.

5.1.6 National environmental standards

A NES is a regulation that can (amongst other things) control activities *directly* and independently of regional or district rules. A NES may also take a second, rather different, form by prescribing the way councils must manage activities and resources, including classifying activities, prescribing monitoring methods to be used and similar matters of *regulatory practice*.

NESs therefore generally have three advantages because they:

- can take effect instantly (rather than having to be applied through plans)
- are stand-alone regulations and can be independently enforced through the enforcement provisions of the RMA
- can more directly remove decision-making discretion from local authorities and provide for greater certainty of outcome (certainly in terms of matters relating to resource consents).

However, in terms of the desired outcomes for native biodiversity, a NES would be an overly prescriptive and relatively inefficient approach to improving policy and planning processes throughout the country. This is because it imposes one solution – a rule – for every situation. There is also a risk that regulation may provoke resistance and undermine good will, as well as undermining existing voluntary biodiversity initiatives.

A further drawback of a NES is that private compliance costs would be high, since a national environmental standard could override existing use rights currently held under section 10 of the Act, and/or force a resource user to apply for consent within six months. Nor would a NES allow for any local judgement in evaluating the opportunity costs of protection against the value of protection.

Social costs, also, are potentially high. A NES could be perceived by local government as contradicting the devolved approach to environmental management. A NES would make redundant many district plan provisions developed after extensive consultation. It would also remove the ability for local authorities to tailor solutions to local circumstances.

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³⁷ The MfE-funded report was not officially published but was widely distributed in draft form. Another MfE Guideline – the Section 6(c) Best Practice Guideline – was also prepared in draft form in 1999 but not officially published.

It may also take considerable time to develop an appropriate NES for biodiversity (ie, methods and criteria), whereas a NPS can be implemented reasonably quickly. This is an important consideration because further delaying national intervention is likely to increase the current and future risks to biodiversity.

For these reasons, a NES is not considered the most effective means of achieving the desired outcomes.

5.1.7 National policy statement

National policy statements contain objectives and policies on matters of national significance that must be 'given effect' to in RMA planning documents and given 'particular regard to' in resource consent decision-making. They therefore provide a potentially useful means by which a national policy can be implemented through local and regional decision-making.

A NPS may be prepared on any matter where the Minister considers it useful to state matters of national significance that are relevant to achieving the purpose of the RMA (provided the prescribed process is followed, including the obligation under section 32 to consider the costs and benefits). Section 45 of the RMA sets out a range of matters that the Minister may have regard to when deciding whether it is desirable to prepare a national policy statement. These are broad, and the desire to ensure New Zealand's biodiversity is maintained is encompassed by the matters specified.

Essentially, a NPS will affect what territorial authorities and regional councils put in their plans and the weight given to particular matters when considering resource consents. So, in a practical sense, a NPS on biodiversity may be justified if:

- 1. The quality of existing planning and planning decisions is poor as reflected by:
 - there not being good/comprehensive provisions in district and regional plans and/or
 - biodiversity not being given the desired weight in consent decisions or
- 2. The nature or scale of pressures on biodiversity is expected to change such that existing provisions (that may have previously been adequate) will not be suitable for the future.

Both of these criteria would suggest that a NPS could provide an appropriate means to achieve the desired outcomes, provided any associated costs do not outweigh the benefits of such an intervention. Based on the assumption that the proposed NPS will not directly require existing plan provisions to be reviewed ahead of would have otherwise have occurred, the administrative costs to local authorities (and therefore communities) should be low.

A NPS would promote a national approach to areas and habitats that are important to the maintenance of native biodiversity. It would provide direction that facilitates certainty and consistency in the way that local authorities deal with biodiversity. It would ensure that vulnerable ecosystems such as dunelands, wetlands and those that are significantly reduced at a national or regional level are given recognition by local authorities in their plans and regional policy statements.

A NPS would allow councils to determine the most appropriate means to protect priority areas. This would enable those councils that have already made good progress to continue with approaches that are already working well. In some cases, rules might be applied, but some local authorities might rely, instead, on other measures to achieve the protection required.

The environmental benefits of a NPS are potentially high (provided the provisions put into place by local authorities to give effect to the NPS do not provoke pre-emptive actions by landholders to clear native vegetation). The NPS would require the protection of vegetation and ecosystems that are most susceptible to biodiversity loss, while enabling local authorities to tailor responses to actions most effective in the local context.

A NPS would have social benefits in that it could help to justify and focus local authority effort and expenditure on native biodiversity. In addition, it would demonstrate leadership and raise the profile of the issue nationally. It is also likely to encourage greater coordination and collaboration of the efforts of community stakeholders. A NPS focusing on recognising and identifying areas important to the maintenance of biodiversity would also have public administration benefits. This is because local authorities would have much clearer guidance about the areas that are important and what issues their plans need to address.

For these reasons, a NPS is considered the most effective means of achieving the desired policy outcomes.

5.2 The preferred option

Having examined six options, a *national policy statement* is considered the most appropriate means of achieving the Government's desired outcomes in respect of the following matters:

- clear central government direction to regional and district councils on their responsibilities under the RMA to maintain native biodiversity outside public conservation land
- strong national policy support for those councils that wish to do more for biodiversity but may feel constrained by contentious, time-consuming and costly decision-making processes
- better specification of minimum criteria for identifying areas and habitats important to maintaining native biodiversity, especially for those councils that have weak or non-existent criteria
- clear national policy guidance to landowners and communities about the Government's minimum expectations for biodiversity protection, together with practical options to assist with the trade-offs that will be required in order to achieve these expectations.

The basis for this view is summarised in the following table.

Outcome sought/ relevant criteria	Alternative options that did not satisfy the selection criteria						
	Status quo	Amend the RMA	Increased funding for biodiversity	Targeted assistance	Non- statutory guidance	National Environmental Standard	National Policy Statement
Clear central government direction on nature of biodiversity responsibilities	х	~ (potentially)	X	X	x	\checkmark	\checkmark
Strong national policy support for councils	х	x	x	x	х	~ (potentially)	\checkmark
Specification of minimum biodiversity criteria	x	X	X	X	X	\checkmark	V
Guidance on nature of protection and managing trade-offs	x	X	x	X	X	\checkmark	1
Can be developed quickly/through a cost-effective process	~	X	\checkmark	1	\checkmark	X	1
Will address current and future biodiversity risks at an appropriate national scale	~	X	V	X	V	~ (potentially)	V

Table 1: Comparison of different options' effectiveness in achieving the policy objective

5.3 Risks of acting or not acting

Section 32 (4) (b) of the RMA requires this evaluation to take into account the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of policies.

The risks of acting do not appear high since the primary objective is to enhance the way local authorities undertake an existing statutory function. The primary risks relate to the potential to change (either up or down) the number/extent of areas of vegetation and habitat identified and protected by RMA plans. A significant increase in areas identified may cause some adverse landowner reaction that is counter-productive to long-term conservation interests. A significant decrease in sites may reduce the overall level of protection afforded to native vegetation. The likelihood of this risk can only be assessed by very detailed assessment of the effect of the NPS compared with current plans. Such a task is significant in scale and has not been undertaken at this point. The policies of the NPS are, however, deliberately designed to mitigate these risks.

The risk of not acting is that native biodiversity off public conservation land is likely to continue to decline. Obligations and expectations of local authorities will likely remain unclear

and RMA planning processes (particularly district plan preparation) will continue to be lengthy and litigious. This uncertainty may lead, in different places and at different times, to both environmental cost (through loss of ecosystems and species) and to economic cost (if inflexible protection regimes are imposed). Much more will be left to be settled by the Courts.

Question 4

- a. Do you think a NPS is the best option, out of the options described in chapter 5, to achieve the objectives and address the issues?
- b. Are there other options that have not been addressed by chapter 5?

6 Is the proposed objective appropriate in achieving the purpose of the Act?

Section 32 requires evaluation of the extent to which the objective of the proposed NPS is the most *appropriate* way to achieve the purpose of the RMA.

The purpose of the RMA is to promote the sustainable management of natural and physical resources, which means:

... managing 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 well-being and for their health and safety while—

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

The objective of the proposed NPS seeks the following outcome:

To contribute to the maintenance of indigenous biological diversity by protecting and enhancing significant indigenous vegetation and the significant habitats of indigenous fauna outside of public conservation lands and encouraging maintenance and enhancement of biodiversity values more broadly while:

- Supporting the existing good practice of local authorities.
- Recognising the positive contribution of landowners as guardians/kaitiaki of their land; and
- Recognising that the economic, social and cultural well-being of people and communities relies on making reasonable use of land.

The Quality Planning guidance note on section 32 identifies four criteria against which appropriateness is to be assessed:

- relevancy to the purpose of the Act
- usefulness (or utility) in that it serves a purpose particularly being of value in guiding decision-making or evaluation of policy effectiveness
- achievability the objective must be something that is achievable within the powers and function of the RMA
- reasonableness the outcome needs to be set at a level (and/or requires progress at a rate) that recognises the burden of costs and the section 5 obligation to enable social and economic well-being.

Each of these is discussed in turn.

Relevancy

The core objective proposed (maintenance of biodiversity) is *relevant* to each of the matters raised in section 5(2) (a), (b) and (c) of the Act. Native plants and animals are *natural resources*

(whose potential to meet future needs is to be sustained), they are found in *ecosystems* (whose life-supporting capacity is to be safeguarded) and they are part of the *environment* (adverse effects on which are to be avoided remedied or mitigated).

For that reason (and for the reasons that follow), the objective may be regarded as relevant to the purpose of the Act.

Usefulness

While the objective does not set out measurable, time-bound outcomes, it is of considerable use in other ways.

Importantly, the objective makes it clear that *maintaining* biodiversity is to be achieved by:

- a. protecting and enhancing significant native vegetation and the habitats of native animals
- b. encouraging the maintenance and enhancement of biodiversity values more broadly.

This is useful because it sets the agenda for maintaining biodiversity more broadly than section 6(c). Thus there are two clear parameters to measure when, in future, evaluating the implementation of the NPS.

Reasonableness

The reasonableness of the objective is assured by the three caveats to the core objective of maintaining biodiversity.

As noted earlier, many local authorities are doing a good job of identifying sites and values important to biodiversity and seeking to protect these through planning processes. Emphasising this clearly within the objective recognises the importance that further interventions do not undermine the progress made with communities to maintain biodiversity. It seeks to avoid any inference that existing efforts of all local authorities are necessarily inadequate. Furthermore, it accepts that the final arbiter of what is reasonable needs to be the local authorities making policy and regulatory decisions, because they are closest to the affect of such decisions and best understand the nature and scale of costs imposed.

The second caveat recognises the role of landowners. This aims to encourage local authorities to take a respectful approach to their relationships with landowners, recognising that in many cases vegetation and habitat is protected by landowners' goodwill and commitment rather than by any legal protection mechanism. This supports the later policy position that non-regulatory methods of protection may be appropriate in certain circumstances. This contributes to the reasonableness of the objective, and provides a degree of flexibility within which local authorities can pursue the objective.

The third caveat recognises that the economic, social and cultural well-being of people and communities relies on making reasonable use of land. This aims directly at ensuring councils do not adopt an inflexible, single-minded approach to biodiversity protection and that regulation is not to be imposed without regard to costs on individuals and communities.

The three caveats reflect the approach of section 5 and should ensure that a reasonable approach to taken to maintain the core objective.

Achievability

Maintaining native biodiversity requires positive action (such as species recovery programmes, large-scale sustained pest management and research). While the RMA can achieve some of this positive action (by requiring offsets and through mitigating conditions, etc) the RMA's main contribution will be to avoid damage occurring through resource (particularly land and water) use and development. Furthermore, as discussed earlier, some species and ecosystems are found largely on the public conservation estate and their maintenance will depend on public conservation programmes (via DoC). Therefore, the objective of the NPS needs to be carefully articulated. The RMA can and should contribute to maintaining native biodiversity, but it should not be held accountable for maintaining biodiversity in absolute terms, as addressing the threats will likely require solutions that extend beyond what the RMA offers.

The use of the wording 'promote' in the draft objective recognises this, and for that reason the objective may be regarded as achievable.

7 Will the policies be effective and efficient in achieving the objective?

The proposed NPS includes seven policies. This chapter evaluates these policies in accordance with the requirements of section 32(3)(b) of the RMA, which states they must be assessed to determine whether each will achieve the proposed objective in an efficient and effective manner.

Section 32 guidance notes on the Quality Planning website³⁸ explain how the terms 'efficiency' and 'effectiveness' should be understood for the purposes of evaluating the proposed policies. This guidance is set out in the following sub-chapters and underpins the evaluation of the policies in the remainder of this chapter.

7.1 Assessing effectiveness

The Quality Planning guidance says that: **effectiveness** – means how successful a particular option is/will be in achieving the stated objective. How successful an option is can be measured in terms of not just whether an objective will be achieved outright; but it may alternatively relate to the extent to which progress will be made even if the objective won't be met in full. The speed at which progress is made may also be a relevant consideration.³⁹

The guidance goes on to say that this means asking which approach will best achieve the objective of the proposed NPS, which in turns requires understanding of how the policies will take effect and what the risks are of the objective not being achieved. The most effective policies will be those that most directly target the proposed objective of the NPS.

7.2 Assessing efficiency: costs and benefits

The Quality Planning guidance says that: **efficiency** – means where the benefits will outweigh the costs, either immediately or over time. The most efficient policy or method will achieve the stated objective with the greatest benefit and the least cost (costs and benefits may be quantitative, semi-quantitative or qualitative). Efficiency is not to be confused with the terms 'net benefit' or 'net present value' (a measure that implies that all the benefits and costs can be converted to a common currency and netted off against one another to generate a single measure).⁴⁰

Analysing efficiency therefore requires identifying and assessing the various environmental, economic and social costs and benefits associated with the proposed policies, including who or what will face the costs or experience the benefits. More precisely, this will involve evaluating the marginal costs and benefits of the policies. That is, understanding the costs imposed by the existing policy and regulatory framework and then assessing how those costs are likely to differ from those that will arise once the NPS is implemented.

³⁸ http://www.qualityplanning.org.nz/plan-development/implementation.php

³⁹ http://www.qualityplanning.org.nz/plan-development/implementation.php

⁴⁰ http://www.qualityplanning.org.nz/plan-development/implementation.php

This analysis therefore assesses the potential costs and benefits to local authorities, individuals and the economy by considering the state of current plans and the likely changes that may occur as a result of the policies.

The following actual and potential costs are likely to be associated with the proposed policies.

- Policy development costs and associated ongoing costs borne by central government in offering support, monitoring implementation and reviewing the policy where necessary.
- Compliance costs for *local authorities* which include:
 - administrative costs associated with, for example, reviewing and/or changing plans including dealing with added submissions and appeals – and taking additional matters into account in consent decision-making, etc
 - substantive costs depending on the nature of the intervention these may include expenditure in monitoring and inspection services, or the adoption of non-regulatory initiatives to help ensure national policy is met.
- Compliance costs for *resource users* which may include:
 - *administrative* costs, such as those associated with applying for consent or providing additional information as part of consent applications
 - substantive costs, such as costs associated with the curtailment of development rights or the costs of complying with conditions.
- Broader *economic costs* that result for a particular community/industry or for the country as a whole. These will be the sum of the compliance costs set out above, plus the indirect costs suffered downstream in the economy.

The relevant **benefits** of the proposed policies are likely to include the following:

- *administrative savings* for local authorities (and thereby communities) through, for example, less debate (ie, hearing time and litigation avoided or abridged)
- improved maintenance of biodiversity through the implementation of better, clearer and more effective RMA plans and processes (ie, direct environmental benefits).

When considering the efficiency of each policy, we have therefore examined the costs and benefits associated with:

- the environment
- central government
- local government (district, city, and regional councils)
- resource users (generally landowners and land occupiers)
- communities and the country as a whole.

7.3 Policy 1: Defining significant areas and habitats for the purpose of the NPS

For the purpose of this national policy statement, an area of significant indigenous vegetation or a significant habitat of indigenous fauna is an area or habitat whose protection is important for the maintenance of indigenous biological diversity.

7.3.1 Policy intent

Policy 1 recognises the complex and potentially confusing relationship between local authorities' biodiversity maintenance function and the responsibility they have under section 6(c) to recognise and provide for areas of significant native vegetation and significant habitats of native animals. Although the objective positions section 6(c) as being highly relevant (though not by itself sufficient) to maintaining biodiversity, it is also important to clarify that the protection of sites in accordance with section 6(c) may be for reasons broader than those articulated in the NPS. Local authorities can, and do, target sites for reasons other than maintaining biodiversity, and they use criteria to identify sites of high ecological importance that are broader than those of the NPS.

Policy 1 states that, for the purpose of the NPS, significant areas and habitats are those that are important for maintaining biodiversity. This implies that local authorities can continue to interpret their section 6(c) obligations more broadly than the NPS should they choose to do so. By clarifying the relationship between section 6(c) and the NPS in this way, the term *"significant indigenous vegetation and habitats of indigenous fauna"* can be used throughout the NPS without implying limitation on the application of section 6(c) more broadly. As that term is now widely used, the ability to use it in the NPS (rather than introducing a new term) is considered important for the readability and simplicity of the NPS.

7.3.2 Effectiveness

Policy 1 aims to clarify responsibilities to enable the effective implementation of the NPS and other RMA responsibilities. It is not aimed at achieving on-the-ground outcomes. Rather, it aims to ensure the NPS does not cut across what local authorities might be doing in respect of section 6(c) for reasons other than biodiversity, while at the same time clarifying that at least one legitimate measure of 'significance' is the whether an area or habitat contributes to the maintenance of native biodiversity.

As the NPS does have statutory weight in policy and regulatory decision-making under sections 55, 67, 75, 104 and 171 of the RMA, Policy 1 can be expected to be effective.

7.3.3 Efficiency

There is little, if any, cost associated with this policy since it confirms established practice. The principal benefit of the policy is that it allows those councils that already protect vegetation and habitat for reasons other than maintaining biodiversity (as promoted by this NPS) to continue to do so. In the absence of this policy, there is a risk that the NPS could inadvertently prescribe, in narrower terms than currently applies, a definition of 'significant' that causes local authorities to change plans to conform with the NPS (when they otherwise would not) and/or cease offering protection to areas and habitats that may have previously been protected. The benefits of the policy are avoiding potential compliance cost for local authorities and environmental cost from reduced protection.

While there is a cost associated with local authorities identifying and protecting areas and habitats beyond those identified as priorities in this NPS, that is a cost associated with existing practice and cannot be attributed to this NPS.

For these reasons, the benefits are considered to outweigh the costs and the policy is considered efficient on that basis.

7.4 Policy 2: Criteria for identifying significant indigenous vegetation and the significant habitat of indigenous fauna

In considering the effects of any matter, local authorities shall, in addition to any area of significant natural vegetation or a significant habitat of indigenous fauna identified in, or by, provisions of any relevant regional policy statement, or regional or district plan, regard the following as significant natural vegetation or significant habitat of indigenous fauna:

- a. the originally rare ecosystem types listed in Schedule One
- b. indigenous vegetation associated with sand dunes;
- c. indigenous vegetation associated with wetlands;
- d. land environments, defined by Land Environments of New Zealand at Level IV (2003), that have 20 per cent or less remaining in indigenous vegetation cover; and
- e. habitats of threatened and at risk species.

7.4.1 Policy intent

Policy 2 requires local authorities to ensure they regard certain areas and habitats as 'significant' areas and habitats when considering the effect of any resource consent application (including a request for a change or cancellation of conditions of consent), change or variation to a plan (or request for a regional plan), notice of requirement for a designation, or notice of requirement for a heritage order (or to alter a heritage order).

In other words, in the context of any specific development project or proposal for specific protection measures, local authorities need to consider whether the site(s) in question are significant and, therefore, whether their protection is a matter of national importance under section 6(c). This provides some assurance that important areas and habitats will receive recognition when they might be at risk, even in the absence of such sites being identified in existing RPSs and regional and district plans.

The areas and habitats to be so regarded are defined by criteria. These criteria are those included in the *National Priorities for Protecting Rare and Threatened Native Biodiversity on Private Land*, published as guidelines in 2007.⁴¹ Key underpinning concepts of *rarity* of vegetation/habitat types; the desirability of maintaining *representativeness* (the full range of what once existed); and the need to maintain the habitats of *threatened species* are familiar ecological concepts that are already widely accepted in many RMA plans.

The policy is worded in such a way as to present the matters listed as *minimum (or bottom line) criteria*. That is, it protects the ability of councils to apply broader or additional criteria to the assessment of areas and habitats, provided any such criteria are included in relevant RPSs and plans. This means that the NPS ought not result in any narrowing of the recognition currently given to areas of native vegetation and habitat.

⁴¹ Ministry for the Environment and Department of Conservation, 2007. Protecting our Places: Introducing the National Priorities for Protecting Rare and Threatened Native Biodiversity on Private Land. Ministry for the Environment, Wellington. Available at www.biodiversity.govt nz/pdfs/protecting-our-placesbrochure.pdf

7.4.2 Effectiveness

The effectiveness of this policy should be assured by the requirement in section 55 (3) for a local authority to "take any other action that is specified in a national policy statement".⁴² Section 104 (1) requires those making decisions on resource consents to have regard to a NPS. Section 171 does the same in respect of requirement for designations.

The effectiveness of the policy will also be determined by the ability of decision-makers to apply the criteria in a certain and precise manner. All local authorities have access to the LENZ tool and therefore applying criteria (d) should not be problematic. This is likely to be far more effective than the more general criterion of 'representativeness' (as previously promoted), which was open to more subjective assessment. Similarly, by listing originally rare ecosystem types in an appendix, the room for debate about where and what these are is greatly narrowed.

The broader question is whether focusing on the areas and habitats identified by the criteria will, of itself, be sufficient to ensure the objective is met. Or whether, a broader range of criteria would be more effective. On that question it is important to remember that the policy aim is to introduce a more uniform level of biodiversity protection. It is not to ensure the broadest possible range of criteria apply at a national scale. Furthermore, it is important to remember that the objective of the NPS is to *contribute towards* maintenance of biodiversity and that identification of significant areas and habitats is not the only aspect of the NPS (the other acknowledges the need to encourage protection of biodiversity values more broadly). In that sense, the policy can be regarded as effective, notwithstanding that it would be possible to promote broader criteria. It should also be noted that the criteria promoted by Policy 2 have been previously endorsed as the key national priorities. While it is possible to go wider, that would result in added cost.

7.4.3 Efficiency

The cost of this policy arises from the need for local authorities to go beyond their current criteria/definitions of significant areas and habitats when considering the adverse effects in the context of resource consents, designations, plan change requests and similar decisions.

Thus, understanding the extent of this cost requires a comparison of the criteria applied by local authorities currently and those that the NPS requires to be applied.

As noted earlier, MfE has commissioned an update of research into various aspects of current district plans. That research found that 80 per cent of district plans (ie, 60 out of 75 plans) contain criteria of assessing the significance of vegetation and habitat. A further 13 plans do not include criteria but do identify significant natural areas (so have clearly applied some form of criteria).

Of the 60 existing district plans that contain criteria, 40 use the PNA criteria (with some providing specificity as to how the criteria are to be applied that go beyond what the PNA stated and hence these are identified in the research as "PNA (in Part)"). The PNA criteria are a list of seven criteria originally developed in conjunction with the Protected Natural Area Programme – a programme aimed at meeting the objectives of the Reserves Act 1977. Importantly, two of these criteria were *representativeness* and *rarity* and *special features*. These are the broadly similar ecological concepts as are captured by Policy 2's "*land environments with less than*"

⁴² In this context, "any other action" refers to action other than amending RPSs and regional and district plans.

20 per cent remaining vegetation" (which is designed to ensure retention of ecosystems representative of the full range of naturally occurring ecosystem types) and natural uncommon ecosystems, respectively. The only additional matter raised by Policy 2 is the habitats of threatened and at-risk species.⁴³

A further six plans use the Norton Roper-Lindsay criteria (initially developed for the Ministry for the Environment in 1999). Norton Roper-Lindsay proposed three primary and one secondary criteria. The primary criteria include *representativeness* and *rarity/distinctiveness*.

A further 15 plans use "other criteria". It is difficult to draw generic conclusions about the relationship of these "other" criteria and those of the NPS due to an absence of more detailed information that is not available for current research. It should not be assumed, however, that these "other criteria" are necessarily narrower than those of the NPS. They are, though, generally cruder in design. Some will be broader than those of the NPS. Others will be broader or narrower depending on the nature of vegetation being assessed (some, for example, appear only to value forest ecosystems but in that category are all encompassing).

Twelve plans do not specify criteria. It may be that these have simply applied criteria of the relevant RPS but without further detailed research this cannot be confirmed (although it is logical given that district plans have to give effect to RPSs – and prior to the 2005 amendment had to be "not inconsistent with" RPSs).

Of the 60 plans we know about, we can be confident that 46 (77 per cent) already apply criteria that at least include the same ecological concepts as those of Policy 2.

It is important to record that, without further detailed research, we cannot be certain that the concepts in the PNA and Norton Roper-Lindsay criteria are applied in precisely the same manner as proposed by Policy 2. While the concepts are the same, the way they are articulated in Policy 2 with reference to LENZ and scheduled habitat types removes considerable subjective judgement in the application of the criteria. On the other hand, both the PNA and Norton Roper-Lindsay criteria contain additional criteria that represent potentially broader capture than does Policy 2.

While information is incomplete, it seems likely that Policy 2 will result in cost associated with *additional* areas/habitats being identified through consenting processes (over and above those that would be identified anyway) in a maximum of 29 out of 75 districts. However, it is highly likely that further research would demonstrate that this over estimates the cost impact.⁴⁴ A more precise assessment of how much additional land is likely to be identified as significant and what the economic trade-off of its protection might be has not been attempted here.

In terms of added costs on councils, this is likely to only affect around 20 per cent since we know that 80 per cent already apply criteria of one sort or another. It is unlikely that the imposition of the criteria of Policy 2 will be more expensive (administratively) than applying other criteria. In fact, the more precise and less subjective Policy 2 criteria are likely to be considerably more cost effective to apply.

⁴³ Wetlands and dunelands are largely captured by the other criteria.

⁴⁴ It is also important to note that in these districts, the significance of sites affected by a development proposal might be identified through the assessment of environment effects (AEE) required of any project. Policy 2 will simply remove any debate as to whether weight ought to be given to the protection of such sites (debate that might arise if such sites were not identified by relevant plans or criteria included in such plans).

It is important to note, however, that the above analysis does not include additional vegetation and habitat that might be identified because of the presence of threatened or at risk species. Again information on the presence of these species is incomplete but it is worth noting that few councils currently apply that criterion. (It is not an explicit criterion used by the PNAP or the Norton Roper-Lindsay report). GIS analysis undertaken for this report does suggest that this additional criterion will lead to the identification of sites in addition to those identified by the "LENZ 20 per cent" criterion discussed above. A review of known information in Appendix 3 suggests there could be over 1300 locations of threatened plants alone that would not be captured by the LENZ 20 per cent criterion. Unfortunately, there is no available information on the spatial scale of these locations.

The benefit is that in 29 districts vegetation and habitat important to the maintenance of New Zealand's biodiversity will be identified in consenting processes when it might otherwise not be. The value of that is difficult to quantify without significant economic analysis. However, given the national importance of maintaining biodiversity the social value is assumed to be high.

It is also important to note that setting criteria nationally, as proposed, avoids repetitive debate (through hearings and appeal processes) as to the appropriate minimum criteria to apply.

7.5 Policy 3: Including criteria in regional policy statements

Any regional policy statement notified after the date on which this national policy statement takes effect, shall, in addition to any other provisions relating to section 6(c) of the Act, include criteria for the identification of areas of significant vegetation and significant habitat of indigenous fauna that include, as a minimum, the areas and habitats identified in Policy 2a–d.

7.5.1 Policy intent

Policy 3 places an obligation on RPSs to include the criteria outlined in Policy 2. Three points should be noted.

First, the policy only applies to RPSs notified after the date on which the NPS takes effect. This is proposed to reduce compliance costs given there are a number of second generation RPSs that have recently been or are on the verge of notification at this time. To require changes to these documents so soon after they have been notified would add cost with little benefit (especially given that Policy 2 requires the NPS criteria to apply regardless of what any RPS might say).

Second, the policy makes clear that the criteria are to apply in addition to any other provisions/criteria that a regional council chooses to include in their RPS. This is designed to reinforce the notion of the criteria being bottom-lines.

Third, reference is only made to Policy 2a–d. The criterion of Policy 2e (*habitat of threatened and at risk species*) is deliberately excluded. This is not because the criterion ought not to apply in a case-by case basis (in, for example, the context of the resource consent) as Policy 2 makes clear that it should. Rather, it is because the cost of ecological survey to determine the presence of such a large number of species (over 2000) over a potentially large number of sites is considered unreasonable and should not be imposed on territorial authorities (which would otherwise be the consequence given Policy 4).

7.5.2 Effectiveness

Again, Policy 3 can be expected to be effective because under Section 55(2) of the RMA regional councils are obliged to change their RPSs to give effect to a NPS if that NPS so directs it.

Once such criteria are in an RPS, regional and district councils need to give effect to them. In that sense effectiveness assurance is built in to the statutory framework. Whether the criteria themselves are effective in achieving the objectives is discussed in chapter 7.4 above.

The limitation on the effectiveness of this policy is that it will allow those NPSs that were notified prior to the NPS coming into force to continue as proposed (subject to the first schedule process). As noted above, this is to minimise compliance costs for regional councils. Although this may appear to be a significant issue, in practice it is not likely to adversely affect the achievement of objectives. That is because (a) the criteria will continue to apply (in accordance with Policy 2) at the project scale; and (b) regional and district councils will need to be amended to reflect the criteria in accordance with Policy 4. On that basis, the policy will be effective without unnecessarily imposing compliance costs on regional councils.

7.5.3 Efficiency

The benefit of requiring the inclusion of the criteria of Policy 2 in RPSs is ensuring there is a seamless policy framework that avoids conflicting or contradictory criteria at different levels of governance. While the policy makes clear that its criteria are to be included in addition to whatever other criteria might apply, core criteria of RPSs notified after the NPS and regional and district plans will be consistent.

There should be no extra cost for regional councils to require inclusion of the criteria in RPSs notified after the NPS since they would be expected to include some criteria regardless of the NPS. The fact that the criteria are required by a NPS may reduce the costs for regional councils since it will provide a defensible basis for the inclusion of the criteria.

The alternative approach to requiring inclusion of the criteria in all RPSs (and not in regional and district plans) and waiting for those criteria to be "driven down" into regional and district plans (as would occur through the normal working of the Act) would, by contrast, be administratively inefficient. The benefits of this alternative approach would take longer to come to fruition and the costs would be higher since there would be more opportunity for provisions to be debated.

The approach to promoting the inclusion of criteria in RPSs is considered to be efficient since it achieves the desired outcome at low cost.

7.6 Policy 4: Identifying areas and habitats in district plans

District plans and any relevant regional plans shall identify, using (where practical) maps and/or schedules, areas of significant natural vegetation and significant habitats of indigenous fauna by applying the criteria of the relevant regional policy statement and, within five years of this national policy statement taking effect, the criteria of Policy 2a–d (to the extent that these may be broader in scope than those of the relevant regional policy statement).

7.6.1 Policy intent

Policy 4 requires district plans to identify significant areas and habitats by applying the criteria of RPSs and, noting that not all RPSs will necessarily contain the criteria of Policy 2 due to their date of notification relative to the timing of the NPS, the criteria of Policy 2a–d.

Regardless of the NPS, all district plans need to give effect to RPSs. That is what the Act currently states. On that basis, there is no need to provide a timeframe for the identification of sites according to RPS criteria. It will happen in due course. However, there is a need to provide a timeframe for the identification of areas and habitats according to the criteria of Policy 2. That ensures that, should any RPS contain criteria of lesser breadth than those of Policy 2, that RPS's more limiting effect on district plans' identification of areas and habitats does not persist beyond a reasonable transition period. That period is set at five years.

Also notable is the requirement for identification to be by way of maps and/or schedules. This is designed to make the criteria both effective and transparent. The words "where practical" are included to recognise that in districts with very large numbers of very small areas and habitats it may not be practical to map them all and other means of identification (eg, by vegetation type) might be necessary.

As with Policy 3 (and for the same reasons), the obligation to identify areas and habitats in plans specifically excludes the habitats of threatened and at risk species.

7.6.2 Effectiveness

The protection of vegetation and habitat is more likely where it is clearly identified in planning documents as being significant. That is what Policy 4 ensures (again via the requirement of section 55(2)).

In some cases, under current arrangements, it is possible for district plans to give effect to RPSs without specifically identifying what vegetation and/or which particular sites are to be regarded as significant. Policy 4 will ensure that does not happen in the future and will bring greater certainty to planning for biodiversity at the district and regional levels. This should reduce the chance that significant areas and habitats will be over-looked when the effect of particular projects or policy changes are being considered.

7.6.3 Efficiency

The cost of this policy for regional and district councils is in the mapping and/or scheduling of sites. The research into district plans revealed that 64 per cent of district plans already use maps and a further 16 use (or are developing for use) schedules. Only two councils do not identify sites at all (although a number appear to do so in databases that are outside of district plans). On that basis, the overall cost for local government should not be high (although it may be high for a small number of councils that have not previously identified sites).

If the number of sites requiring identification increases substantially from that number already identified then the cost will be considerable greater. However, that should not be the case in the 46 councils already applying similar criteria to those of Policy 2. Furthermore, Policy 4 does contain some flexibility by stating that identification is required "where practical". This is to ensure that those district/regions with a large number of very small sites (eg, small wetlands or dunes) do not have to identify each individually. Furthermore, a period of five years
is provided to allow the policy to be complied with as part of the "business as usual" plan review cycle. That should greatly reduce costs for all those councils due to review their plans within that period.

The costs for landowners were discussed in chapters 7.2 and 7.4.3. In summary, a "highest cost" scenario would see a greater number of properties affected relative to current practice in 29 districts. Determining the extent of the area potentially affected needs further detailed analysis.

Overall, the cost for local authorities should not be high. The marginal benefit is in securing site identification in all district plans (instead of the 80–90 per cent at present) and relevant regional plans and the increased certainly that represents.

7.7 Policy 5: Managing effects to achieve no net loss

In addition to the inclusion in plans or any other provisions relating to section 6(c) of the Act, local authorities must manage the effects of activities through district and relevant regional plans (or be satisfied that the effects are managed by methods outside of district or regional plans) to ensure 'no net loss' of biodiversity values within areas of significant indigenous vegetation and significant habitats of indigenous fauna by:

- a. avoiding adverse effects to the extent practicable; and
- b. where adverse effects cannot be avoided, ensuring remediation to the extent practicable; and
- c. where adverse effects cannot be remedied, ensuring mitigation to the extent practicable; and
- d. where adverse effects cannot be adequately mitigated, ensuring that any residual adverse effects that are more than minor, are offset in accordance with the principles set out in Schedule 2.

7.7.1 Policy intent

Policy 5 is perhaps the most critical of the NPS. It establishes the obligation for local authorities to manage the effects of resource use to achieve no net loss in biodiversity values within significant areas and habitats. The use of the term "or be satisfied that the effects are managed by methods outside of district or regional plans" is intended to allow councils to rely on methods such as public ownership or covenants on land titles as appropriate means of managing risk of adverse effect. Without this caveat, Policy 5 could be read as requiring councils to address risks through RMA plans when they were already addressed adequately via other existing mechanisms.

The use of the term *biodiversity values* is defined in the interpretation section of the NPS. The term is used to potentially allow some use of/disturbance to significant areas and habitats provided the biodiversity value associated with the site is not compromised. That is important, as Part d of the Policy introduces the notion of biodiversity offsets. That concept potentially allows for ecological enhancement and restoration activities off site as a means of offsetting any unavoidable effects on site. The approach is not new in resource management but its application is still developing and it remains a field of continuing discussion amongst ecological professionals.

Because the notion and application of biodiversity offsets is still evolving, the NPS contains two safeguards against inappropriate use. The first is the hierarchy of approach presented by Parts a to d of Policy 5. That is, there is a clear obligation to avoid effects as a first priority, remedy as a second, then mitigate and only once these approaches have been exhausted is it appropriate to consider whether any residual effects (those that cannot be avoided, remedied or adequately mitigated) can be properly offset such that there is no net loss in the biodiversity values at stake.

The second safeguard is that any biodiversity offset under this policy needs to be developed in accordance with principles listed in Appendix 1. Those principles replicate those agreed internationally through the Business and Biodiversity Off-set Programme (BBOP). One of these principles is there will be some areas and habitats that are so important that offsetting should not apply to them. Although high level in nature, they erect a meaningful threshold test that is considered appropriate at this time.

7.7.2 Effectiveness

The effectiveness of Policy 5 is difficult to assess. The RMA already requires adverse effects to be avoided, remedied or mitigated. In that sense Policy 5 can be said to impose little (if any) marginal cost, but similarly, no marginal benefit either.

On the other hand, it is important to note that Policy 5 sets up the avoid, remedy or mitigate duty of the RMA as a clear hierarchy. That is, the first obligation is to avoid, then remedy then mitigate. Case law under the RMA is divided on the issue of whether avoid, remedy or mitigate is, or is not, a hierarchy. If the duty it is applied in a hierarchical manner (in respect of effects on biodiversity) this will increase the likelihood of adverse effects being more effectively managed.

However, the most significant aspect of the policy is that it introduces a fourth effectsmanagement option – to offset. This has the potential to greatly increase the effectiveness of policy since it is common for there to be *residual effects* – that is, effects that cannot be avoided, remedied or mitigated. This leaves the decisions-makers with just two options (a) to accept/tolerate the adverse effects; or (b) to decline the application (or deny the resource through restrictive plan provisions). Neither option is necessarily in the best interests of New Zealand. Policy 5 provides another option and therefore greatly adds to the potential effectiveness of RMA intervention in achieving biodiversity outcomes.

The effectiveness of the policy could, arguably, be enhanced if there was greater certainty over when offsetting is, and is not, appropriate and what measures are appropriate offsets (and in what quantity/ratio relative to effects).

In reality, however, there is insufficient experience with biodiversity offsets for the policy to be able to offer that level of detail. It is likely subsequent practice and experience will enable greater guidance to be given in the future either through amendment to the NPS or by way of non-statutory guidance.

7.7.3 Efficiency

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The only significant additional costs/benefits associated with Policy 5 would seem to arise in relation to the offset provision. Costs could arise if future projects were required to offset effects that decision-makers had previously tolerated. This could increase costs associated with

resource use and development or even deter investment. That potential needs to be weighed against the possibility that Policy 5 might allow projects to proceed (on the basis that residual effects are offset) that might have previously not been consented or even brought forward for consideration. Again, on the basis of current information, it would be speculative to conclude whether the possible costs outweigh the possible benefits.

It is possible only to observe that explicit enabling of biodiversity offsets does, theoretically, allow for full internalisation of negative externalities and therefore more efficient allocation of resources.

7.8 Policy 6: Supporting maintenance and enhancement of biodiversity

To promote the maintenance of biodiversity outside of identified areas of significant vegetation and significant habitats of indigenous fauna, and to support the resilience and viability of populations and species assemblages within identified areas and habitats, local authorities should, when considering any matter, and/or when preparing regional policy statements and regional and district plans:

- a. recognise the contribution that all remaining areas of indigenous vegetation make to the maintenance of indigenous biodiversity and encourage the retention of as many elements as possible
- b. recognise the full range of potential adverse effects on indigenous biodiversity including, but not limited to, population fragmentation, degradation of non-living components (eg, water and soil), interruption to breeding cycles and migratory pathways, and increased exposure to plant and animal pests
- c. encourage the retention of existing vegetation, whether indigenous or not (but not including recognised pest plants), that provides:
 - i. important habitat for indigenous species
 - ii. seasonal food sources for indigenous species
 - iii. ecological linkage between areas and habitats identified in accordance with Policy 4
 - iv. a buffer to indigenous vegetation for areas and habitats identified in accordance with Policy 4
- d. when existing vegetation and habitat important for indigenous species cannot be retained, encourage measures that mitigate adverse effects on indigenous species during, and subsequent to, removal of that vegetation through harvest or clearance
- e. encourage the planting of locally sourced indigenous species and the creation of habitats for indigenous species
- f. encourage the establishment of additional indigenous riparian vegetation as a means of increasing connectivity and enhancing freshwater habitat for indigenous species
- g. ensure human-made impediments do not interfere with the natural migratory movements of indigenous species
- h. consider both regulatory incentives (such as bonus development rights in exchange for protection and enhancement of vegetation and habitats) and non-regulatory incentives (such as technical advice and practical help) to support and encourage landowners to make appropriate land management decisions.

7.8.1 Policy intent

Policy 6 promotes the protection and enhancement of biodiversity more widely. That is, it focuses not just on the identified significant areas and habitats but also recognises that biodiversity occurs across the landscape and various scales, and that the robustness and resilience of ecosystems requires more than protection of the best (potentially isolated) sites. Policy 6 is important in making the NPS about biodiversity protection and not simply about the protection of specific high-value sites.

The policy refers to a range of matters well recognised in ecology and in many existing RMA plans. This includes matters such as avoiding impediments to movement of migratory species and maintaining seasonal food sources, ecological linkages between sites, buffers around significant sites and riparian vegetation.

The policy also encourages consideration of adverse effects that might be subtler that blanket vegetation clearance (including, for example, exposing areas and habitats to greater risk of plant and animal pests). It also encourages consideration of appropriate incentives in recognition that ecologically sympathetic management of land requires on-going actions by thousands of individual land managers which is largely impossible to regulate and enforce and which needs to be driven by individual willingness to modify behaviour.

Importantly, Policy 6 is phrased as a "should do" policy rather than a "shall do". This provides a clear signal without being overly prescriptive in the actions expected.

7.8.2 Effectiveness

As with Policy 5, the effectiveness of Policy 6 is very difficult to assess. The policy is deliberately written as an attempt at moral suasion (rather than as a strictly enforceable obligation). That said, in the context of resource management processes, such policies can be relied on by parties wishing to advocate for additional provisions in plans. Indeed, the policy is included to provide that support without assuming that all measures will necessarily be appropriate in all districts. It may well be that the existence of national policy results in regional and district plans promoting a greater level of "sympathetic management" than they otherwise would. However, any attempt to predict the extent of that effectiveness will be largely speculative.

There can be little doubt, though, that if the matters raised in Policy 6 were undertaken the RMA's effectiveness in maintaining biodiversity would be greatly enhanced. The policy cannot be easily expressed to be more binding in its effect since it raises too many issues that need to be weighed at a more local level.

7.8.3. Efficiency

The policy could result in increased costs because it may lead to requirements on resource users (eg, limitations on land use) that they might otherwise not face. However, for the reasons set out above, it is not possible to estimate those costs at this time. It should be noted, though, that any additional requirement in plans based on this policy will need to be subject to the First Schedule process and section 32 analysis that considers the costs and benefits at the more localised scale.

Although it is arguable that there is insufficient certainty of Policy 6's effectiveness or its benefit relative to its cost, the effectiveness of the NPS in making a positive, sustainable

contribution to long-term biodiversity maintenance is dependent on the measures set out in Policy 6 being pursued when it is appropriate to do so.

7.9 Policy 7: Tangata Whenua

To recognise and provide for the role of tangata whenua as kaitiaki, when developing and implementing regional policy statements and regional and district plans local authorities shall provide for:

- a. tangata whenua values and interests to be incorporated in to the management of biodiversity
- b. consultation with tangata whenua regarding the means of protecting and enhancing areas and habitats identified in accordance with Policy 4 that have particular significance to tangata whenua
- c. active involvement of tangata whenua in the protection of cultural values associated with indigenous biological diversity
- d. customary use of indigenous biodiversity according to tikanga.

7.9.1 Policy intent

Policy 7 recognises the relationship of Māori to biodiversity. Māori do have a number of particular interests in biodiversity that need to be recognised in accordance with Part 2 of the Act.

The first is that there may well be principles from traditional Māori knowledge (mātauranga Māori) that can be usefully applied in the management of biodiversity. Recognising and providing for these principles is important in recognising the role of Māori as kaitiaki in accordance with section 7 of the Act. It is also consistent with Objective 7.2 of the NZ Biodiversity Strategy that seeks to recognise and respect mātauranga Māori.

Some areas and habitats identified using the criteria of the NPS will be of particular significance to Māori due to continuing Māori ownership, historical association or perhaps because of the resources they provide for traditional cultural practices. In respect of such areas and habitats specific consultation with Māori will be of particular importance and value, Policy 7 (b) ensures that such consultation will occur.

Policy 7(c) ensures that tangata whenua are involved in the protection of areas and habitats when there are particular cultural values at stake. It is expected that this involvement could take a variety of forms including partnerships in active management programmes or specific consultative/joint decision-making arrangements.

Policy 7(d) ensures consistency with the NZ Biodiversity Strategy by ensuring that protection of vegetation and habitat provides for customary use of indigenous species by Māori provided that use is in accordance with tikanga (traditional customs and practices). This enablement of customary use is, however, limited by other conservation legislation, under which the taking of indigenous species may specifically controlled (including the Wildlife Act, Conservation Act, National Parks Act, Reserves Act, and Marine Mammals Protection Act).

7.9.2 Effectiveness

In short, Policy 7 seeks to provide for the appropriate involvement of tangata whenua in biodiversity management in recognition of the Treaty relationship, tangata whenua's kaitiaki role, and related existing provisions of the Act.

The extent to which Policy 7 will be effective in securing that involvement will depend on many things including the capacity and resources within hapū and iwi, the willingness of tangata whenua to share traditional knowledge, and the understanding and acceptance of Māori priorities and cultural values within local authorities and their communities.

These are, however, matters that the NPS cannot itself ensure. It can only ensure that the opportunity is made available and that the expectation is clear. By requiring that these matters be "provided for" there is a very clear obligation imposed on local authorities. Under Section 55 of the Act they are required to give effect to that obligation and, on that basis, the policy can be expected to be effective.

7.9.3 Efficiency

The policy may well result in some increased administrative costs for local authorities if they subsequently need to enhance their consultation and engagement procedures and protocols.

This cost is likely to be variable across the country, as some local authorities will already have suitable arrangements in place. The question of whether the involvement of tangata whenua is achieved in a manner that is administratively efficient and cost effective will be a matter for each individual council to determine. It would not be efficient to prescribe exactly how tangata whenua ought to be involved. This will depend on local circumstances, such as the existing arrangements in place, the number of iwi and hapū, and the level of resources and capacity that exist.

Importantly, Policy 7 does not increase the breadth of areas and habitats that may be subject to the NPS's provisions. Hence the broader, substantive costs on landowners and economic use should not be increased.

The benefits of the policy accrue to tangata whenua, the Crown and potentially the community generally. Tangata whenua benefit through assuming a more instrumental role in biodiversity matters of key interest to Māori. The Crown benefits from being able to give effect to Treaty obligations (and commitments given in existing statutes and national strategies). The community potentially benefits through having greater access traditional Māori knowledge and increased participation in protection that leads to better biodiversity outcomes.

While these benefits defy quantification, they are significant in the context of the RMA where expectations of all parties can be high. The question of whether benefits outweigh costs is not answerable in this context. In any event, it is important to note that the responsibility for the Crown to meet its Treaty obligations transcends any narrow policy test of efficiency.

7.10 Policy 8: Consultation

During the development of biodiversity-related provisions of district plans and relevant regional plans (including prior to notification), local authorities will consult with, and provide reasonable opportunity for the input of:

- a. those whose properties would be affected by the proposed plan
- b. the public
- c. tangata whenua.

7.10.1 Policy intent

Policy 8 reinforces the expectation already apparent in the RMA itself, that those whose properties would be affected by councils' efforts to identify and protect biodiversity values are to be consulted early in the process (ie, before plans are notified and have legal effect). While the First Schedule of the Act implies this already, the draft NPS makes this obligation much more explicit.

7.10.2 Effectiveness

Effective biodiversity protection outside public conservation land requires willing (or at least not hostile) landowners. Past experience has shown that it is very difficult to introduce an effective protection regime if landowners consider they have not been properly consulted and involved in the design of the local authority's response. Other parties also need to be closely involved.

Therefore, although the policy may not add greatly to the obligations already under the Act, the policy (and its proper implementation) is critical to the effectiveness of the NPS.

That said, the degree to which the policy will be effective will inevitably depend on the style and quality of the consultation process. That is a matter of practice on which the NPS can say little as it is context specific.

7.10.3 Efficiency

There are clearly costs for local authorities associated with consultation but such costs are a well-accepted part of plan development under the RMA. As noted above, consultation is already required under the First Schedule and therefore cannot be attributed to the NPS.

The benefits of consultation can be a greater level of buy-in from stakeholders and, as a consequence, reduced submissions and appeals through the plan development process. While consultation cannot be expected to necessarily lead to early resolution of conflict, experience shows that an informed community which feels it has been given a fair opportunity to have its say does lead to more focused and constructive debate that can save time and money in the long run.

7.11 Summary of evaluation

	Quantitative (likely range) and Qualitative	Directly attributable to the NPS?
Costs		
Central government costs		
Policy development costs and associated ongoing costs	<i>Low</i> (may be a requirement for complementary guidance on some matters as well as continued support for information and information management tools),	Yes (but only the marginal cost above that arising under BAU)
Compliance costs for local a	uthorities	
Administrative costs associated with reviewing/changing plans and/or taking additional matters into account in consent decision-making	<i>Negligible</i> for regional councils' RPSs <i>Moderate</i> cost for territorial authorities district plans – if they were not due for review within five years. If due for review within five years, negligible.	Yes (but only the marginal cost above that arising under BAU)
Substantive costs relating to identifying biodiversity, and any increase in protection	Moderate for those whose planning provisions do not already address biodiversity. However, cost could be lower than would be the case without the NPS since the NPS introduces more precise and objective criteria and is not dependent on broad-scale ecological survey.	Yes (but only the marginal cost above that arising under BAU)
Compliance costs for resour	ce users	
Administrative costs associated with applying for consent eg, providing additional information for consent applications	<i>Low.</i> Assessments of Environmental Effects (AEEs) already required as part of applications,	Yes (but only the marginal cost above that arising under BAU)
Substantive costs associated with the cost of development or curtailment of development rights	Likely to be <i>highly variable</i> . Little change likely in 46 of the 75 cities/districts. Greater uncertainty of cost levels in other 29 districts. Strong possibility that in some districts which have not previously had biodiversity protection provisions some landowners could face new restrictions that represent significant foreclosing of opportunities.	Yes (but only the marginal cost above that arising under BAU)
Economic costs for commun	ities / industries	
Any broader economic cost is I kely to be low. Almost by definition land with high biodiversity value will likely have low value for alternative uses (if it did it would have been "developed"). The exception is indigenous forestry. However, there may be some other specific high-value uses (like mining opportunities) and these may well be enabled more as a consequence of this NPS than they otherwise would (given the explicit provision for offsetting).		
Benefits		
Central government		
Responds to request for greate	er direction under the RMA generally.	
Council Administrative		
Savings accruing from less debate, hearing times and litigation	<i>Moderate</i> . Difficult to access but savings through greater policy certainty are certainly a possibility.	Yes
Environmental		
Improved biodiversity	<i>High.</i> 468,000 hectares (at least) of high-value biodiversity land will be targeted by local authorities over time. The NPS should also generally increase the emphasis given to biodiversity outcomes in RMA decision-making forums.	Yes (but only the marginal benefit above that arising under BAU)

Question 5

- a. Do you think each of the policies in chapter 7 are the best option for achieving the objectives in a NPS? Should there be other polices, or fewer?
- b. Do you think the analysis of each policy is fair? If not, why?

8 Conclusions

This analysis has been limited by incomplete information. Ideally, there would be better information available to be able to assess the marginal difference between current practice and what this NPS requires. Such information is, however, difficult to acquire. Such is the nature of planning-relevant data in a highly devolved management system such as exists in New Zealand.

Notwithstanding an absence of complete information, on the basis of what is known there is a *prima facie* case that the tests of section 32 requiring objectives and policies to be appropriate in regard to effectiveness and efficiency can be met.

Appendix 1: Section 32

Section 32, Consideration of Alternatives, Benefits and Costs, of the Resource Management Act imposes a rigour on decision-makers by requiring them to evaluate their objectives, policies and methods.

Section 32 reads:

- 1) In achieving the purpose of this Act, before a proposed plan, proposed policy statement, change, or variation is publicly notified, a national policy statement or New Zealand coastal policy statement is notified under section 48, or a regulation is made, an evaluation must be carried out by—
 - (a) The Minister, for a national policy statement or regulations made under section 43; or
 - (b) The Minister of Conservation, for the New Zealand coastal policy statement; or
 - (c) The local authority, for a policy statement or a plan (except for plan changes that have been requested and the request accepted under clause 25(2)(b) of Part II of the First Schedule), or
 - (d) The person who made the request, for plan changes that have been requested and the request accepted under clause 25(2)(b) of Part II of the First Schedule.
- 2) A further evaluation must also be made by—
 - (a) A local authority before making a decision under clause 10 or clause 29(4) of the First Schedule; and
 - (b) The relevant Minister before issuing a national policy statement or New Zealand coastal policy statement.
- 3) An evaluation must examine—
 - (a) The extent to which each objective is the most appropriate way to achieve the purpose of this Act; and
 - (b) The efficiency and effectiveness of policies, rules, or other methods in achieving each objective.
- 4) For the purposes of this examination, an evaluation must take into account—
 - (a) The benefits and costs of policies, rules, or other methods; and
 - (b) The risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules or other methods.
- 5) A person required to carry out an evaluation under subsection (1) must prepare a report summarising the evaluation and giving reasons for being satisfied that—
 - (a) The objectives are the most appropriate ways to achieve the purpose of this Act; and
 - (b) The policies, rules, or other methods are the most appropriate in achieving the objectives, having regard to efficiency and effectiveness.
- 6) The report must be available for public inspection at the same time as the document to which the report relates is publicly notified or the regulation is made

Section 32A - Failure to carry out evaluation

a) A challenge to an objective, policy, rule or other method on the ground that section 32 has not been complied with may be made only in a submission under the First Schedule or a submission under section 49.

b) Subsection (1) does not preclude a person who is hearing a submission or an appeal on a proposed plan, proposed policy statement, change, or variation, or a submission on a national policy statement or New Zealand coastal policy statement, from taking into account the matters stated in section 32.

Appendix 2: Tools and databases

What is the Land Environments of New Zealand (LENZ) classification?

LENZ is a national environment-based classification of ecosystems mapped across New Zealand's landscape. LENZ uses 15 climate, land form and soil variables likely to influence the distribution of species to classify and map areas that have similar environmental or ecosystem character. The classification is used to identify areas that are similar regardless of where they occur – sites not necessarily the same in all respects but likely to have similar groups of species and similar biological interactions and processes (ie, similar ecosystems). For example, swampy areas on poorly drained recent soils on coastal plains and in river valleys in eastern New Zealand occur from Gisborne to mid-Canterbury. Although geographically separated from each other, these areas are environmentally similar and form one type of LENZ environment (Environment I: Central Poorly Drained Recent Soils).

LENZ can be used at four levels of detail containing 20, 100, 200 or 500 environments respectively. Map 1 shows the LENZ level 1 classification of 20 environments for New Zealand. Note the location of P and R, which together comprise 20 per cent of New Zealand's total area. P and R also comprise 50 per cent of the environments protected on public land. The different levels of LENZ simply reflect greater detail and hence an increase in the number of environments. Different levels are more or less appropriate for use depending on the level of detail needed to address a particular question. For our analysis of legally protected areas for indigenous biodiversity this report used LENZ level II which maps 100 different environments nationally. Level II is considered appropriate for national to regional scale assessments. LENZ levels III and IV would be appropriate for local scale assessments.

To identify each different land environment a letter and numbering system is used, ie, A to T for each of the environments at level I or 20 environments nationally. As levels of detail increase (ie, 100, 200 and 500 environments) numbers and additional letters are added to the A to T system to identify the further division of ecosystem boundaries within the level I environment, eg, A1 for LENZ level II or 100 environments, A1.1 for LENZ level III or 200 environments and A1.1a for LENZ level IV or 500 environments. Map 1 shows the LENZ level I classification or 20 environments for New Zealand.

What is the Land Cover Database?

The Land Cover Database 1 (LCDB1) is a digital theme-based map of land cover for mainland New Zealand. It was completed in June 2000 but based on satellite images from the Spot II satellite taken over the summer of 1996/97. Sixteen land-cover classes were used for most regions with a 17th class (riparian willows) added in some regions. The cover classes address cultural (modified by people) and natural landscapes, eg, Urban Area, Mines and Dumps, Primarily Pastoral, Indigenous Forest, etc. The 17 classes were classified manually with boundaries superimposed on satellite images that were field checked. These satellite images have a 20 m spatial resolution. The overall classification accuracy was independently assessed at 93 per cent at ± 25 m. The minimum mapping unit used was one hectare and the data is suitable for application at the 1:50,000 mapping scale or coarser.

To identify areas of indigenous vegetation eight land-cover classes from the Land Cover Database (indigenous forest, inland water, coastal wetlands, inland wetlands, coastal sands, scrub, tussock and bare ground) were combined into one indigenous vegetation class. By overlaying information from the Land Cover Database with areas of public conservation land and private land we know there are about 14,033,769 hectares of indigenous vegetation remaining in New Zealand and about 8,210,570 hectares is legally protected. This leaves about 5,823,199 hectares of indigenous vegetation scattered across New Zealand. Some of this will be protected by council covenant schemes on private land or in council reserves. Some remnants in plantation forests will be protected under the Forest Accord, a scheme run with the Forest Stewardship Council (the Ministry of Agriculture and Forestry estimate there is about 1,000,000 hectares of indigenous vegetation scattered through production forests). Some areas will be managed outside legal protection schemes for conservation and although not legally protected will still contribute to indigenous biodiversity outcomes, eg, community or non-government organisation (NGO) pest and weed control activities and restoration programmes.

Appendix 3: Location of threatened species

Information of the presence of threatened species is partial and incomplete. The Department of Conservation does, however, hold good quality digitised information on the known location of some species. That information has been analysed to allow the following conclusions to be drawn.

Threatened plants⁴⁵

- An analysis of 149 threatened plant species indicates that the vast majority (83 per cent) of such species have at least one known location outside of public conservation land.
- It is also clear that protecting just those environments with less than 20 per cent of vegetation remaining will leave some populations of threatened plants vulnerable to land clearance or other adverse effects. GIS analysis shows that, outside of public conservation land, 113 of these threatened plant species (ie, 76 per cent of the sample) have at least one known location in LENZ environments with more than 20 per cent of indigenous vegetation remaining.
- Information is available for 86 threatened plant species, that occurred outside of public conservation land and in LENZ environments with more than 20 per cent of indigenous vegetation remaining, allowing for analysis as to whether these species occur in predominantly indigenous or predominantly non-indigenous land cover. Of these 86 species, 60 species (70 per cent of the sample) have at least one site within predominantly non-indigenous land cover. This finding reinforces the need for local authorities to consider predominantly non-indigenous vegetation if they are to fully protected threatened plants.
- Of the 113 threatened plant species that occur outside public conservation land, 64 per cent(⁴⁶) of known locations are thought to be outside LENZ environments with less than 20 per cent indigenous vegetation remaining (based on a total of 2075 known locations).
- No data is available on the spatial extent of these areas of vegetation.

Threatened reptiles⁴⁷

- On the whole, less information is available for indigenous fauna. However, data is available for threatened reptiles. This indicates that the vast majority (82 per cent) of threatened reptile species have at least one known location outside public conservation land.
- As with threatened plants, it is clear that a focus on LENZ environments with less than 20 per cent of indigenous vegetation remaining will not adequately protect these populations. Analysis shows that approximately three-quarters of the threatened reptile species for which there is location data have at least one known location outside of public

⁴⁵ Department of Conservation. 2010. *BIOWEB Threatened Plants Database*.

⁴⁶ Due to data reliability issues figures on the proportion of known locations inside LENZ environments has a greater degree of uncertainty than other data reported here.

⁴⁷ Department of Conservation. 2010. *Herpetofauna Database*.

conservation land in LENZ environments with greater than 20 per cent remaining indigenous vegetation cover.

- Information was available for 10 threatened reptile species, that occurred outside of public conservation land and in LENZ environments with more than 20 per cent of indigenous vegetation remaining, to allow for analysis to determine whether these species occur in predominantly indigenous or predominantly non-indigenous land cover. Of these 10 species seven (ie, 70 per cent of the sample) have at least one site within predominantly non-indigenous land cover.
- Of the 14 threatened reptile species that occur outside public conservation land, 41 per cent of known locations are thought to be outside of LENZ environments with less than 20 per cent remaining indigenous vegetation cover (based on a total of 306 known locations).
- No data is available on the spatial extent of these areas of vegetation.

Appendix 4: How to make a submission

The Government welcomes your feedback on this National Policy Statement. A number of questions are provided here to guide your feedback on the proposal. You may also choose to raise other issues and/or only respond to some of the issues or questions. To ensure your point of view is clearly understood and also to provide more evidence to support the Government's decisions, you should provide reasons for your answers or in support of your position.

• To make a submission, you can fill in the form (by downloading a writable version from www.mfe.govt.nz/npsbiodiversity and then emailing it back to us) or prepare your submission in a separate document using this form as a guide. The Ministry prefers submissions to be provided in electronic form, however we will accept submissions sent by post, provided that they arrive by the closing date. Please send only one copy of your submission.

The closing time and date for submissions is 5:00pm on 2 May 2011.

After receiving submissions, the Ministry will evaluate them and may, where necessary, seek further comments. After this, recommendations will be developed for Ministers, and then Cabinet, to consider.

Contact for queries and submissions

Please direct all submissions and any queries to:

Telephone: 04 439 7419

Facsimile: 04 439 7700

Email: biodiversity@mfe.govt.nz

Postal: Land and Water Management Team, Ministry for the Environment, Environment House, 23 Kate Sheppard Place, PO Box 10362, Wellington, New Zealand.

Publishing and releasing submissions

The Ministry may publish all or part of any written submission on its website, www.mfe.govt.nz. Unless you clearly specify otherwise in your submission, the Ministry will consider that you have consented to website posting.

In any case, contents of submissions provided to the Ministry will likely have to be released to the public under the Official Information Act 1982 following requests to the Ministry (including via email). Please advise if you have any objection to the release of any information contained in a submission, and, in particular, which part(s) you consider should be withheld, together with the reason(s) for withholding the information. The Ministry will take into account all such objections when responding to requests for copies of, and information on, submissions to this document under the Official Information Act 1982.

The Privacy Act 1993 establishes certain principles with respect to the collection, use and disclosure of information about individuals by various agencies, including the Ministry. It governs access by individuals to information about themselves held by agencies. Any personal

information you supply to the Ministry in the course of making a submission will be used by the Ministry only in conjunction with the matters covered by this document. Please clearly indicate in your submission if you do not wish your name to be included in any summary of submissions that the Ministry may publish.

Submission form

Subm	litter details
l am r	esponding as (please tick one):
	An individual
	Name: Email: Address:
	On behalf of a group or organisation
	Name of group or organisation: Email: Address:
This f	form is a guide only. You do not have to use it or answer every question.

Please be aware that MfE may publish your submission, or a summary of it (including your name and/or organisation but not your contact details), on our website. If you wish to supply confidential information please contact biodiversity@mfe.govt.nz. All submissions remain subject to the Official Information Act 1982.

Part 1: Objective and Policies of the proposed National Policy Statement on Indigenous Biodiversity

Is the wording and intention of the objective clear?	Yes	No
If no, please comment.*		
Do you:		
Support the objective?		
Or, Support it in part?		
Or, Oppose the objective?		

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*Additional comments on the objective:

Policy 1: Defining significant areas and habitats for the purpose of the NPS.

Is the wording and intention of the policy clear?			
	Yes	No	
If no, please comment.*			
Is the policy consistent with the objective of the NPS?			
	Yes	No	

If no, please comment.*

What effects do you think the policy will have?

(How do you think the policy will affect you, your members, or your organisation? What costs and benefits will arise from this policy and where will they fall? Do you anticipate any challenges in implementing this policy?)

Comment:	
Do you:	
Support the policy?	
Or, Support it in part?	
Or, Oppose the policy?	
*Additional comments on Policy 1:	

Policy 2: Criteria for identifying significant indigenous vegetation and the significant habitat of indigenous fauna.

Is the wording and intention of the policy clear?		
	Yes	No
If no, please comment.*		
Is the policy consistent with the objective of the NPS?		
	Yes	No
If no, please comment.*		

What effects do you think the policy will have?

(How do you think the policy will affect you, your members, or your organisation? What costs and benefits will arise from this policy and where will they fall? Do you anticipate any challenges in implementing this policy?)

Comment:		

Do you think any changes should be made to the list of significant indigenous vegetation and significant habitat of indigenous fauna given in Policy 2?

Yes	

No

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If yes please comment below.

Comment:	
Do you:	
Support the policy?	
Or, Support it in part?	
Or, Oppose the policy?	

*Additional comments on Policy 2:

Policy 3: Including criteria in regional policy statements.

Is the wording and intention of the policy clear?		
	Yes	No
If no, please comment.*		
Is the policy consistent with the objective of the NPS?		
	Yes	No

If no, please comment.*

What effects do you think the policy will have?

(How do you think the policy will affect you, your members, or your organisation? What costs and benefits will arise from this policy and where will they fall? Do you anticipate any challenges in implementing this policy?)

Policy 4: Identifying areas and habitats in district plans.

Is the wording and intention of the policy clear? If no, please comment.*	Yes	No
Is the policy consistent with the objective of the NPS?		
If no, please comment.*	Yes	No

What effects do you think the policy will have?

(How do you think the policy will affect you, your members, or your organisation? What costs and benefits will arise from this policy and where will they fall? Do you anticipate any challenges in implementing this policy?)

Comment:	
Do you:	
Support the policy?	
Or, Support it in part?	
Or, Oppose the policy?	
Additional comments on Policy 4:	

Policy 5: Managing effects to achieve no net loss.

Is the wording and intention of the policy clear?

Yes	No

If no, please comment.*

Is the policy consistent with the objective of the NPS?

Yes	No

Yes

No

If no, please comment.*

What effects do you think the policy will have?

(How do you think the policy will affect you, your members, or your organisation? What costs and benefits will arise from this policy and where will they fall? Do you anticipate any challenges in implementing this policy?)

Comment:

Do you support the use of biodiversity offsets, as outlined in this policy?

Comment:	
Do you:	
Support the policy?	
Or, Support it in part?	
Or, Oppose the policy?	
*Additional comments on Policy 5:	

Do you agree with the principles outlined in Schedule 2 (*Principles to be Applied when Considering a Biodiversity Offset*?

	Some	None	I want to suggest additional/alternative principles
Comment			

Policy 6: Supporting maintenance and enhancement of biodiversity.

Is the wording and intention of the policy clear?		
	Yes	No
If no, please comment.*		
Is the policy consistent with the objective of the NPS?		
	Yes	No
If no, please comment.*		

What effects do you think the policy will have?

(How do you think the policy will affect you, your members, or your organisation? What costs and benefits will arise from this policy and where will they fall? Do you anticipate any challenges in implementing this policy?)

Comment:		
Do you:		
	_	
Support the policy?		
Or, Support it in part?		
Or, Oppose the policy?		
*Additional comments on Policy 6:		

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Policy 7: Tangata Whenua

Is the wording and intention of the policy clear?		
	Yes	No
If no, please comment.*		
Is the policy consistent with the objective of the NPS?		
	Yes	No
If no, please comment.*		

What effects do you think the policy will have?

(How do you think the policy will affect you, your members, or your organisation? What costs and benefits will arise from this policy and where will they fall? Do you anticipate any challenges in implementing this policy?)

Comment:		

Do you:	
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** ! !	
Or, Oppose the policy?	
Or, Support it in part?	
Support the policy?	

*Additional comments on Policy 7:

Policy 8: Consultation

Is the wording and intention of the policy clear?			
If no, please comment.*	Yes	No	
Is the policy consistent with the objective of the NPS?			
	Yes	No	

If no, please comment.*

What effects do you think the policy will have?

(How do you think the policy will affect you, your members, or your organisation? What costs and benefits will arise from this policy and where will they fall? Do you anticipate any challenges in implementing this policy?)

Comment:	
Do you:	
Support the policy?	
Or, Support it in part?	
Or, Oppose the policy?	
*Additional Comments on Policy 8:	

Part 2: General Questions about the Proposed National Policy Statement on Indigenous Biodiversity

Do you think that the policies, taken together, will achieve the objective of the NPS?

Yes	

Yes

No

No

If no please comment below.

Comment:

Do you think the NPS appropriately balances the protection of indigenous biodiversity with landowner's rights to reasonable use of their land?

If no please comment below

Comment:

What are the key ways that this NPS will affect you, your members and stakeholders, or your organisation? Will these effects be positive, negative or neutral?

Comment:
Do you see any challenges to the implementation of this NPS? How do you think it will operate in practice?

Comment:

Do you think the NPS should more explicitly address freshwater biodiversity?

Yes

No

If yes, what aspects of freshwater biodiversity should be addressed more explicitly in this NPS?

Comment:

What, if any other changes would you like to see made to this NPS?

Comment:

How do you think the NPS could best be monitored?

Comment:

What, if any additional guidance is needed to support the implementation of this NPS?

Comment:

Part 3: The Section 32 Report

Note: the section 32 report is available online at www.mfe.govt.nz/npsbiodiversity

Does Chapter 2 (The status quo) provide a full account of the measures in place to manage biodiversity?

		Yes	No
The	Status Quo		
1.	Legislative protection of biodiversity		
2.	Convention on Biological Diversity and national strategies		
3.	Non-statutory guidance, trusts and funds		
4.	Efforts to protect biodiversity under the current framework		

Do you think Chapter 3 (Situation under the status quo) has fully covered the problem?

Yes Situation under the status quo			No
5.	Overview		
6.	Risks and challenges		

Are there any other things that should be addressed in chapter 3?

Comment:

Comment:

Are you aware of any more evidence for or against the issues raised in chapter 3?

Comment:

Do you think the aims of Chapter 4 (What are we trying to achieve?) are appropriate things to try to achieve given the issues that have been described?

	Yes	No	
Comment:			

Do you think a NPS is the best option, out of the options described in Chapter 5 (Alternatives to the Status Quo), to achieve the objectives and address the problem?

Yes	No

Comment:

Are there other options that have not been addressed by Chapter 5?

Comment:

Thank you for your submission.