



Section 1

Introduction

1.1 Project origins - how it began

Why has the Parliamentary Commissioner for the Environment (PCE) decided to explore the future roles, place and value of native plants on private land, particularly given the recent Biodiversity Strategy, the examination by a Ministerial Advisory Committee of the contribution private lands can make to biodiversity, and the sterling work of several agencies and trusts to protect land by Crown ownership or private covenant?

Native plants have spent 80 million years adapting to Aotearoa and are a key - if not the key - to maintaining the ecological health of New Zealand's lands and waters, which underpin New Zealand's social and economic well-being. To help support this outcome native plants have to be deeply rewoven back into the 70% of lands now held in private ownership and mostly dominated by exotic plant species. To contribute to the ecological sustainability of all lands, this reweaving cannot just occur in the form of reserves or protected areas, but must be an integral part of New Zealand's working landscapes and the biotic businesses of agriculture, horticulture, and forestry.

The Ministerial Advisory Committee (MAC) on Biodiversity and Private Land has extensively examined an ecosystem services component of conservation (biodiversity), and the protection of indigenous vegetation on private lands. However, MAC considered the issue of sustainable use of indigenous biodiversity (defined in this context as some form of extractive use) as beyond its terms of reference. Of note is its argument for the need "to hasten the transition from exploitative to sustainable land use".¹

There are three strategic dimensions to the PCE's focus on native plants on private lands. The first is that New Zealand is highly dependent on biotic industries of agriculture, horticulture, forestry and

fishing. The viability of New Zealand as a nation is dependent on the sustainability of our land use ecologies.

World wide experience has shown that all attempts to manage ecological variables (to farm, grow fruit, harvest trees etc) have led to less resilient ecosystems, systems that are more prone to pest attack, and loss of nutrients, and erosion. Ecological systems with greater diversity are more resilient in a wide range of uses.² Most New Zealand land uses (with the exception of conservation and indigenous forestry) do not draw on the ecological resilience that could be gained from having a higher proportion of native plants in the environment as a practical functional part of production landscapes.

As a trading nation, it can be argued that New Zealand's future can be characterised as pampering the palates and the passions of the world's more financially prosperous. Whatever we do to earn our way as a nation - be it goods derived from agriculture, horticulture, forestry or fishing, or knowledge and other services from technological developments, the arts or tourism - we will need to meet the wants of the world's more affluent and more discerning. In global markets, ecological sustainability is a component of economic value for land and marine industries, tourism businesses and others who wish to strongly identify their product as from and of New Zealand. Delivering on these emerging market expectations will be, and is already, a tough task. It is essential that we fully understand these expectations, and address them, to ensure that we can truly substantiate and continue to promote New Zealand's 'clean, green' image.

The second dimension is that New Zealanders are becoming increasingly passionate about the ecological health of the Gondwanan³ remnant we call home. Over the last three decades there has been a rapidly increasing focus on the impacts that land uses have on soil and water qualities, and on reversing the loss of indigenous ecosystems and protecting native species. The

people of New Zealand are, in diverse ways, placing greater 'values' (as distinct from value) on indigenous natural heritage. An example of this 'greater value' is that it is generally accepted that the New Zealand Biodiversity Strategy and the subsequent initiatives should focus only on indigenous biodiversity rather than biodiversity *per se*.⁴

The third dimension is the legislative and institutional framework for planning and management of land use in New Zealand. There are two major strands to our efforts to improve ecological sustainability. One strand focuses on the sustainable management of a whole variety of land uses (e.g. Resource Management Act 1991, Biosecurity Act 1993, and Forests Amendment Act 1993).⁵ The other strand focuses on protection and preservation of indigenous flora and fauna and thus primarily, though not exclusively, on the ongoing provision of ecosystem services⁶ such as biodiversity (e.g. Conservation Act 1987). To date the legislative and policy thrust of these two streams of sustainability effort has tended to be parallel rather than integrated. This led the PCE, in his 1997 strategic plan, to identify as a critical issue "how to address conservation of natural resources on private land".⁷

This discussion paper explores the opportunities and barriers to the expansion of native plants on private lands, in the belief that their expansion and appropriate management are essential to improve the ecological sustainability of all land uses, and hence the economic viability of the biotic industries of New Zealand. In addition, reintroducing native plants into these landscapes will play a role in strengthening New Zealand's 'sense of place'.

As is already evident, sustaining and expanding New Zealand's native plant cover are major challenges. Making substantive progress in the coming decades will require some innovative thinking and actions.



1.2 PCE role & mandate

Role of PCE

The Environment Act 1986 empowers the PCE to, among other matters, “investigate any matter in respect of which, in the Commissioner’s opinion, the environment may be or has been adversely affected”.⁸

Mandate of PCE

During a 1999 Strategic Plan update, stakeholders examined the most effective ways that the PCE could operate, and recommended expansion of three roles: that of “pathfinder” identifying unexplained issues; “catalyst” to stimulate debate and identify where there are gaps; and that of “environmental defender” or public voice to ensure that environmental management and sustainability issues are kept to the forefront of debate and discussion.⁹

The future of native plants on private land is clearly covered by the Environment Act 1986¹⁰ - our indigenous vegetation is a very important component of the ecological health of New Zealand. In addition, these issues fall within the three PCE roles specifically identified, clearly warranting application of the pathfinder, catalyst and defender roles.

1.3 Objectives

The task of this discussion paper is to articulate the issues around the potential role of native plants to contribute to the sustainability of land uses and to the unique sense of place of New Zealand’s landscapes. The aim is to expand and enhance the dialogue about what New Zealand wants from, and how we should use indigenous plants and ecosystems. This dialogue needs to stimulate thinking about the tensions surrounding the current ‘acceptable use’ and potential uses of indigenous species, and how New Zealand might develop and determine ecologically sustainable uses. These issues need to be considered in the context of current land use trends, particularly more intensive agriculture, and the significance of

global climate change.

This paper is an exercise in stimulating futures thinking, endeavouring to foster creative ideas about land use scenarios 50 - 100 years from now. Current environmental, trade and tourism initiatives suggest that both New Zealanders and our overseas visitors and customers are increasingly putting higher value on ecosystem services and ecological health.¹¹ Increasingly, mechanisms will be developed to better incorporate at least some of these values into mainstream economic systems. For New Zealand, this suggests much greater opportunity to enhance the contribution of native plant species to our ecological, economic and social well-being (see Figure 1).

This discussion paper therefore offers perspectives that are complementary to but wider than those generating the current debates on biodiversity enhancement. More importantly, the hope is that it will provide a basis for crafting a more holistic view of the place, and values, of native plants on New Zealand’s private lands - urban, peri-urban and rural.

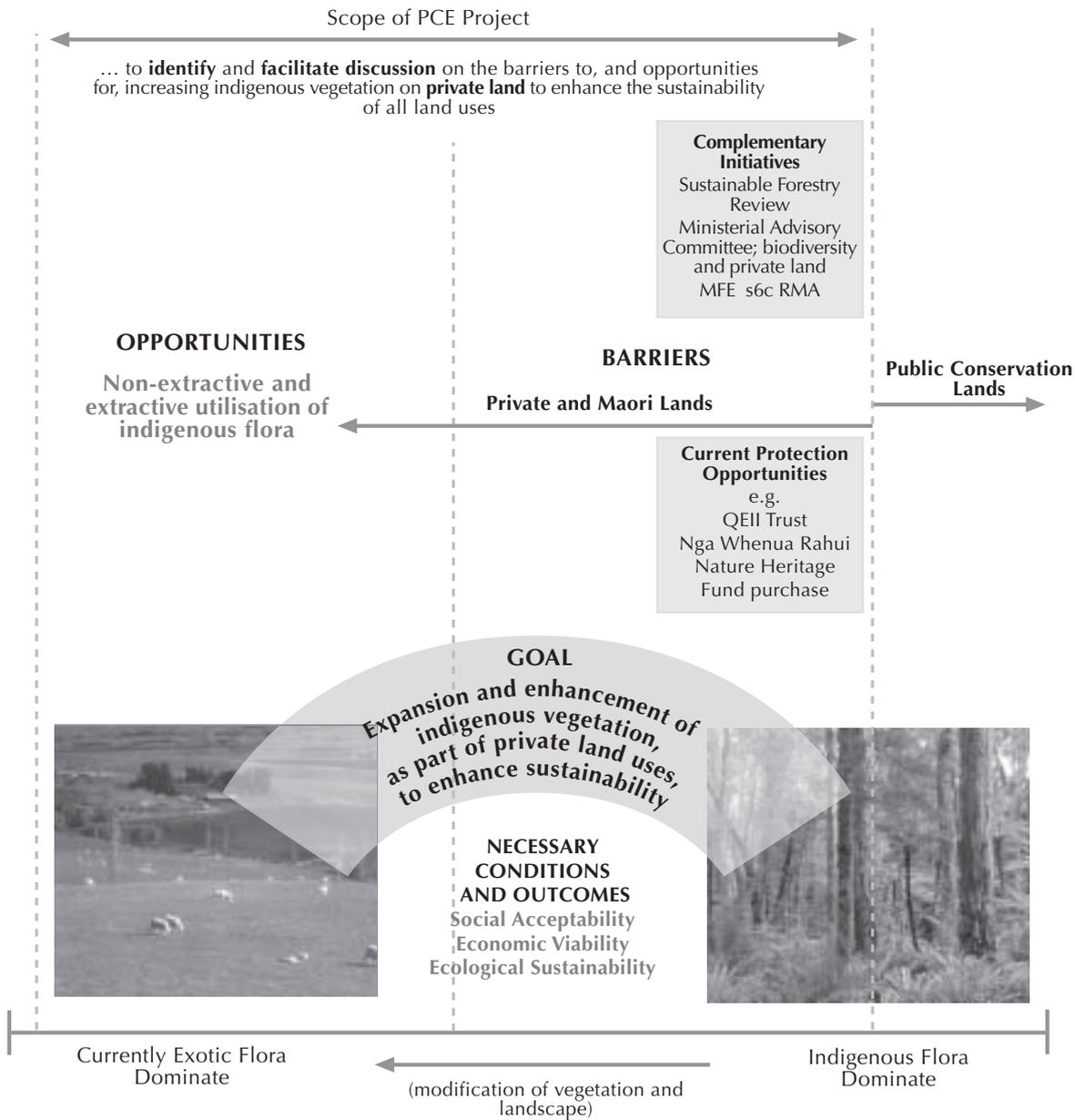
1.4 Outline of the project

Given the complexity of the issues, and the need for wide input from interested groups and stakeholders, the PCE decided to undertake the project in three stages:

Phase 1

The preparation of this discussion paper included a series of interviews with individuals and organisations involved with native plants on private land. Interviews were held with people representing rural landowners, environmental groups, business and local government groups, regional and local councils, Government Departments, Māori land managers, academics, and Crown Research Institutes. The interviews for this phase were not intended to be a fully comprehensive consultation process, and it was beyond the scope of this part of the exercise to

Figure 1 Schematic diagram of PCE project: Weaving Resilience into our Working Lands



Source: PCE 2001

canvass all the individuals and groups active in this area. The intention has been to identify the range of viewpoints, and the major issues and concerns surrounding the future roles of native plants on private land. Research was also undertaken through the available reference material and commentary on these issues, both in New Zealand and internationally.

To assist the PCE with the development of this discussion paper, a reference group was formed

consisting of people from a diversity of backgrounds, including ecologists, landowners, Māori and experts in landscape and environmental advocacy. Membership of the reference group is listed on the inside cover of this publication.

The paper is intended for a wide range of audiences including secondary schools, universities, public agencies, and community and business interests. A glossary at the back defines

terms used (including acronyms) and endnotes have been included throughout for references and additional explanation. The aim is a comprehensible text for all readers and we would welcome feedback on our approach as well as on the topic.

Phase 2

The release of this discussion paper provides an opportunity for input, via submissions, by a wide range of New Zealanders. These submissions will then be summarised in a further report. If appropriate the submissions may also be used, as a basis for developing a recommendatory report.

Phase 3

After the summary is completed, options will be considered on the most appropriate and effective means by which the PCE and/or other agencies or groups might advance the priority issues. Possible ways of moving forward might include more targeted studies to address particular aspects of management or policy for indigenous biodiversity on private lands, or processes of dialogue and interaction between the various stakeholders.

1.5 Structure of this paper

It is intended that this paper be read in two parts. The first part comprises sections 2, 3 and 4.

Section 2 is a condensation of the scope of the dialogue and the debates surrounding the issue of native plants on private land. Section 3 outlines the barriers and opportunities to the expansion of native plants on private land. Section 4 provides an invitation to provide comment on the fundamental question “what are the future roles of native plants on private land?”

Section 5 extends the discussion of many of the issues in section 2 and is an additional resource that can be dipped into if expansion, clarification or further information of the issues in section 2 is required. It is hoped that this section will be both useful and interesting to the reader.

1.6 Other relevant PCE investigations

The PCE is also currently undertaking an investigation into the adequacy of the system of agencies and processes, at both the Government and local government levels, which have responsibility for promoting the sustainable development of peri-urban areas.¹²

Such areas form a transition from strictly rural to strictly urban. They are often subject to development pressures and may result in a change of land uses from rural to urban.

In some cases peri-urban pressures will have an impact on indigenous biodiversity and raise questions about the appropriate ‘use’ of native plants in these places. The issues concerning land use in the Waitakere Ranges are a prime example of these types of pressures.

The peri-urban report is due to be released during mid July 2001.

1.7 What this discussion document does NOT do

This discussion paper does NOT specifically address the following issues:

- The management of native plants and ecosystems on public lands managed by the Department of Conservation and local authorities;
- The management of native fauna - although it is recognised that native plants and ecosystems are critically important for habitat for these species;
- Specific local government policies, performance and approach in the initiatives and processes for Significant Natural Areas (SNAs) under the Resource Management Act (RMA); and
- Any land uses or roles for native plants that are not ecologically sustainable.

During the many discussions that contributed to the development of this paper it was evident that some stakeholders considered that this initiative was endeavouring to reopen the debates that took

place at the time the Government decided to terminate Timberlands West Coast Ltd's beech forest logging proposals and associated other cutting rights. That decision did not warrant reviewing, given that it was principally a landowner (the Crown) making a land use change from a management regime that included an extractive use to a regime that is focused on conservation use. At the time, the PCE received requests to examine the decision and declined to do so.

However, in considering these requests the PCE did note that elements of the debate surrounding the decision indicated a number of unresolved tensions about what constitutes 'use' of indigenous flora, including: whether any uses involving extraction can be ecologically sustainable; and what assemblages of indigenous flora, under what management, can contribute to the enhancement of indigenous biodiversity. The debates about such issues were very passionate, as appropriate, given their importance. However, neither the defenders of extraction, nor those who saw the need to add such forests to our public conservation lands, sufficiently expanded public understanding of the far more complex issues associated with the management approaches for native vegetation in New Zealand.

¹ MAC 2000, pp 31 & 75.

² DEST 1993.

³ Gondwana - original southern supercontinent from which New Zealand separated 80 million years ago.

⁴ DOC and MFE 2000, p 8.

⁵ Land uses: Housing, industry, roading, gardening, crop, animal and fruit production, water management, tree products production, tourism, recreation, conservation.

⁶ Ecosystem services: maintenance of biodiversity, water catchment and purification, waste decomposition, carbon sequestration, nitrogen fixation, weed suppression, soil generation and protection, pollination, nutrient cycling, existence values.

⁷ PCE 1997, p 26.

⁸ Environment Act 1986 s16(c)(i).

⁹ PCE 1999a.

¹⁰ Environment Act 1986 s17(a).

¹¹ Buwalda 1997.

¹² PCE 2001.