

## 9. RECENT DEVELOPMENTS IN CROWN FLORA AND FAUNA POLICY

### 9.1 INTRODUCTION

This chapter provides a brief overview of the main policy initiatives that have been developed by the Government since 1992 in relation to flora and fauna that have not already been covered in earlier chapters. These policy initiatives include the Environment 2010 strategy (1995), the State of the Environment Report (1997), the Environmental Indicators Programme, and the New Zealand Biodiversity Strategy (2000). This chapter also mentions the Sustainable Land Management strategy 1996, and the OECD Environmental Performance Review 1996. The present authors have grouped these initiatives together as they relate to all spheres of flora and fauna policy, including resource management, conservation, biosecurity, research, and new organisms. For each initiative, the present authors have not carried out any in-depth research or analysis. Thus, this chapter is limited to giving a brief overview and is largely dependent on secondary and other published sources, although some primary source material has been used in the section on the New Zealand Biodiversity Strategy. While the timeframe for this entire report is stated to be 1983 to 1998, the New Zealand Biodiversity Strategy has been included because of its key importance in guiding the future development of flora and fauna policy and legislation.

### 9.2 ENVIRONMENT 2010 STRATEGY

The Environment 2010 Strategy is a statement of broad strategic directions in environmental policy. The intention of these directions was to guide the Government's environmental policies and priorities, including funding priorities. The strategy was first released as a draft document in October 1994 and formally adopted by the Government in July 1995. The strategy was influenced by the 1992 Earth Summit and Agenda 21 (see chapter two of this report). After the Earth Summit, the MFG reported that 'Agenda 21 provides New Zealand with internationally

accepted guidelines for sustainable development.<sup>1</sup> Agenda 21 called for governments to prepare and adopt national strategies for sustainable development. These national strategies were to ensure ‘socially responsible economic development while protecting the resource base and the environment for the benefit of future generations.’<sup>2</sup> In May 1993, the Government established a United Nations Conference on Environment and Development implementation officers’ group with representatives from 11 government departments and ministries. This group was coordinated by the MFE.<sup>3</sup> The purpose of this initiative was to help departments incorporate relevant Agenda 21 recommendations into policy development. The MFE has also facilitated the development of local Agenda 21 projects and has produced a number of publications on implementing Agenda 21 in New Zealand.<sup>4</sup>

### 9.2.1 Draft Environment 2010 Strategy

In late 1993, Simon Upton became the Minister for the Environment. The new Minister supported the idea of a national environmental strategy that would facilitate the integration of environmental, economic, and social policies. However, he emphasised the primacy of a market economy and advocated the freedom of individuals to choose goods and services with limited government regulation. Both the sustainability focus of Agenda 21 and the approach of the Government to promote a deregulated market economy meshed together in the Environment 2010 Strategy. The draft strategy was released on 6 October 1994.<sup>5</sup> The foreword of the draft strategy stressed the market approach to environmental issues:

New Zealanders value the freedom to organise their own lives and make their own choices. They enjoy being able to choose from a wide range of goods from New Zealand and around the world. They often love to travel widely and to spend their leisure time in numerous outdoor activities. A market economy allows New Zealanders to choose the goods, services and lifestyle that meet their individual needs and preferences. But it does not automatically ensure that our environment is protected and that resources will be available to meet the needs of our children and their children’s children.<sup>6</sup>

1. MFE, *Environmental Update*, Newsletter of the Ministry for the Environment, June 1993, p 4

2. ‘Integrating Environment and Development in Decision Making’, Agenda 21, June 1992 (available, <http://www.unep.org>)

3. *Environmental Update*, Newsletter of the Ministry for the Environment, June 1993, p 6

4. MFE, *Securing the Future: A Guide to Agenda 21*, Wellington, MFE, 1993; MFE, *Living for the Future: A Guide to Agenda 21*, Wellington, MFE, 1993

5. The present author is not aware if any consultation was carried out before the publication of the draft strategy.

6. MFE, *Summary of Environment 2010 Strategy, A Statement of the Government’s strategy on the Environment*, Wellington, MFE, October 1994, p 1

The draft strategy attempted to translate the concept of sustainability endorsed at the 1992 Earth Summit into practical terms for New Zealand. This was to be achieved by promoting a vision for New Zealand's environment in 2010 as being 'a clean, healthy and unique environment, sustaining nature and people's needs and aspirations.'<sup>7</sup> This vision included the conservation of biological diversity, sustainable development, and the need to ensure that 'the natural treasures and taonga of Maori are protected, and the cultural practices of Maori associated with the environment are provided for.'<sup>8</sup> The strategy included a number of principles to guide the Government in realising these goals. These principles included such statements as the 'internalisation of environmental costs,' 'sustainable management of natural resources,' and 'protecting our international competitiveness.'<sup>9</sup>

The draft strategy identified nine environmental priority areas that were considered 'particularly important for New Zealand to deal with.' These nine issues were:

- ▶ protecting indigenous habitats and biological diversity;
- ▶ managing pests, weeds and diseases;
- ▶ managing pollution, waste and hazardous substances;
- ▶ managing land resources;
- ▶ managing New Zealand's water resources;
- ▶ ensuring sustainable fisheries;
- ▶ managing the environmental impacts of energy services;
- ▶ responding to the risk of climate change; and
- ▶ restoring the ozone layer.<sup>10</sup>

The draft strategy proposed that each priority would be tackled by a number of actions directed by a set of goals. For example, the priority of protecting indigenous habitats and biological diversity was linked with the goal of maintaining biodiversity. This was to be achieved by:

Protecting representative examples of all indigenous ecosystems and by maintaining and enhancing the net total area of New Zealand's remaining indigenous forests and enhancing the quality of other remaining indigenous vegetation.<sup>11</sup>

Maori interests were noted in relation to the goals to manage the quality and quantity of water, and in the management and conservation of New Zealand fisheries.

7. *ibid*, p 2  
8. *ibid*  
9. *ibid*, p 4  
10. *ibid*, p 5  
11. *ibid*, p 6

### 9.2.2 Environment 2010 Strategy consultation

The deadline for submissions on the draft strategy was 15 December 1994. MFE organised a series of public meetings around the country during November 1994 to obtain public input and feedback. These meetings were not, on the whole, well attended – in some cases less than 20 people turning up.<sup>12</sup> The draft strategy was perceived by some people as part of a ‘clean and green’ marketing ploy or an attempt by the National Party to improve its environmental credentials.<sup>13</sup> To the present author’s knowledge, no separate meetings or hui were held for Maori during the short consultation process.

A number of individuals and groups found the time allowed for submissions too restrictive and many submissions arrived after 15 December 1994. By February 1995, 216 written submissions had been received.<sup>14</sup> Of these submissions only two came from iwi: Te Runanga O Ngati Pikiiao; and Huakina Development Trust. Submissions were also received from Te Komiti Rangapu, the Maori Advisory Committee of the West Coast Regional Council; Maori Representatives Committee of the Auckland City Council; and Pauline Tangiora.<sup>15</sup> All the submissions were analysed and summarised by MFE officials. The summary of submissions’ report noted that most criticisms of the strategy were related to its explicit market-based approach to environmental management, and its emphasis on personal individual choice.<sup>16</sup> Despite the lack of a separate consultation exercise for Maori and that few Maori appear to have made submissions, the summary of submissions report did contain comment that Maori submissions (and those of some local authorities) considered that the draft strategy failed to recognise and provide for Maori interests. In particular, the Maori submissions state that the proposed vision statement failed to provide for Maori interests, that there was no explicit recognition of the Treaty of Waitangi, and no provision for the active involvement of iwi in environmental management.<sup>17</sup> The summary of submissions report noted that Te Runanga O Ngati Pikiiao urged the ‘establishment of a legal framework which recognised the Treaty of Waitangi.’<sup>18</sup> The draft strategy had included a section on the need for partnerships between Government and private organisations yet did not mention the need for partnerships between Government and Maori. This omission was identified by the Huakina Development Trust. The trust was quoted as stating:

12. *Environmental Update*, Newsletter of the Ministry for the Environment, February 1995, p 1. The present author attended the Palmerston North draft strategy public meeting in November 1994. Excluding MFE and Regional Council officials, about 25 people attended the meeting.

13. Based on comments during the Palmerston North draft strategy public meeting, November 1994.

14. MFE, *Environment 2010 Strategy, Summary of Submissions*, Wellington, MFE, 1995, p 7

15. The present author has not viewed copies of the submissions submitted on the draft Environment 2010 strategy.

16. MFE, *Environment 2010 strategy, Summary of Submissions*, Wellington, MFE, 1995, p 9

17. *ibid*, p 31

18. *ibid*, p 53

When one is dealing with the natural environment anything that affects it is of importance to Maori. Not just the certain parts that you think are important to tangata whenua, e.g. shellfish beds, but the natural environment in its entirety. Government offers help in developing partnerships between different sectors except its Treaty partner who is relegated to 'Negotiation and mediation in resolving disputes.'<sup>19</sup>

In regard to the issue of protecting indigenous habitats and biological diversity, the summary of submissions reported that Te Runanga O Ngati Pikiao stated that in 'regard to council planting in reserves within Ngati Pikiao rohe, Ngati Pikiao require the planting be exclusively using native species. Further, the plants should originate from the same gene pool in that area.'<sup>20</sup>

### 9.2.3 Final Environment 2010 Strategy

In September 1995, the Government released the final Environment 2010 Strategy. The final strategy was not significantly different from the draft strategy, except that the emphasis on the free market was toned down, and greater attention was given to urban issues. Also there were some changes in the wording and presentation of the principles and goals. The final list of principles is:

- ▶ sustainable management;
- ▶ the precautionary principle;
- ▶ environmental bottom lines;
- ▶ internalisation of external environmental costs;
- ▶ sustainable property rights;
- ▶ least cost policy tools;
- ▶ social costs and benefits;
- ▶ pricing of infrastructure;
- ▶ research, science and technology;
- ▶ defining the limits of resource use and substitution; and
- ▶ protecting our international competitiveness.<sup>21</sup>

The only reference to the Treaty, in relation to these principles, is in the discussion on sustainable property rights. This principle encourages better environmental decision-making by the specification of property rights. The strategy states that some resources now regarded as common

19. *ibid*, p 54

20. *ibid*, p 36

21. MFE, *Environment 2010 Strategy, A Statement of the Government's strategy on the Environment*, Wellington, MFE, September 1995, p 8

property resources could become part of a property right regime. It mentions the use of tradable water permits as a way to make resources such as water subject to a property rights regime. The strategy says that such a property rights regime should enable the clear determination of resource allocation rights and provide the necessary certainty to promote investment. In order to do so they must be transferable, enforceable, and capable of modification. Some resources, however, are not deemed to be suitable for such property right regimes and it is recognised that Maori rights to resources require clarification:

Many resource decisions will not be capable of resolution in property rights frameworks. There may be considerable uncertainty about the nature of environmental effects, making the specification and enforcement of duties difficult. Further the costs of creating such frameworks may be high, relative to the number and value of the transactions likely to occur. Such cases will continue to require discretionary decision-making systems.

However, there is scope to increase considerably the use of property right approaches, and this should be developed as far as possible. Clarification of the natural resource entitlements of Maori under the Treaty of Waitangi will also be needed. Waitangi Tribunal inquiries and Crown negotiations with iwi are progressively clarifying these matters.<sup>22</sup>

The final strategy increased the number of priority issues from nine to eleven. These are:

1. managing our land resources;
2. managing our water resources;
3. maintaining clear, clean breathable air;
4. protecting indigenous habitats and biological diversity;
5. managing pests, weeds and diseases;
6. sustainable fisheries;
7. managing the environmental impacts of energy services;
8. managing the environmental effects of transport;
9. managing waste, contaminated sites and hazardous substances;
10. reducing the risk of climate change; and
11. restoring the ozone layer.

Each of these issues are interrelated, as the MFE states in the concluding chapter of New Zealand's state of the environment report:

22. *ibid*, p 17

Although the issues are listed as if they are independent, they are, in fact, all interconnected to some degree . . . For example, water quality is affected, by among other things, land use, pests and weeds, and pollution from wastes and transport leaks and residues. Atmospheric and air quality are also affected by land use, transport, and other forms of energy use. Soil quality is affected by land use, pests and weeds and waste disposal. And biodiversity is affected, to some extent, by all of these things. So rather than see the issues as separate, it is more accurate to think of them as facets of the same picture or interconnected strands in a web. Some strands are relatively short and connected to only a few others. Some are long and connected to many others. In all cases, none can be changed independently without affecting some of the other strands.<sup>23</sup>

Each issue is accompanied by a goal statement, a discussion of risks, and a set of priority actions. Explicit recognition of Maori interests in the strategy's objectives and goals is only included in the sustainable fisheries goal. This goal is to 'conserve and manage New Zealand's fisheries for the benefit of all New Zealanders by providing for sustainable utilisation of fisheries resources, including commercial, recreational and Maori customary take.'<sup>24</sup> In relation to the section on responsibilities for action, it is stated that 'Maori have a special relationship with the Crown through the Treaty of Waitangi', and in chapter 8 the strategy says that 'policies must also be consistent with the principles of the Treaty of Waitangi.'<sup>25</sup>

Of the strategy's issues and goals, the two most relevant to this report relate to the protection of indigenous habitats and biological diversity, and managing pests, weeds, and diseases. These goals are:

To protect indigenous habitats and biological diversity by:

- ▶ maintaining and enhancing the net area of New Zealand's remaining indigenous forests and enhancing the ecological integrity of other remaining indigenous ecosystems;
- ▶ promoting the conservation and sustainable management of biological diversity so that the quality of our indigenous and exotic ecosystems is maintained or enhanced to guard against extinctions and permit adaptation to changing environmental conditions.

To manage pests, weeds and diseases by reducing the risks they pose, to levels consistent with New Zealand's established objectives for:

23. MFE, *The State of New Zealand's Environment*, Wellington, MFE, 1997, pp 10.2–10.3

24. *ibid*, p 38

25. *ibid*, pp 51–52

- ▶ biological diversity of ecosystems;
- ▶ people's health;
- ▶ biosecurity of the economy.<sup>26</sup>

The goal of protecting indigenous habitats and biological diversity focuses on the protection of lowland habitats and wetlands outside the current protected area network. One issue that is identified is the 'loss of taonga Maori, such as pingao, which grows in sand dunes and is used for weaving.' In order to achieve better protection of biological diversity, the strategy proposes the following actions:

- ▶ preparation of a national biodiversity strategy in order to implement the Convention on Biological Diversity;
- ▶ consideration of a national policy statement on biological diversity under the RMA;
- ▶ developing a priority setting and risk assessment framework to guide conservation management and research;
- ▶ expanding public education programmes;
- ▶ addressing the role of sustainable management in the context of biodiversity conservation (this would include addressing the issue of customary harvest of native plants and animals); and
- ▶ developing innovative processes for resolving conflicts between conservation and activities such as tourism, telecommunications, and mining.<sup>27</sup>

In addition, the strategy states that action will be taken to prevent 'further loss of habitats and species and damage to ecological processes on the mainland and restoring habitats on offshore islands.' This would be done by: controlling and eradicating pests; ensuring that funding for such things as nga whenua rahui and forest heritage fund is well targeted to protect habitats such as 'wetlands, tussock grasslands and dune lands in Maori and other forms of private ownership; giving priority to ecological process and ecosystem research, rather than on individual species in isolation; and continue managing declining species on offshore islands.'<sup>28</sup> Of these actions, the strategy states the Government will give priority to completing the terrestrial protected areas network in terms of protecting under-represented habitats, developing marine protected areas, ensuring the coastal environment is protected under the New Zealand Coastal Policy Statement, and controlling plant and animal pests. Achieving a 'broad consensus of public and iwi support, understanding, awareness

26. *ibid*, p 26

27. *ibid*, p 35

28. *ibid*

and involvement in biological diversity conservation' is also identified as a priority action.<sup>29</sup>

Actions associated with managing pests, weeds and diseases focus on implementing the Hazardous Substances and New Organisms Act 1996, the Biosecurity Act 1993, the Wild Animal Control Act 1987, and the Wildlife Act 1953. These actions include developing national and regional pest management strategies, wild animal control plans, effective pest monitoring, ensuring exports meet the phytosanitary requirements of importing countries, maintaining rigorous border control, and focusing research on innovative pest management.<sup>30</sup>

The final Environment 2010 Strategy was released as part of the Toward 2010 Government Strategy Statement in 1996. This statement had the primary objectives of achieving higher incomes, creating better opportunities, building stronger communities, promoting better education and training, protecting and enhancing our environment, and encouraging economic growth.<sup>31</sup> The section on protecting and enhancing our environment restated a number of issues and goals from the Environment 2010 Strategy. Generally, the Toward 2010 Strategy Statement focused government action on the collection of environmental indicator information, implementation of sustainable land management, preparation of water quality guidelines, targeted DOC funding, and the development of a national biodiversity strategy.

At the time of release, it was planned that the Environment 2010 Strategy would be formally reviewed and updated every four years. In 1998, the MFE published a stocktake of the strategy as part of a review. The stocktake basically lists actions that have been achieved since 1995 and identifies further issues, risks, and work required. For example, under the goal of protecting indigenous habitats and biological diversity, the 1998 stocktake report listed the draft biodiversity strategy (see below), green package funding, extension of pest control, and offshore island restoration programmes as significant actions achieved by the Government. The stocktake report also said that the settlement of the Ngai Tahu claim was a significant achievement and would provide for the 'formal involvement of tangata whenua in conservation management.'<sup>32</sup> Further work identified as necessary in the 1998 stocktake included improving knowledge of marine biodiversity, increasing marine protected area networks, and offering stronger incentives for the protection of biodiversity on private lands.<sup>33</sup>

29. *ibid*

30. *ibid*, p 36

31. 'Toward 2010 Government Strategy Statement', 1995 (available, <http://www.executive.govt.nz/93-96/minister/pm>)

32. MFE, 'Environment 2010 Strategy, 1998 Stocktake' (available, <http://www.mfe.govt.nz>)

33. *ibid*, p 13

The 1998 stocktake noted that a major achievement of the Environment 2010 strategy was the 1997 State of Environment Report and the development of the environmental indicators programme. These are briefly reviewed in the next section of this report.

It appears the Environment 2010 strategy remains part of current Government policy despite the change of Government in 1999. This is indicated in the 'strategic directions' web page of the MFE. This page begins with the statement: 'The Government's environmental objectives are set out in its Strategic Priorities and in the Environment 2010 strategy.'<sup>34</sup> Further clarification would be required from the MFE to determine the exact status of the Environment 2010 strategy at the present time.

#### 9.2.4 Sustainable land management strategy

The Sustainable Land Management Strategy was one of the first environmental policy documents to be produced by the Government after the release of Environment 2010 strategy. The purpose of the strategy is to 'enable land users, and those who provide support and services to land users, to work together more effectively.'<sup>35</sup> The strategy attempts to provide a policy framework to deal with issues such as high country degradation, agricultural impacts on aquatic ecosystems, and soil erosion. Its central principle is that these land sustainability issues are best dealt with by individual users and landowners. As such the Government will take a 'voluntary approach' to regulating land use, and Government intervention will be limited to providing assistance to land users. This will be done by the establishment of a National Landcare Trust and local Landcare groups. It was envisaged that the National Landcare Trust would be managed by the Federated Farmers secretariat, with support from Government agencies, NGOs, Women's Division of Federated Farmers, and industry groups. Other initiatives in the strategy include the establishment of a National Science Strategy Committee to co-ordinate sustainable land management research, and information support from MFE. There is no explicit reference to Maori interests in the strategy in terms of its main priorities for action, principles, or solutions. However, one desired 'outcome' does refer to the 'maintenance of cultural values associated with land and water, including the relationship of Maori and their traditions with their ancestral lands, water sites, waahi tapu, and

34. 'MFE Strategic Directions' (available, <http://www.mfe.govt>)

35. MFE, *Sustainable Land Management, A Strategy for New Zealand*, Wellington, MFE, 1996, p 3

other taonga.<sup>36</sup> The present authors have not investigated the consultation process that was adopted in preparing the strategy and no research has been conducted on the extent to which the strategy has been implemented.

### 9.2.5 OECD environmental performance review of New Zealand, 1996

In 1996, the Organisation for Economic Cooperation and Development (OECD) issued its second review on the environmental performance of New Zealand.<sup>37</sup> The OECD report focused on nature conservation, water, waste, economy, energy, agriculture, and co-operation with the international community.<sup>38</sup> The OECD report briefly reviewed New Zealand's economic and environmental restructuring between 1984 and 1996 and the development of new environmental legislation such as the RMA 1991 and Conservation Act 1987. In the discussion on nature conservation, the OECD considered one major issue to be the 'loss of taonga species (those species treasured by Maori), such as pingao, which grows in sand dunes, and is used for weaving.'<sup>39</sup> Other issues identified included the loss of some types of ecosystems such as wetlands, loss of indigenous biodiversity caused by invasive pests, damage to ecologically valuable sites, and damage to sensitive areas as a result of recreation.<sup>40</sup> In terms of Maori values and the conservation of biodiversity, the OECD report stated:

*Maori values provide an important ethical basis for environmental management in New Zealand. Maori regard for the land and its resources is reflected in their recognition of flora and fauna as taonga (something highly prized or of special significance) and in the concept of kaitiakitanga (guardianship and stewardship in relation to a resource). The principles of the 1840 Treaty of Waitangi, which recognise the Maori right to decide how a resource is to be used and managed, require a partnership between Maori and the wider community and impose a duty to act reasonably and in good faith . . . The UN Convention on Biological Diversity, to which New Zealand is a party, requires signatories to 'respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation of biological diversity' and to promote their wider application.<sup>41</sup>*

36. *ibid*, p 6

37. OECD, *Environmental Performance Reviews, New Zealand*, Paris, OECD, 1996. As discussed in chapter 3, the first OECD environmental review took place in 1981.

38. The present author did not investigate the procedure that was adopted by the OECD review group, or if Maori were consulted during the review.

39. OECD, *Environmental Performance Reviews, New Zealand*, Paris, OECD, 1996, p 43

40. *ibid*, pp 43–44

41. *ibid*, p 46 (emphasis in original)

On this basis, the OECD report, although acknowledging progress had been achieved in the last 20 years in terms of recognising Maori values in biodiversity conservation, recommended that ‘consideration should be given to developing greater opportunities for Maori ownership and/or management of protected areas, bearing in mind that issues of management may not be separate from issues of ownership.’<sup>42</sup> In addition, the OECD recommended that New Zealand gives a high priority to the development of a national state of the environment report and a set of environmental indicators, and that ‘Maori-inspired indicators should be developed to support protection of Maori values.’<sup>43</sup> Other recommendations in relation to biodiversity relevant to this report included the:

- ▶ expedition of the survey and assessment of unprotected natural areas;
- ▶ encouragement of effective ecosystem management irrespective of land tenure and use;
- ▶ identification of representative samples of marine ecosystems and protection of these ecosystems within protected marine areas; and
- ▶ development of a national policy statement on biodiversity.<sup>44</sup>

In terms of international co-operation, the OECD recommended that ‘New Zealand ratify and rapidly implement international conventions related to protection of the marine environment.’<sup>45</sup> The conventions identified that had not been ratified by New Zealand included the 1958 Geneva Convention regarding Fishing and Conservation of the Living Resources of the High Seas, the 1973 MARPOL Convention on preventing sea pollution, the Bonn Convention on protection of migratory species, and the 1982 Convention of the Law of the Sea.<sup>46</sup>

Subsequent to the publication of the OECD report in 1996, the Government did give high priority to the completion of the first New Zealand state of the environment report and the development of national environmental indicators. The state of the environment report is the subject of the next section of this chapter.

42. *ibid*, p 57

43. *ibid*, p 180

44. *ibid*, p 181

45. *ibid*, p 185 (emphasis in original)

46. *ibid*, pp 192–197

### 9.3 STATE OF ENVIRONMENT AND ENVIRONMENTAL INDICATORS

Since 1990, the MFE has been developing a state of the environment reporting system. At the early stage of this development, MFE supported

the adoption of the 'pressure-state-response' framework. This framework was initially developed by Environment Canada and adopted by the OECD. As explained in the 1997 *The State of New Zealand's Environment* report, this framework is based on the concept of causality:

Human activities exert *pressures* on the environment, changing both its quality and the quantity of natural resources. These changes alter the *state*, or condition, of the environment. The human *responses* to these changes include any organised behaviour, which aims to reduce, prevent or mitigate undesirable changes.<sup>47</sup>

For example, a pressure could be the removal of forest and the state is the condition of the forest at a particular time. This is measured by certain environmental indicators such as the amount of forest per hectare in a certain area. A response is any action taken by people to reduce forest removal such as laws that encourage sustainable use of the forests. This would mean three basic types of indicators would be required, with each indicator giving key information on a pressure, a state, or a human response.

In January 1996, the MFE published a proposed framework for a core set of national environmental indicators.<sup>48</sup> This report heralded the start of a three year project, with funding provided by the Government's green package initiative, to establish a 'relevant, credible core set of national environmental statistics.'<sup>49</sup> These indicators would serve to enable national state of the environment assessment, assist in monitoring outcomes of Government policy, and assist in meeting New Zealand's international obligations to provide environmental information. It was proposed that each set of indicators would be linked to the 11 environmental issues outlined in the Environment 2010 strategy. The process of creating the indicators was planned to encourage partnerships between key groups and organisations, including Maori. Concerning the role of Maori in the project, the MFE stated that:

Inviting Maori to be involved in the development and selection of the indicators will ensure that Maori ideas and concerns are taken into account. Maori will also be included in the information stream, which will keep interested parties up to date with the selection and development process.<sup>50</sup>

47. MFE, *The State of New Zealand's Environment*, Wellington, MFE, 1997, p 1.6 (emphasis in original)

48. MFE, *National Environmental Indicators: Building a Framework for a Core Set*, MFE, January 1996

49. *ibid*, p 21

50. *ibid*, p 37

### 9.3.1 New Zealand's state of the environment report 1997

Despite the fact that the environmental indicators project had not been completed, the MFE decided to prepare a state of the environment report for New Zealand. As a result, New Zealand's first state of the environment report was published in 1997.<sup>51</sup> The report is over 600 pages in length and comprises ten main chapters. These are listed below:

- Chapter 1 Introduction
- Chapter 2 The Place and the People
- Chapter 3 Production and Consumption Patterns
- Chapter 4 Environmental Management
- Chapter 5 The State of Our Atmosphere
- Chapter 6 The State of Our Air
- Chapter 7 The State of Our Waters
- Chapter 8 The State of Our Land
- Chapter 9 The State of Our Biodiversity
- Chapter 10 Conclusions on the State of New Zealand's Environment

The report has two broad purposes: 'inform New Zealanders of the state of their environment, and to help identify areas where our environmental information could be improved.'<sup>52</sup> The report is really an overview on the state of New Zealand's environmental information. As such, the report draws attention to the limitations of the environmental information currently available. As stated by Denise Church in the preface:

The report does not present new data but brings together a wide range of existing information, much of which has already been published in other forms. This has inevitably limited the scope of the report, as our existing information is still quite patchy. Some aspects of the New Zealand environment are not monitored at all. Others are monitored using different methods in different parts of the country, making it impossible to combine the information into a single big picture.<sup>53</sup>

The report uses the OECD 'pressure-state-response' framework in organising the available environmental information.

### 9.3.2 The state of New Zealand's biodiversity

The chapters most relevant to flora and fauna in the report are those on the state of our waters, land, and biodiversity. Both the waters and land

<sup>51</sup> MFE, *The State of New Zealand's Environment*, Wellington, MFE, 1997

<sup>52</sup> *ibid*, p 3

<sup>53</sup> *ibid*

chapters focus on these ecosystems as a whole, while the biodiversity chapter takes a more species-centred approach, and covers all species living on land and water. In order to illustrate some of the contents of the report, the following discussion will focus on chapter nine, the state of our biodiversity.

The discussion on sources of data throughout the biodiversity chapter illustrates the difficulties in assessing the status of New Zealand's biodiversity on current information and in the absence of a national biodiversity inventory. In total, it is estimated that 80,000 species exist in New Zealand. This number includes exotic and excludes extinct species. Of this number, 30,000 species have been scientifically described. Those species that have been described include all the reptiles, birds, mammals, most lichens, seaweed, plants, and algae. The species about which least known include the invertebrate animals, fungi (except for lichens), protozoa, and bacteria. Of the 'known' species, the threatened status information of the vertebrate animals and plants is most complete, while the threatened status information of other 'known' species such as algae is largely incomplete. This means that information that indicates the actual status of biodiversity is limited to plants and vertebrate animals. The key sources of biodiversity information are indicated in the report as being the following:

- ▶ Ministry of Fisheries assessments (covering 40 fish species);
- ▶ DOC draft status list for marine organisms;
- ▶ DOC national priority system for the conservation of threatened plants and animals (land and freshwater organisms);
- ▶ New Zealand Botanical Society list of threatened and local plants;
- ▶ Landcare red data fungi list (in preparation in 1997); and
- ▶ other databases held by universities, museums, and professional associations.

DOC's lists of threatened marine organisms, and the national plants and animal priority system are discussed in chapter 5 of this report. The report says that the Landcare red data list of fungi is an example of the sort of environment information currently being developed. The report states that 20,000 fungi species are estimated to be present in New Zealand. This number includes some 500 native mushrooms. It is noted that some of these mushrooms formed a 'small but prized part of the traditional Maori diet, and one species was used as tinder for fire lighting.'<sup>54</sup> Most of the common edible mushrooms today are introduced species. Twenty percent

54. *ibid*, p 9.63

of fungi are lichens, lichen being ‘fungi that have algae living inside them.’<sup>55</sup> Some 1,500 lichens have been scientifically described in New Zealand. This is about a third of the total estimated number of lichens. The Landcare research involves the development of a comprehensive list of threatened New Zealand fungi. So far this list identifies 200 threatened fungi. These include *Aecidium* species and *Claustula fischeri*.<sup>56</sup>

The state of the environment report considers that current pressures on biodiversity are caused by human predation, habitat destruction, and the effects of pests and weeds.<sup>57</sup> Human predation includes activities such as illegal harvesting of wild species (including fishing), potential effects of bioprospecting, and collecting for the illegal international wildlife trade. Habitat destruction includes cumulative trends of ecosystem degradation and fragmentation. Tourism and increases in visitor numbers are, in particular, considered to be a major cause of habitat degradation. Pests and weeds include a huge raft of organisms that have arrived in New Zealand and are harmful to indigenous species. These include possums, deer, rats, cats, trout, wasps, and some 200 exotic plants. One example used in the report to illustrate bioprospecting activity is the use of sponges of the genus *Lissendoryx* for anti-cancer drugs. One such sponge was found several years ago on a rocky outcrop on the edge of the Kaikoura Canyon. The sponge was found to produce substances called Halichondrin B and Isohomo HB that kill cancerous cells. Isohomo HB has been sent to the National Cancer Institute in Washington DC. ‘If successful, the discovery could put considerable pressure on our *Lissendoryx* species,’ since it ‘takes one tonne of these sponges to produce one gram of the extract.’ For this reason, NIWA has experimented growing *Lissendoryx* at other locations around the coast, including Wellington Harbour with some success.<sup>58</sup> Regarding the environmental effects of bioprospecting, the report states:

Bioprospecting in New Zealand is funded primarily by North American companies and is carried out by scientists at various research facilities, including Crown Research Institutes, such as Landcare Research and the National Institute of Water and Atmospheric Research, and several universities ... About 40 percent of tested species yield potentially useful compounds, and about 2 percent advance to trials in the United States. Where valuable compounds are discovered and the species that produce them are too rare to harvest

55. *ibid*, p 9.64

56. *ibid*, p 9.66

57. *ibid*, p 9.33

58. *ibid*

commercially, production can only proceed through farming or through laboratory manufacture of the compounds (e.g. in genetically modified bacteria), allowing the natural populations to remain unmolested.<sup>59</sup>

References to Maori interests in biodiversity are sprinkled throughout the report. One text box discusses the culturally important plants for Maori.<sup>60</sup> The plants mentioned in the text include kumara, pikopiko, nikau palm, harakeke, pingao, totara, kauri, and medical plants such as koromiko, kakaho, kawakawa, and horopito. As a conclusion to the discussion on culturally important plants, the report states that many 'rongoa plants' are 'now confined to DOC-managed land and 'can only be harvested with the Department's permission. Although this is usually forthcoming, many iwi would like more control over customary plant use in their areas, particularly where non-iwi members and bioprospectors are also seeking permission to harvest them.' The report also mentions the Wai 262 claim by noting that 'some Maori have even lodged a claim with the Waitangi Tribunal . . . seeking iwi control over all indigenous biodiversity.'<sup>61</sup> The Report then states:

The need to sustain culturally significant resources is recognised in our environmental legislation, and the challenge is to develop management regimes, which will safeguard cultural use rights and traditional knowledge while also maintaining the plants for their intrinsic and ecological values and the benefit of society in general.<sup>62</sup>

As stated earlier in this chapter, the major finding of the report is that 'New Zealand's environmental information needs considerable upgrading if the state of the nation's environment is to be accurately described and trends detected.'<sup>63</sup> The state of our environmental data in regard to biodiversity, fisheries, and pests and weeds is summarised as follows:

#### *Biodiversity*

Only 30,000 of perhaps 80,000 multicellular species have been identified. Most of the undescribed species are insects and fungi. Wildlife habitat sites and a number of ecologically representative areas have been surveyed and recorded over the past two decades, but relatively few have been monitored since the initial survey. The status of most species and ecosystems is not known.

59. *ibid*, p 9.34

60. *ibid*, pp 9.60–9.62

61. *ibid*, p 9.62

62. *ibid*

63. *ibid*, p 10.3

*Pests and Weeds*

Considerable data exist on vertebrate pests, economic pests and a range of ecological and economic weeds, though we still lack population estimates and distribution maps for many of them. Very little is known about invertebrate pests in natural ecosystems.

*Fisheries*

Considerable raw data has been collected on marine fish and invertebrates, but analysis has largely been confined to commercially important target species. Catch data are the main monitoring method. Status estimates are available for about half the commercial quota stocks. The status of marine ecosystems and non-target species is unknown.<sup>64</sup>

To address this problem, the report mentions the developing MFE national environmental indicators programme that will form the basis of future national reports on the state of the environment.

While recognising these information limitations, the report concludes that biodiversity is continuing to decline due to loss of lowland forest and wetland habitat, declining quality and quantity of remaining habitats, impacts of pests and weeds, and the effect of human fishing activity. Although Government policy has focused on ecosystem and species recovery programmes, island restoration, and pest control, the report concludes that there is 'need for partial restoration of representative indigenous lowland and coastal ecosystems and for wider protection of marine ecosystems.'<sup>65</sup> Pest control is considered to be a 'never-ending' problem but such control needs to become 'safe, humane and cost effective to remain economically and socially sustainable.'<sup>66</sup> The conclusions to the report also mention the need to conserve and maintain the genetic diversity of beneficial exotic species that are vital to the New Zealand economy. The report finds that:

At present, many minority crop and livestock strains and varieties may be disappearing from New Zealand because of poor storage facilities and limited knowledge of their existence or importance. While many of these strains can be imported or recreated from overseas gene pools, some are specifically adapted to New Zealand conditions and would be difficult to recreate quickly.<sup>67</sup>

64. *ibid*, p 10.4

65. *ibid*, p 10.7

66. *ibid*, p 10.8

67. *ibid*, p 10.7

The concluding chapter of the report includes a brief mention of Maori interests in the environment. It says that Maori developed a sustainability ethic over some '700–800 years of sometimes hard-earned experience in living with the indigenous environment.' These values are most 'effectively expressed when Maori participate actively in environmental decision making and have the ability to make decisions for their own resources.'<sup>68</sup>

### 9.3.3 National environmental indicators programme

The national state of the environment report in 1997 acknowledged the need for better environmental information. In light of this finding, the MFE revitalised the environmental performance indicators project. A discussion paper outlining proposals for air, fresh water, and land indicators was published in October 1997.<sup>69</sup> The discussion paper indicated that other indicators for ozone and climate change; coasts; marine and fisheries; indigenous biological diversity; waste and hazardous substances; transport; pests and weeds; and energy would be forthcoming. Each of these sets of indicators were termed 'strands.' An indicator was defined in the report as a 'quantitative measure . . . against which some aspects of policy performance can be assessed.'<sup>70</sup> A number of the proposed indicators involved the use of indigenous flora or fauna. For example, the proposed indicators for fresh water included factors such as assessment of periphyton (attached algae) and occurrence of the indigenous giant kokopu in rivers. The giant kokopu was considered to be a good indicator species, because the fish is 'easily identifiable, and is sensitive to a range of environmental pressures.'<sup>71</sup> The giant kokopu has also been documented by NIWA in the native fresh fish database that holds over 13,000 records relating to giant kokopu distribution and habitat. Other indicators suggested for rivers included bird life measurements, assessments of riparian habitat, assessments of aquatic macrophytes and macro-invertebrates, and other physico-chemical parameters such as dissolved oxygen, biochemical oxygen demand, pH, turbidity/clarity, ammonia, temperature, and nutrients.<sup>72</sup> Proposed wetland indicators included 'biotic factors' such as fish and wildlife populations, vegetation associations, and occurrence of invertebrates, including benthos and zooplankton. The discussion paper noted the need for Maori input in the

68. *ibid*, p 10.21

69. MFE, *Environmental Performance Indicators, Proposals for Air, Fresh Water, and Land*, Wellington, MFE, October 1997

70. *ibid*, p i

71. *ibid*, p 73

72. *ibid*, p 69

indicators programme, it being said that Maori 'value water in some unique ways'. However, it was stated that no ways for monitoring and reporting Maori values were identified and that further work with iwi was required to identify any suitable indicators.<sup>73</sup> People were invited to make submissions or responses on the proposed indicators by 23 January 1998.

During November and December 1997, the MFE convened a series of meetings around the country to discuss the proposed indicators. These meetings were largely directed towards local authorities, in particular regional councils. Separate meetings were also held with NGO groups, industry groups, and the Parliamentary Commissioner for the Environment. There do not appear to have been any separate consultation hui for Maori at this stage of the project.<sup>74</sup> In response to the discussion document and meetings, the MFE received 73 submissions. These came from individuals, community and environmental groups, universities, Crown Research Institutes, industry and business interests, local authorities, and central government agencies. Two submissions were received from Maori groups. These were Kapakapanui (Te Atiawa ki Whakarongotai), and the Hauraki Maori Trust Board. These submissions called for more 'face to face' contact with Maori in developing the indicators and the need to integrate Maori indicators throughout the document. Kapakapanui also stated that the MFE needed to consider intellectual property issues.<sup>75</sup> Other non-Maori submissions also supported the need to better integrate Maori indicators and encourage greater partnership with Maori. The Parliamentary Commissioner for the Environment, in particular, considered that 'lack of integration of Maori values [into the environmental indicators programme] is a serious strategic weakness at this point in time.'<sup>76</sup>

#### 9.3.4 Maori environmental indicators initiative

In an effort to gain greater Maori participation in the indicators project, the MFE established a Maori Environmental Monitoring Group. This monitoring group was to provide input at a conceptual level. In addition, individual Maori consultants were contracted to provide input on each individual indicator strand. In terms of consultation, four hui were held in early 1998 at Whangarei, Auckland, Whakatane, and Christchurch to brief Maori. Further, a number of hapu, iwi, and individual Maori were invited to a series of national workshops held in February and April 1998.<sup>77</sup>

73. *ibid*, p 97

74. Gus Roxburgh, Environmental Solutions NZ Ltd, *Environmental Performance Indicators, Proposals for air, fresh water and land, Summary of Submissions*, Wellington, Report for MFE, December 1997, p 9

75. Gus Roxburgh, Environmental Solutions NZ Ltd, *Environmental Performance Indicators, Proposals for Air, Fresh Water and Land, Summary of Submissions*, Wellington, Report for MFE, December 1997, p 29. The present author has not assessed the actual submissions. This information has been taken from the summary of submissions.

76. Gus Roxburgh, Environmental Solutions NZ Ltd, *Environmental Performance Indicators, Proposals for Air, Fresh Water and Land, Summary of Submissions*, Wellington, Report for MFE, December 1997, p 30

77. MFE, *Environmental Performance Indicators, Maori input into the Environmental Performance Indicators Programme*, Wellington, MFE, April 1999, p 10

Reports of these hui and workshops indicate Maori were generally frustrated with the indicators programme, and had difficulties with the concept of developing a 'Maori' indicator.<sup>78</sup> Despite this, Gardiner and Parata consultants who were contracted by MFE to provide input on the programme, suggested a number of Maori-relevant indicators in May 1998. These included:

- ▶ quantities of birds caught for personal eating, for example, pigeons;
- ▶ quantities of native berries available;
- ▶ re-appearance of birds and fruit; and
- ▶ quality, availability and accessibility of rongoa ingredients.<sup>79</sup>

In a supplementary report for MFE, Gardiner and Parata questioned the value of continuing with environmental indicators consultation hui and the wisdom of developing one national Maori indicator for each indicator strand. As an alternative, Gardiner and Parata recommended the establishment of a small group of Maori environmental experts that could develop draft policy documents.<sup>80</sup> This small group, established in early 1998, became known as the Panel of Independent Maori. At the first meeting of this panel, this group questioned the development of Maori indicators without the corresponding development of a Treaty relationship between the MFE and a 'properly mandated group of Maori able to represent the Treaty partner.' In particular, the panel recommended that Maori indicators should be 'developed by iwi, hapu and whanau in the context of those communities themselves.'<sup>81</sup> This recommendation has been acted on with the development of three Maori indicator case study projects. These involve a Hauraki Maori Trust Board indicator project relating to Maori customary use of the marine environment; a Ngai Tahu study involving the Taieri River, and a Ngati Porou study relating to marine indicators.<sup>82</sup> Examples of indicators proposed in the Taieri River study include the following:

- ▶ greasiness of water – the feel of the water;
- ▶ temperature;
- ▶ smell;
- ▶ sound of winds in riparian vegetation;
- ▶ willow infestation;
- ▶ abundance and diversity of fish species;
- ▶ presence or absence of stock in the riparian margin and waterway; and
- ▶ the health of fish found in the waterway.<sup>83</sup>

78. Tuanuku Consultants, *Tohu Waotu Maori Environmental Performance Indicators*, Wellington, Report for MFE, 1998

79. Gardiner and Parata Ltd, *Maori Input into the Coasts and Estuaries, Biodiversity, Fisheries, Climate Change and Ozone Strands of the EPI Programme*, Wellington, Report for MFE, May 1998, p 14

80. Gardiner and Parata Ltd, *Supplementary Report – Maori Input into the EPI Programme*, Wellington, Report for MFE, May 1998, p 4

81. MFE, *Maori Environmental Monitoring, Prepared for the Ministry for the Environment by a Panel of Independent Maori*, Wellington, MFE, July 1998, p 39

82. Te Runanga o Ngai Tahu, *Taieri River Case Study*, Wellington, Report for EPI Programme of the MFE, October 1999; Hauraki Maori Trust Board, *Hauraki Customary Indicators Report*, Wellington, Report for EPI Programme of the MFE, June 1999

83. This is only 10 of a total of 30 indicators proposed in the report. Te Runanga o Ngai Tahu, *Taieri River Case Study*, Wellington, Report for EPI Programme of the MFE, October 1999, p 59

In April 1999, the MFE summarised Maori input into the indicators programme and called for further input in relation to the ‘possible addition of new strands to the EPI programme that may better accommodate the Maori world-view.’<sup>84</sup> The MFE report suggested that a possible new strand could be mahinga kai. The goal of this strand would be ‘to protect and enhance those ecosystems from which medicinal, support resources (e.g. flax for kete) and food supplies are harvested.’<sup>85</sup> It was thought several of the existing indicators would be relevant to a mahinga kai strand and other indicators could be developed by conducting studies on mahinga kai sites.<sup>86</sup>

### 9.3.5 Confirmed national environmental indicators

In late 1998, the MFE confirmed the indicators for air, fresh water and land, and proposed indicators for terrestrial, freshwater biodiversity, and the marine environment. The MFE state that the purpose of the indicator programme is to ‘develop and use indicators to measure and report how well we are looking after our environment.’ Specifically the three objectives of Government are: to report regularly on the state of New Zealand’s environment; to measure the performance of our environmental policies and laws; to better prioritise policy, and to improve decision-making.<sup>87</sup> In confirming the indicators, the MFE has used a staged approach. Stage one indicators are selected where current monitoring can provide the relevant data now, and stage two indicators are those identified now but that will take time and further planning to be fully implemented.

The proposed and confirmed indicators also include goals distilled from key legislation and policy documents. These goals are to guide indicator development. For example, the proposals for terrestrial and freshwater biodiversity indicators include the following goals:

- ▶ Ensure the survival of all *indigenous species* in their natural communities and habitats
- ▶ Ensure *listed wildlife* is protected throughout New Zealand and its waters
- ▶ Maintain and enhance the total area of New Zealand’s remaining *indigenous forests*
- ▶ Protect *significant indigenous vegetation* and *significant habitats for indigenous fauna*

84. MFE, *Environmental Performance Indicators, Maori Input into the Environmental Indicators Programme*, Wellington, MFE, April 1999, p 19

85. *ibid*, p 20

86. *ibid*

87. Environmental Performance Indicators Programme – General Information (available, <http://www.mfe.govt.nz/monitoring/epi>)

- ▶ Preserve representative samples of all classes of *natural ecosystems and landscapes*
- ▶ Protect *wetlands of national importance* and where appropriate, wetlands of regional and local importance
- ▶ Complete the terrestrial *protected areas network*, including wetlands, grasslands and other ecosystems under-represented in reserves
- ▶ Preserve all indigenous *freshwater fisheries* and freshwater fish habitats
- ▶ Protect the *habitat of trout and salmon*
- ▶ Develop or maintain necessary legislation and/or other regulatory provisions for the protection of *threatened species*
- ▶ Continually monitor New Zealand's status in regard to *pests* and effectively manage or eradicate pests
- ▶ Preserve the *natural character* of wetlands, rivers and lakes and their margins
- ▶ Maintain and enhance *public access* to and along lakes and riverbanks.<sup>88</sup>

At the time of writing this report, indicators have been confirmed for nine policy strands. These strands are air, fresh water, land, climate change, ozone, waste (solid, liquid, hazardous, contaminated sites, and toxic) marine, biodiversity, and transport. These indicators are currently being implemented on a trial basis. Further indicators are being confirmed and developed for Maori, energy, toxins, amenity, animal pests, weeds and diseases. By way of example, the confirmed biodiversity indicators are listed as follows:

- ▶ change in the extent of each land cover class;
- ▶ percentage area of each of New Zealand's different environments, ecosystems and habitats under protection;
- ▶ the number of taxa in IUCN and NZ threat categories;
- ▶ the genetic diversity of valued introduced species;
- ▶ change in gross habitat fragmentation of indigenous vegetation cover;
- ▶ change in the abundance and distribution of selected animal pests;
- ▶ change in the abundance and distribution of selected weeds;
- ▶ change in the extent of each land use pressure on biodiversity;
- ▶ the biodiversity condition of selected ecosystems and habitats compared with historic and current baselines;

88. MFE, *Environmental Performance Indicators, Proposals for Terrestrial and Freshwater Biodiversity*, Wellington, MFE, December 1998. Emphasis in original.

- ▶ the evolutionary diversity remaining in selected taxonomic groups (first group, birds) compared to historic and current baselines;
- ▶ the extent of selected freshwater ecosystems (wetlands, lakes, rivers, karst and geothermal) compared with historic and current baselines.<sup>89</sup>

The MFE estimates that most of these indicators will take between two and five years to fully implement. It is envisaged that the local authorities, especially regional councils, will take a leading role in the gathering of environmental data within the national indicators framework. Once all the indicators are confirmed and implemented, MFE will prepare a second state of environment report for New Zealand.<sup>90</sup>

#### 9.4 NEW ZEALAND BIODIVERSITY STRATEGY

As noted earlier in this chapter, the Government planned to develop a national biodiversity strategy in 1994. That such a strategy is prepared is a requirement of the international Convention on Biological Diversity 1992. The Convention on Biological Diversity is reviewed in chapter 2 of this report. Te Puni Kokiri realised the importance of the convention and the need to develop a national strategy in 1994, and the Ministry published a discussion document on biodiversity and Maori.<sup>91</sup> This document stated that the development of a national strategy would require Maori participation and that a number of outstanding issues regarding Maori interests in biodiversity required attention. These issues included:

- ▶ establishing protected areas;
- ▶ rehabilitation and restoration of areas of cultural significance;
- ▶ establishing mechanisms to safeguard against removing resources without knowledge and participation of Maori;
- ▶ determining access to genetic resources;
- ▶ devising ways of sharing the benefits from uses of genetic resources;
- ▶ establishing mechanisms for consultation with Maori regarding use or access to biological material; and
- ▶ clarifying issues regarding ownership of new genetic material.<sup>92</sup>

While acknowledging the primary role of DOC in developing a national strategy, Te Puni Kokiri considered that effective implementation of the convention required Maori to be 'intricately involved in all aspects of planning and implementation and at all levels of activity.'<sup>93</sup>

89. List of Confirmed and Proposed Environmental Performance Indicators, September 2000 (available, <http://www.mfe.govt.nz/monitoring/epi>)

90. *ibid*

91. TPK, *Biodiversity and Maori*, Te Ara o Te Ao Turoa, Wellington, TPK, 1994

92. *ibid*, p 12

93. *ibid*, p 19

### 9.4.1 Development of the draft biodiversity strategy

#### 9.4.1.1 Consultation

In early 1996, Cabinet approved the establishment of a 15-agency officials' committee to co-ordinate the development of a national biodiversity strategy. This committee, the New Zealand Biodiversity Strategy Officials' Committee, included officials from the Ministry of Agriculture and Forestry, DOC, Ministry of Commerce, MFE, Ministry of Fisheries, Ministry of Foreign Affairs and Trade, Department of Internal Affairs, the Prime Minister's and Cabinet Departments, Treasury, State Services Commission, Te Puni Kokiri, Office of Treaty Settlements, MORST, FRST, and Ministry of Women's Affairs. DOC files indicate there was an awareness for the need to involve Maori in the strategy process from the beginning.<sup>94</sup>

The first consultation meeting with a selected number of Maori 'advisors' was held on 25 June 1996. These Maori 'advisors' were largely the Maori members of the conservation boards, and included Rauru Kirikiri, John Parae, Joe Te Maipi, John Klaricich, Tumu Te Heuheu, Aroha Mead, Kevin Prime, and Ronda Tokona.<sup>95</sup> This meeting discussed the proposed process for preparing a national strategy and how Maori could be involved in the process. The meeting agreed that Maori must be part of development of the strategy; issues must be discussed at iwi, hapu, and whanau level; and that it be recognised that Maori are the kaitiaki of New Zealand's environment.<sup>96</sup> DOC then planned two general stages of consultation. The first stage, or pre-consultation stage, involved targeted consultation with individual Maori during the scoping of issues. The second stage would see the distribution of the draft strategy and involve widespread iwi consultation. Some consultation initiatives in the first stage included:

- ▶ meetings with Maori New Zealand Conservation Authority and conservation board members;
- ▶ distribution of 'fact sheets' on the proposed strategy to iwi via Kaupapa Atawhai managers;
- ▶ Maori participation in the biodiversity workshops held in October 1996;
- ▶ hui attended by DOC and iwi authority representatives. These hui were held at Urenui, Matiu Island, and Whangarei in November 1996; and
- ▶ distribution of a biodiversity strategy video aimed at a Maori audience in August 1997.

94. Draft Consultation Process, 10 June 1996, 1996–1999, CBDO403, DOC, Wellington

95. NZ Biodiversity, Maori Caucus Meeting, 25 June 1996, CBDO403, DOC, Wellington

96. File note, Meeting with Iwi Representatives, 25 June 1996, CBDO403, DOC, Wellington

The consultation hui were considered to be 'volatile' and the distribution of the biodiversity strategy video was chosen as a more 'reliable way of delivering a consistent method.'<sup>97</sup> The idea of using a video was suggested by iwi in Taranaki. It was also planned that separate 'one to one' meetings would be held with specialists on Maori biodiversity issues. These specialists included Dell Wihongi, Rahui Katene, Nikki Seranceke, Morrie Love, and Shane Jones.<sup>98</sup> No evidence that these meetings ever took place could be found in DOC files.

#### **9.4.1.2 Biodiversity strategy background papers**

During 1997 and 1999, the officials' committee prepared a number of background papers to help in developing the biodiversity strategy. These background papers covered the following themes:

- ▶ sustainable agriculture;
- ▶ aquaculture;
- ▶ bioprospecting;
- ▶ exotic forestry;
- ▶ fisheries;
- ▶ protecting genetic diversity;
- ▶ impact of introduced pests;
- ▶ border control and biosafety measures;
- ▶ indigenous forestry management;
- ▶ Maori and biodiversity;
- ▶ non-commercial harvest of components of biodiversity;
- ▶ property rights regimes and indigenous biodiversity;
- ▶ community awareness and involvement in biodiversity conservation;
- ▶ improving knowledge of biodiversity; and
- ▶ tourism and other non-consumptive uses.

The background papers highlighted a number of issues that were considered to require Government action or policy development as part of the New Zealand biodiversity strategy. The most relevant issues to this report included management of genetic resources, bioprospecting, introduced species control, biosafety, non-commercial harvest, property rights and improving knowledge systems.

Issues surrounding management of genetic resources focused on emerging problems over genetic erosion and decline, hybridisation, translocation of marine stock, and need for improved management of

97. DOC memo, November 1996, CBDO403, DOC, Wellington

98. DOC memo, November 1996, CBDO403, DOC, Wellington

ex-situ collections. In particular, the sustainable aquaculture background paper recommended the development of mechanisms to manage the risk to biodiversity associated with the movement of aquaculture stock between marine farms, and potential aquaculture activities between 12 and 200 nautical miles offshore. One example of this risk, cited in the sustainable aquaculture paper, was the transfer of greenshell mussel spat collected at Ninety Mile Beach, near Kaitaia (part of the range of the northern genetic variety of this species) to marine farms in the Coromandel, the Marlborough Sounds and Stewart Island.<sup>99</sup> It is thought this translocation could lead to the possible genetic erosion of the southern genetic species of greenshell mussel. Another example of possible genetic decline, identified in the 'protecting genetic diversity within species' background paper, is crossbreeding or hybridisation between the native grey duck and introduced mallards, and between the 100 surviving black stilts and more common pied stilts.<sup>100</sup> The paper states that mechanisms should encourage voluntary commitments to use local genetic stock, and new mechanisms should be investigated to manage risks associated from genetic translocation, especially in relation to marine and plant species.

Bioprospecting is defined as an activity that involves examining biodiversity in order to find compounds, substances and genetic material of commercial value.<sup>101</sup> The bioprospecting background paper notes that there is 'no statutory management framework specific to bioprospecting' and control over such activities is regulated by private landowners, or Government agencies in the case of public lands. For those species protected under the Wildlife Act 1953 or Marine Mammals Protection Act 1978 existing on private land, possession is regulated by the Minister of Conservation, while access to the land is regulated by the land owner. In rivers both DOC and MAF have responsibilities over fisheries, but the bioprospecting paper concluded that there is 'no clear allocation of responsibility for the control and possession of freshwater animals and plants that are not a fishery.'<sup>102</sup> In the marine environment, MAF has developed a special permit regime for the taking of marine resources for non-commercial, scientific, and research purposes. The bioprospecting paper highlights the need to establish regulatory regimes or to clarify the process relating to the granting of approval for the taking of biological material in the course of bioprospecting. The paper also identified the need to clarify ownership interests in biological (including genetic)

99. 'Sustainable Aquaculture: Freshwater and Marine Farming' Final Draft, unpublished Biodiversity background papers, 1998, DOC, Wellington

100. 'Protecting Genetic Diversity Within Species' Draft, unpublished Biodiversity background papers, 1997, DOC, Wellington

101. 'Bioprospecting' Draft, unpublished Biodiversity background papers, 1997, DOC, Wellington

102. *ibid*, p 8

resources, the development of mechanisms that provide for sharing of benefits from bioprospecting, and the need to protect Maori knowledge systems.<sup>103</sup>

The introduced plant and animal pest background paper noted there are an estimated 4,300 introduced species established in the wild. This means introduced species are present in nearly all indigenous ecosystems in New Zealand. For example, Waikareiti Lake in the central North Island is considered to be the only lake in New Zealand free of exotic plants.<sup>104</sup> Some 240 species of introduced plants are thought to have 'significant impacts in land and freshwater communities.'<sup>105</sup> The background paper noted the need for increased coordination between agencies, development of an information base, better systems to see priorities for managing plant and animal pests, increased surveillance, the establishment of common protocols for evaluating risk, and greater public awareness.<sup>106</sup> Similar issues were also covered in relation to the topics of border control and biosafety. While noting progress in biosafety under the Hazardous Substances and New Organisms Act 1996, the background paper on border control and biosafety found more work needed to be done to minimise risks to biodiversity under current biosafety and border control frameworks. In particular, the paper recognised the need for a clearly defined methodology for assessing risks posed by importing new organisms or developing genetically modified organisms, explicit guidelines considering impact on flora and fauna, the alignment of new organisms methodologies and border control processes, and greater inter-agency communication especially in common approaches to overall risk assessment.<sup>107</sup>

Another issue raised in the background papers was the non-commercial harvest of flora and fauna and the effect of this harvest on biodiversity. Four generic characteristics of non-commercial harvest were identified:

- ▶ generally harvesting involve small 'takes' of flora and fauna, but these 'takes' can lead to a large cumulative effect;
- ▶ harvesting is often undertaken by a large number of people in a wide range of locations;
- ▶ harvesting does not require large amounts of special investment; and
- ▶ a wide range of resources are affected.<sup>108</sup>

103. *ibid*, p 1

104. 'An Overview of Impacts on New Zealand's Biodiversity from Introduced Plants and Animals' Draft, unpublished Biodiversity background papers, 1997, DOC, Wellington

105. *ibid*, p 1

106. 'Introduced Plant and Animal Pests' Draft, unpublished Biodiversity background papers, 1997, DOC, Wellington

107. 'Border Control and Biosafety Measures' Draft, unpublished Biodiversity background papers, DOC, Wellington

108. 'Non-Commercial Harvest of Components of Biodiversity', unpublished Biodiversity background papers, 1997, DOC, Wellington

This non-commercial harvest definition includes activities such as recreational fishing (marine and freshwater); recreational shellfish and seaweed gathering; recreational hunting of game birds and wild animals; gathering of plants; fungi and wood; and collecting other indigenous species not for commercial purposes. This paper noted that Maori customary use of biodiversity ‘could be considered to be non-commercial harvest and to present similar risks and opportunities.’ However, it did not address issues relating to Maori customary use because:

Maori customary use rights, unlike other use rights, are based in aboriginal title (and recognition of them is implied in Article 2 of the Treaty of Waitangi), and because these rights are exercised within an iwi or hapu authority structure, separate protocols and management arrangements exist to give effect to them. This is an area in which new ground is being broken, and in which the settlement of Treaty claims is having an important influence.<sup>109</sup>

The background paper noted that the effect of non-commercial harvest on biodiversity is largely unknown, as there is little information or monitoring regarding the effect of recreational fishing on the marine and aquatic environment, and the effect of plant harvesting. It was also found that recreational user-groups have developed strategies to ensure the sustainability of non-commercial harvest. For example, the preservation of wetlands for duck shooting. However, the dominance of such introduced game birds can threaten indigenous species, and the paper noted there is a debate ‘over the extent to which the hunting of mixed populations of grey and mallard ducks is contributing to the rapid loss of pure grey duck genes in the wild.’<sup>110</sup> The paper encouraged an approach focused on improving the information base regarding impacts of non-commercial harvest on indigenous flora and fauna, and raising community awareness of such potential impacts.

The background paper on property rights argued that the development of property rights in relation to flora and fauna is required to achieve biodiversity goals. This specification of property rights should aim to make clear:

- ▶ who has what rights in relation to the use and protection of genetic, species, and ecosystem diversity;

109. *ibid*, p 3

110. *ibid*, p 9

- ▶ the nature of these rights, including: the degree of exclusivity of access, and the consequent ability to capture the benefits from the use of biodiversity;
- ▶ what stewardship and social obligations accompany these rights; and
- ▶ what measures are in place to guarantee rights and ensure obligations are met.<sup>111</sup>

Some examples mentioned in the paper of clear property right regimes include the quota management system for commercial fisheries, the protection of most native birds under the Wildlife Act 1953, and district plans that explicitly ‘state the responsibilities of land owners for the management of significant areas of indigenous vegetation and habitats.’<sup>112</sup> The property rights paper also considered the issue of intellectual property rights in relation to biodiversity. These property rights may include unique knowledge such as medicines used by indigenous peoples, innovations resulting in new products derived from biodiversity components, and the creation of new strains of species by genetically modified techniques. The bioprospecting background paper noted that in terms of biodiversity intellectual property rights, both Maori and the public have raised concerns regarding the patenting of life forms and ownership of genetic material as distinct from the ‘organism within which it naturally occurs.’ This patenting regime means tradable ownership rights are created over genetic material that leads to ‘commercial exploitation of genetic material making up plants and animals.’<sup>113</sup> The paper notes a public view that ‘genetic material is the common heritage of all humankind and that information regarding genetic material should be available to all,’ while Maori have concerns about the lack of control by Maori over the commercial exploitation by others of both indigenous flora and fauna, Maori designs, traditions, and symbols.<sup>114</sup> The property right paper considers that the current intellectual property right system is not designed to protect Maori traditional biodiversity knowledge and uses, because such knowledge and uses do not ‘meet the criteria of being novel and not obvious.’<sup>115</sup> In terms of biodiversity, the main limiting factors of the current intellectual property regime are summarised as:

- ▶ intellectual property rights can only apply to creative or inventive endeavour by an individual or individuals creating an original invention or plant variety or other protectable subject matter;

111. ‘Property Rights Regimes and Indigenous Biodiversity’ Draft 2, unpublished Biodiversity background papers, 1999, DOC, Wellington

112. *ibid*, p 4

113. ‘Bioprospecting’ Draft, unpublished Biodiversity background papers, 1997, DOC, Wellington

114. *ibid*, p 10

115. ‘Property Rights Regimes and Indigenous Biodiversity’ Draft 2, unpublished Biodiversity background papers, 1999, DOC, Wellington, p 9

- ▶ there must be an identifiable creator of the subject matter of the intellectual property right (communities are not identifiable in this sense); and
- ▶ while trademarks can be indefinite, intellectual property rights are limited in duration, after which the work or product falls into the public domain.<sup>116</sup>

This means that the current intellectual property rights systems is thought to be of limited use to create incentives for protecting genetic diversity, ‘establishing fair and equitable shares in the benefits arising from the use of genetic diversity’, and creating incentives for protection of Maori traditional knowledge.<sup>117</sup> Some options for action include the creation of new forms of intellectual property rights, funding mechanisms to encourage protection of traditional knowledge, and developing measures such as contractual agreements, codes of conduct, and cultural property and expression rights in order to ‘ensure an equitable sharing of the benefits arising from the contribution of Maori traditional knowledge to the sustainable use and conservation of the components of biodiversity.’<sup>118</sup>

Although the issue of Maori and biodiversity was canvassed in a number of the background papers, Te Puni Kokiri prepared a separate paper on Maori and biodiversity in 1998. This paper emphasised the need for greater participation by Maori in biodiversity management in New Zealand.<sup>119</sup> The paper recommended that this can be achieved by building on existing partnership arrangements developed under the Conservation Act 1987, Resource Management Act 1991, and Acts relating to the settlement of Treaty claims, such as the Ngai Tahu Settlement Act. Some examples of developing partnerships under these Acts, as mentioned in the paper, include the Ngai Tahu eel management plan, Ngati Hine’s management of kukupa at Motatu forest, and the co-management arrangements for Lakes Rotoiti and Okataina Scenic Reserves. In relation to the status of Maori traditional knowledge or matauranga Maori, the paper states that such knowledge is recognised in legislation such as section 7(a) of the RMA which recognises kaitiakitanga. However, it is noted that there is no explicit legal protection of such knowledge. Te Puni Kokiri also found that some small-scale progress had been achieved in terms of development of research partnerships between Maori and research institutions. For example, the research partnership between Otago University and Rakiura Titi Islands Committee for investigation

116. *ibid*

117. *ibid*

118. *ibid*, p 11

119. ‘Maori and Biodiversity’ unpublished Biodiversity background papers, TPK, 1998

into the sustainability of the titi harvest.<sup>120</sup> In terms of further developing matauranga Maori, Te Puni Kokiri state there is a need for Crown agencies to further encourage 'Maori to apply traditional Maori values and practices to tikanga-based projects' and to explore the development of a framework 'for the protection, retention, promotion and inclusion of matauranga Maori into the management of biodiversity.'<sup>121</sup> Other recommendations of the paper include the further development and monitoring of partnerships, development of iwi management plans, the formulation of a policy response to NZCA work on Maori customary use, and further work by Crown agencies and Maori to improve access to potential harvesting sites.

#### 9.4.2 Draft biodiversity strategy

While the background papers mentioned above were being prepared, DOC and the MFE established a working group in 1997 to prepare a biodiversity issues and options discussion document. The release of this paper was to be followed by submissions and further consultation meetings. As it happened, the discussion document was not produced, and instead the draft New Zealand Biodiversity Strategy was released in December 1998. The draft strategy was set out in a format not dissimilar to the Environment 2010 strategy with sections setting out the strategy's vision, goals, and principles, and theme-oriented sections covering main issues and actions.<sup>122</sup> The draft strategy proposed three goals. These were:

##### Goal 1 – Natural habitats and ecosystems

Maintain and restore a comprehensive and representative range of remaining natural habitats and ecosystems to a healthy functioning state, and sustain those features which support indigenous biodiversity in a range of more modified ecosystems (including those in primary production areas and urban environments).

##### Goal 2 – Indigenous species

Maintain and restore representative populations of all indigenous species in selected natural habitats where threats can be controlled or there are reasonable prospects for controlling them in the future.

##### Goal 3 – Genetic resources

Maintain the natural resilience and economic usefulness of our domesticated and cultivated species by conserving their genetic diversity.<sup>123</sup>

120. *ibid*, p 17

121. *ibid*, p 21

122. The following discussion provides a very brief overview of the Draft strategy. Fuller detail will be provided regarding the final strategy released in February 2000.

123. DOC and MFE, *New Zealand's Biodiversity Strategy, Our Chance to Turn the Tide, A Draft Strategy for Public Consultation*, Wellington, DOC, MFE, December, 1998, p 14

The explanatory text emphasises that the 'primary focus of this strategy is New Zealand's indigenous biodiversity' and while many introduced species are valued, they were not the main focus, because their survival is not threatened. In order to guide conservation and sustainable management of New Zealand's biodiversity, the draft strategy proposed 17 principles. The first principle was termed 'governance and sovereignty' and stated that the 'Government has responsibility to set the direction for the conservation and sustainable use of New Zealand's biodiversity as a matter of national importance.' The second principle recognised and provided for the 'relationship of Maori with the biodiversity of Aotearoa as provided for in the Treaty of Waitangi.'<sup>124</sup> Principle five referred to setting biodiversity priorities and stated that 'priority should be given to species found only in New Zealand (endemic) over species indigenous to New Zealand, but also found overseas.'<sup>125</sup> Another principle held that 'conservation of biodiversity does not preclude its use, but any use should be sustainable.' The principle of 'informed action', stated that all biodiversity management actions should be 'based on the best and most current information and knowledge available, including traditional Maori knowledge (matauranga), local experience, and the results of scientific research and monitoring.'<sup>126</sup>

The themes in the draft strategy covered biodiversity on land; freshwater; coastal and marine; genetic resources; biosecurity; information; knowledge and capacity; and the role of New Zealanders, including Government, Maori, communities, and participation in international environmental law. The following list is a summary of some of the most significant recommended actions in relation to these themes:

- ▶ preparation of a national policy statement on implementing biodiversity protection provisions under the RMA (which would also apply to freshwater biodiversity);
- ▶ protection of priority representative freshwater habitats, and development of a comprehensive freshwater ecosystem classification system;
- ▶ revision of the 1986 New Zealand Wetlands Management Policy;
- ▶ extension of DOC's threatened species priority setting system (Molly and Davis, see chapter 6 of this report) to cover all groups of indigenous freshwater species;

124. *ibid*, p 22

125. *ibid*

126. *ibid*, p 23

- ▶ identification of marine biodiversity and the full range of marine environments by mapping the coast and sea using a marine classification system;
- ▶ development of a strategy for better protecting the marine environment, including establishment of marine reserves and maataitai and taiapure areas;
- ▶ development of a national policy on access to New Zealand's indigenous genetic resources, taking into account Maori interest in these resources; and
- ▶ ensuring the use of matauranga Maori occurs only with consent of Maori and that any benefits are shared when this knowledge leads to the commercial use of indigenous genetic resources.

Other significant actions were mentioned in annex II of the draft strategy. This section set out roles and responsibilities for agencies and groups within 'strategic clusters'. For example, the section noted the possibility of contracting out the management of some protected areas to private groups or local authorities, amending the Wildlife Act 1953 to extend protection for threatened species, and increasing the role of iwi in managing protected areas.<sup>127</sup>

The section on Maori and biodiversity included five objectives relating to the recognition of Maori interests in biodiversity. These objectives related to building partnerships, the Treaty of Waitangi claims settlement process, matauranga Maori, science and research, and customary use of biodiversity.<sup>128</sup> One action under the partnership objective requires Government:

To negotiate and establish protocols and arrangements with iwi and hapu at regional and locals levels with respect to the management of specific habitats or particular species within their rohe, as a basis for building and maintaining effective working relationships and partnerships.<sup>129</sup>

The matauranga Maori objective seeks to 'recognise and respect the role of matauranga Maori in biodiversity management and provide for its retention and protection.' One action relating to this principle recognises the 'knowledge and role of kaitiaki in the conservation and sustainable use of biodiversity, including the management of public conservation areas and local authority resource management processes.'<sup>130</sup> The customary use principle aims to 'recognise and provide for the customary

127. *ibid*, pp 120–121

128. *ibid*, pp 90–91

129. *ibid*, p 90

130. *ibid*

use of indigenous species by Maori, consistent with the conservation and sustainable management of biodiversity.’ This principle will be implemented by the development of a national policy to ‘address outstanding issues relating to the sustainable Maori customary use of native species based on the New Zealand Conservation Authority’s work in this area.’<sup>131</sup>

#### 9.4.3 Draft biodiversity strategy consultation

The deadline for submissions on the draft strategy was 16 April 1999. By this date, the officials’ committee had received 7,809 submissions. The submissions were summarised in a report prepared by Tonkin and Taylor in June 1999.<sup>132</sup> Some 2,521 of these submissions were on a form letter addressed to the Prime Minister requesting greater protection for the kiwi, and another 4385 submissions were on a form letter which stated support for the goal of maintaining and restoring all New Zealand’s remaining indigenous biodiversity. In addition, some 437 submissions focused exclusively on the issue of valued introduced species and called for the maintenance of species such as ‘trout, salmon, mallard ducks, deer, chamois, and thar.’<sup>133</sup> Of the remaining 466 submissions, 12 were received from Maori organisations. These organisations were:

- ▶ Te Atiawa Manawhenua Ki Te Tau Ihu Trust;
- ▶ Te Ao Marama Incorporated;
- ▶ Ngarauru Iwi Trust
- ▶ Tuwharetoa Maori Trust Board;
- ▶ Ngati Porou and Ngati Kahungunu Wai 262 claimants;
- ▶ Te Runanga o Ati Awa Whakarongotai;
- ▶ Te Ohu O Nga Taonga, Ngati Maru;
- ▶ Te Ohu Kai Moana (Treaty of Waitangi Fisheries Commission);
- ▶ Te Runanga O Ngai Tahu and the Ngai Tahu Law Centre;
- ▶ Huakina Development Trust; and
- ▶ Ngati Te Whiti Hapu Society, Inc.

Most of these submissions supported the general purpose of the draft strategy, especially the focus on sustainable use of biological resources. However, many of the submissions from Maori commented on the lack of consultation in preparing the draft strategy, the need to better incorporate the principles of the Treaty of Waitangi, and to better provide for Maori management and control over flora and fauna as a Treaty

131. *ibid*, p 91

132. Tonkin and Taylor Ltd, *Department of Conservation, Draft Biodiversity Strategy, Summary of Submissions*, Report prepared for Department of Conservation, June 1999

133. *ibid*, p 1

partner. Regarding participation of Maori in the preparation of the draft strategy, Ngai Tahu stated that there 'is scant recognition of the Crown's Treaty obligations contained in the draft strategy and any recognition given is compartmentalised. This in part reflects the poor process of consultation undertaken with iwi prior to the preparation of the draft strategy.'<sup>134</sup> The Tuwharetoa Trust Board also said that the 'timeframe for consultation with Tuwharetoa and Maori regarding biodiversity has been grossly inadequate. The draft strategy has been developed without consultation with iwi or hapu.'<sup>135</sup> These concerns were also stated in the submission by Te Runanga o Ati Awa ki Whakarongotai. The Maori submissions generally considered that this poor consultation process had resulted in a draft strategy that did not reflect the Treaty of Waitangi partnership between Maori and the Crown, and that reference to the Treaty and Maori interests was lacking in both the draft vision statement, goals, and principles. Te Runanga o Ati Awa ki Whakarongotai stated:

The strategy is a *tino* Crown document redolent with the involvement of the multitude of government departments and ministries and yet tangata whenua are, to all intents and purposes, invisible. It has no Treaty partnership base and has made no attempt to seek one. We assert that the basis for partnership on this strategy and any resulting plans or National Policy Statement must be the Treaty contract (Maori language version) . . . We do not support the vision as written in the strategy. The vision must be Treaty based. It must provide for the conservation, sustainable use and equitable benefit sharing (this basic premise of the Convention is not even mentioned in the vision) of native species and ecosystems. It should not include 'production species.' The vision should include a statement about conserving and sustaining indigenous biodiversity in a manner that honours the Treaty of Waitangi (*kia whakamanangia Te Tiriti o Waitangi*).<sup>136</sup>

To some groups who made submissions, a biodiversity strategy that was not Treaty-based was a threat to the management and control of flora and fauna by iwi. For example, Tuwharetoa stated that 'the development of goals and policies within the draft strategy which seek to remove the rangatiratanga and manawhenua of taonga away from Tuwharetoa will not be tolerated.'<sup>137</sup> Some of the Maori submissions held that rangatiratanga included the right of sustainable use and harvest of

<sup>134</sup>. 'Submission by Te Runanga o Ngai Tahu on New Zealand Draft Biodiversity Strategy' CBD0403, DOC, Wellington

<sup>135</sup>. 'Tuwharetoa Maori Trust Board Submission to the Draft Strategy for New Zealand's Biodiversity Strategy, 16 April 1999', CBD0403, DOC, Wellington

<sup>136</sup>. 'Kapakapanui in partnership with Papatuanuku, New Zealand's Draft Biodiversity Strategy, A Submission, 16 April 1999' CBD0403, DOC, Wellington (Emphasis in original)

<sup>137</sup>. 'Tuwharetoa Maori Trust Board Submission to the Draft Strategy for New Zealand's Biodiversity Strategy, 16 April 1999', CBD0403, DOC, Wellington

indigenous species. The submission from Te Ao Marama Incorporated stated that in the past many bird species and materials were sustainably harvested, but that such harvests are now limited to the titi (muttonbirds) and a small amount of cultural materials. Te Ao Marama asserted that 'the strategy makes no provision for sustainable cultural harvest of materials or species. There is some mention that it does occur but it needs to be addressed more fully. This is guaranteed under Article II of the Treaty and should be acknowledged.'<sup>138</sup> Ngai Tahu supported the aim of sustainable use contained in the draft strategy, but noted that 'within the Conservation Act 1987 and the Wildlife Act 1953 . . . preservation rather than sustainable use is still predominately the guiding philosophy.'<sup>139</sup>

In order to better develop a partnership relationship between Maori and the Crown relating to management and control of biodiversity, Maori submissions emphasised that Maori needed to have a greater role in implementing the strategy. The Hauraki Maori Trust Board submission noted that only 28 percent of the 115 actions in the draft strategy had included Maori as key players. On this basis, the trust board considered that 'decision making is clearly kept within the domain of central and local government.' For example, the trust board noted, Maori are excluded from playing a key role in actions such as reviewing the DOC threatened species priority system, implementing recovery plans for high priority threatened species, developing a policy on access to New Zealand's indigenous genetic resources, and supporting in-situ conservation of rare and endangered introduced species.<sup>140</sup> The submission by counsel for the Ngati Kahungunu and Ngati Porou Wai 262 claimants also emphasised the need for a more 'strategic, meaningful and effective role for iwi and hapu in all areas of biodiversity research, management, conservation, preservation and protection.' The submission also asserted the need to protect matauranga Maori from inappropriate use and expropriation, the 'right' of Maori to 'share in any benefits resulting from the use of that knowledge' and 'to maintain their ability to benefit commercially from their knowledge if they so wish.'<sup>141</sup> In addition, the submission on behalf of the Wai 262 claimants called for the need to develop 'effective and appropriate representation of Maori concerns about biodiversity' at 'local, regional, national and international levels.'<sup>142</sup> This would require financial and administrative resourcing so Maori could continue to contribute towards international dialogue, and participate in international treaty making:

138. 'Submission on the Draft Biodiversity Strategy, Te Ao Marama Incorporated.' CBD0403, DOC, Wellington.

139. 'Submission by Te Runanga o Ngai Tahu on New Zealand Draft Biodiversity Strategy' CBD0403, DOC, Wellington

140. 'Hauraki Maori Trust Board Submission on the New Zealand Biodiversity Strategy, 27 April 1999,' CBD0403, DOC, Wellington

141. 'Submission on Draft New Zealand Biodiversity Strategy', Rudd Watts and Stone for Ngati Kahungunu and Ngati Porou Wai 262 claimants, 22 April 1999, CBD0403, DOC, Wellington

142. *ibid*

In terms of ‘intellectual property issues’ being ‘subject to a number of international treaties’ . . . the impacts of such treaties, conventions, patent systems and other intellectual property instruments on Maori rangatiratanga is a major issue for the claimants. Such instruments generally serve to dilute their rangatiratanga. Therefore, the claimants perceive the Crown action of ratifying, becoming a signatory to, or otherwise incorporating such instruments (and the obligations contained therein) into domestic law, without consultation with Maori, as a Treaty breach.<sup>143</sup>

On this basis it was argued that Maori should become key players in the development of international policy and ‘be afforded the opportunity to have a direct voice at the negotiating table rather than having agreements and conventions negotiated on their behalf regarding matters of high significance to them (i.e. regarding conservation of indigenous biodiversity).<sup>144</sup>

Similar concerns and opinions, outlined in these submissions, were presented to DOC and the MFE during the national consultation hui held at Hopuhopu on 7 April 1999, and at four regional hui held in Christchurch, Waikanae, Rotorua, and Auckland.<sup>145</sup> Participants at the Hopuhopu hui were in agreement that the draft strategy had been developed without iwi input or consultation, and that it was not consistent with the Treaty of Waitangi. It was also agreed that rights and access to biodiversity needed to be addressed and that the ‘Wai 262 Claim to the Waitangi Tribunal should be heard and reported on prior to the development of the New Zealand Biodiversity Strategy.’<sup>146</sup> The main resolution of the hui was that the ‘strategy be reconsidered from the perspective of the Treaty and that a Treaty framework be established in the process.’<sup>147</sup> The key issues of concern to Maori raised in the submissions and at the consultative hui were briefly summarised by DOC as follows:

- ▶ the draft strategy lacks a true ‘Treaty framework’;
- ▶ a Maori perspective needs to be better reflected in all parts of the strategy – at a minimum, the current theme on Maori and biodiversity needs to be shifted to the front of the strategy;
- ▶ there should be a separate goal addressing iwi interests in biodiversity;

143. *ibid*

144. *ibid*

145. Some Maori also participated in the 16 regional workshops held around the country between February and April 1999. Maori attendance at these workshops was significant in Northland, Bay of Plenty, and East Coast, CBDO403, DOC, Wellington

146. Hui Taumata, Hopuhopu 7 April 1999, summary of hui, DOC file note, CBDO403, DOC, Wellington

147. *ibid*

- ▶ as key players in implementing the strategy, iwi need to be better resourced;
- ▶ access and rights to indigenous resources need to be addressed;
- ▶ the Wai 262 claim should influence the development of the biodiversity strategy;
- ▶ all aspects of Article 8(j) of the Convention on Biological Diversity should be addressed in the strategy; and
- ▶ co-management should be the driving principle of iwi partnerships in biodiversity management.<sup>148</sup>

#### 9.4.4 Final biodiversity strategy for New Zealand

The MFE and DOC working group revised the strategy in light of the feedback received at the hui, public meetings and submissions. After the Labour–Alliance Coalition Government came to power in 1999, the strategy was finally approved by Cabinet for release on 3 February 2000.

The final strategy puts more emphasis on Maori interests than the draft strategy. Key statements about Maori interests in biodiversity are included in the vision, goals and principles; and a separate theme chapter on Maori and biodiversity was added. Both the vision and goals are translated into Maori.<sup>149</sup> The vision of the strategy is:

- ▶ New Zealanders value and better understand biodiversity;
- ▶ We all work together to protect, sustain and restore our biodiversity, and enjoy and share in its benefits, as the foundation of a sustainable economy and society;
- ▶ Iwi and hapu as kaitiaki are active partners in managing biodiversity;
- ▶ The full range of New Zealand’s indigenous ecosystems and species thrive from the mountains to the ocean depths; and
- ▶ The genetic resources of our important introduced species are secure, and in turn support our indigenous biodiversity.<sup>150</sup>

This vision is to be realised through the achievement of the goals shown on the next page.

The final strategy contains 13 principles, one of which concerns the Treaty of Waitangi. This principle states that ‘the special relationship between the Crown and Maori as reflected in the Treaty of Waitangi should be recognised and provided for in the conservation and sustainable use of biodiversity, including kaitiakitanga, customary use, and matauranga Maori.’<sup>151</sup> Other principles include governance, collective

148. A Response to the Hui Taumata: Integrating a Treaty Framework in the New Zealand Biodiversity Strategy, DOC memo, April 1999, CBD0403, DOC, Wellington

149. DOC, MFE, *The New Zealand Biodiversity Strategy, Our Chance to Turn the Tide Whakakohukihukitia Te Tai Roroku Ki Te Tai Oranga*, Wellington, DOC, MFE, February 2000

150. *ibid*, p 16

151. *ibid*, p 24

---

**Goals of the New Zealand biodiversity strategy**


---

*Goal One: Community and individual action, responsibility and benefits*

Enhance community and individual understanding about biodiversity and inform, motivate and support widespread and coordinated community action to conserve and sustainably use biodiversity; and

Enable communities and individuals to equitably share responsibility for, and benefits from, conserving and sustainably using New Zealand's biodiversity, including the benefits from the use of indigenous genetic resources.

*Goal Two: Treaty of Waitangi*

Actively protect iwi and hapu interests in indigenous biodiversity, and build and strengthen partnerships between government agencies and iwi and hapu in conserving and sustainably using indigenous biodiversity.

*Goal Three: Halt the decline in New Zealand's indigenous biodiversity*

Maintain and restore a full range of remaining natural habitats and ecosystems to a healthy functioning state, enhance critically scarce habitats, and sustain the more modified ecosystems in production and urban environments; and do what else is necessary to

Maintain and restore viable populations of all indigenous species and subspecies across their natural range and maintain their genetic diversity.

*Goal Four: Genetic resources of introduced species*

Maintain the genetic resources of introduced species that are important for economic, biological and cultural reasons by conserving their genetic diversity.<sup>152</sup>

---

and ethical responsibilities, working together, respect for property rights, and indigenous biodiversity priorities.

A new chapter on Maori and biodiversity was included in the final strategy in response to feedback on the draft strategy. This chapter focuses on the desired outcome that by 2020, the 'relationship that Maori have with New Zealand's indigenous biodiversity, as tangata whenua, is recognised and valued in the process of conserving and sustainably using biodiversity.'<sup>153</sup> The chapter lists five key objectives regarding Maori and biodiversity. These objectives include the development of partnerships between Maori and Crown agencies, recognition and respect of matauranga Maori, the development of Crown Treaty settlements, recognition of Maori interests and involvement in Government-funded scientific research, and recognition and provision for Maori customary

152. *ibid*, pp 17–18

153. *ibid*, p 93

use of indigenous species.<sup>154</sup> The first objective emphasises encouraging iwi and hapu participation in the management of biodiversity by using partnership arrangements and the recognition of iwi and hapu resource management plans. These partnerships are to be developed with respect to the management of specific habitats and species at the regional and local level.<sup>155</sup> The main action arising from the matauranga Maori objective is to be the development of a ‘framework for the retention and promotion of matauranga Maori and its use in biodiversity management.’ The strategy states that the framework will be developed by working with Maori knowledge specialists. Another action acknowledges the role of Maori as kaitiaki in biodiversity, and envisages increased Maori participation in the ‘cooperative management of the public conservation estate, and in local authority resource management processes.’<sup>156</sup> The science and research actions aim to develop a ‘process for incorporating Maori biodiversity research into priority setting for research,’ and to encourage partnerships between science providers and Maori.<sup>157</sup> The main action relating to customary use is to:

Develop and implement policy to address outstanding issues relating to the sustainable Maori customary use of native species based on the New Zealand Conservation Authority’s work in this area, including policy that encourages iwi to provide sufficient habitat for native species to establish conditions that allow customary use of those species.<sup>158</sup>

Another action point is that DOC will ‘work with Maori to facilitate access to traditional materials.’ This may involve developing alternative materials and sources, and sustainable harvesting techniques.<sup>159</sup>

Some other key actions included in the strategy are:

- ▶ expansion of public conservation lands covering those habitats and ecosystems that are not currently represented within the existing protected area network, and that are at significant risk of irreversible decline, and where public ownership is needed for effective management;
- ▶ preparation of a national policy statement on managing indigenous biodiversity under the RMA;
- ▶ expansion of habitat and ecosystem restoration programmes, including offshore islands, mainland islands, and kiwi sanctuary zones;

154. *ibid*, pp 96–98

155. *ibid*, p 96

156. *ibid*

157. *ibid*, p 97

158. *ibid*, p 98

159. *ibid*

- ▶ increase planned species recovery actions to cover threatened indigenous species;
- ▶ review the Wildlife Act and Native Plant Protection Act;
- ▶ progressively protect priority representative freshwater habitats (including a review of the available protection mechanisms for freshwater biodiversity);
- ▶ review the 1986 Wetlands Policy, and 1986 Geothermal Policy;
- ▶ achieve a target of protecting 10 percent of New Zealand's marine environment by 2010 in view of establishing a network of representative protected marine areas;
- ▶ review the Marine Reserves Act 1971;
- ▶ extend the threatened species priority setting system to include coastal and marine species;
- ▶ develop a collaborative strategy to manage New Zealand's genetic resources, especially those in ex-situ collections;
- ▶ develop a policy and legislative framework for managing bioprospecting, including arrangements for sharing benefits from the use of genetic resources;
- ▶ resolve Treaty of Waitangi claims to ownership of biological resources; and
- ▶ provide for Maori interests in genetic resources, and concerns relating to the patenting of lifeforms, to be taken into account during the current review of the Patents Act 1953.<sup>160</sup>

In June 2000, the Government released a funding package for the implementation of the strategy. This funding, amounting to an extra \$187 million over the next five years, focuses on increasing and maintaining the extent of biodiversity in terrestrial and freshwater ecosystems, especially on private land; improving weed and pest control; developing marine biodiversity protection and management; and enhancing biosecurity capability. A total of \$2.35 million has been allocated to increase iwi and hapu participation in managing biodiversity 'in ways that are consistent with customary knowledge (Matauranga Maori) with the knowledge remaining the property of the particular iwi or hapu.'<sup>161</sup> Increased funding has also been allocated to the Nature Heritage Fund, Nga Whenua Rahui, and the QEII National Trust. This funding aims, in part, to contribute towards the protection of biodiversity on Maori-owned land.

<sup>160.</sup> *ibid*, pp 28–114

<sup>161.</sup> DOC, MFE, *The New Biodiversity strategy, Funding Package, 2000–2005*, Wellington, DOC, MFE, June 2000

Since the release of the draft strategy, a parallel initiative has been undertaken with regard to issues surrounding biodiversity on private land. A Ministerial Advisory Committee was appointed in early 1999 with the brief to develop an 'agreed set of proposals that would lead to effective and sustainable management of biodiversity outside the conservation estate.'<sup>162</sup> This committee, chaired by John Kneebone, was asked to provide preliminary advice to the Minister for the Environment by 15 September 1999 on the content of a possible national policy statement. This advice, published in February 2000, includes the recommendation that a national policy statement is prepared under the RMA, and that a national accord between the key stakeholders be developed. Seven principles have guided these recommendations and the overall approach of the committee. The principles include the acknowledgement that 'sustaining biodiversity affected by private land management relies on the *individual commitment* of landowners' and that 'Maori have a *distinct relationship* to biodiversity.'<sup>163</sup> A public consultation round was held in relation to the Ministerial Advisory Committee's report and it is understood that a final report to Cabinet is being prepared. No further research on this has been undertaken by the present authors.

## 9.5 CONCLUSIONS

This chapter has reviewed the key policy initiatives undertaken by the Crown since 1992 in relation to the management of flora and fauna. This brief review has shown that such initiatives have been influenced by international environmental conventions and declarations, especially Agenda 21 and the Convention on Biological Diversity. Also of influence was the 1996 OECD review of New Zealand's environmental policies. Both the OECD review and international environmental law has supported the current legislative framework (RMA, Conservation Act, Forests Amendment Act, HSNO Act, Biosecurity Act), and encouraged the development of new policy. The new policy has tended to focus government attention on six key areas:

1. the protection of biodiversity outside protected areas;
2. the protection and sustainable use of biodiversity in the marine environment;

<sup>162</sup> MFE, *Bio-What? Addressing the Effects of Private Land Management on Indigenous Biodiversity*, Wellington, MFE, February 2000, p 7

<sup>163</sup> *ibid*, p iii (emphasis in original)

3. the development of integrated risk assessment procedures relating to new organisms;
4. the development of better pest and weed control strategies;
5. the development of better environmental knowledge and monitoring systems; and
6. the greater protection and provision for Maori interests in biodiversity.

These six key areas make up the substance of the new policies contained in the Environment 2010 strategy, the Sustainable Land Management strategy, the National Environmental Indicators Programme, and the New Zealand Biodiversity Strategy. It seems likely that these new policies will herald the development of a new wave of legislative initiatives or modifications of the current laws. For example, the development of a national policy statement on biodiversity may alter and guide local authority regulations relating to biodiversity, and the proposed forthcoming review of the Wildlife Act 1953 may change the way DOC manages indigenous flora and fauna.

The New Zealand Biodiversity Strategy, in particular, illustrates that the Crown's policy towards Maori interests in biodiversity has been refocused on establishing partnerships relating to the management of particular conservation areas and species. The use of Treaty settlements may become an important way of creating these partnerships. The New Zealand Biodiversity Strategy suggests that the Crown is willing to aim towards the goal that the management of New Zealand's flora and fauna will involve both the Crown and Maori working together or co-management. On this basis, it could develop that more plans and policy statements regarding conservation areas and species will be prepared by both the Crown and Maori, rather than the current status quo of Maori being treated as one of many stakeholders and only afforded opportunities to make submissions and participate in consultative hui. Less guidance is provided by the emerging policy framework on how Maori participation in biodiversity policy is provided for at the national or international level. Clearly this issue also requires Maori themselves to consider how they can best have input into policies at a national level, and who or what organisation could represent Maori in international fora.

Despite the apparent failure to consult Maori in the Environment 2010 Strategy, and consultation problems in relation to the other initiatives, it seems recent Crown policy on flora and fauna is making some progress

in acknowledging the importance of Maori interests and knowledge, and that the Crown is going to make an effort at establishing workable partnerships in order to facilitate the sustainable use of biodiversity, and make provision for Maori management and control over biodiversity. As indicated in the Maori submissions on the New Zealand Biodiversity Strategy, many Maori organisations support the sustainable use goals of international conventions such as the Convention on Biological Diversity. While this common ground gives some hope, progress in the sustainable use and management of New Zealand's biodiversity will depend on how these strategies and other initiatives are implemented by successive New Zealand governments.

