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SUSTAINABLE DEVELOPMENT -SHOULD WE INVITE IT HOME?

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ABSTRACT

Sustainable development (SD) is internationally acclaimed as the saving principle for our future on Earth. The object of this paper is to critically analyse the concept of SD. To explore whether New Zealand has implemented legislation in accordance with SD, the concept is compared with sustainable management (SM) as enacted in the Resource Management Act 1991.

This paper argues SD and SM are fundamentally incompatible. SD is anthropocentric in approach, and seeks to achieve good social and economic outcomes. The environment is valued only to the extent that it can sustain further growth and development, and is continually transformed to serve human ends.

SM is ecocentric in approach and seeks to secure good environmental outcomes. Environmental integrity is the overriding concern, and social and economic outcomes are of secondary importance. Development is neither promoted or denied, but must not trade off environmental integrity.

Pursuit of SD is fraught with dangers. SD is an overdefined and ambiguous concept. It may be scientifically unsound, and denigrates social and cultural diversity. Endorsement of economic growth obscures true human needs. The writer is not convinced that SD will ensure sustainability on Earth. What is required is a recognition of the value of nature, and a reassessment of the true determinants of quality of life. The future is in our hands.

Word Length

The text of this paper (excluding contents page, footnotes, bibliography and annexures) comprises approximately 9,080 words.

I INTRODUCTION

Sustainable development (SD) is the environmental catchphrase of our time. It is the theme of myriad conferences and papers, and the slogan of environmental and developmental activists alike. The popularity of SD is readily understandable - it engenders optimism for a future that is "more prosperous, more just and more secure,"¹ in a world blighted by poverty, instability and environmental degradation. SD reconciles economic and environmental agendas, and is internationally acclaimed as the saving principle for our future.

This paper traces the evolution of SD from the Stockholm Conference 1972 to the Rio Declaration 1992.² The Rio Declaration is the most recent global endorsement of SD. It was intended to be an Earth Charter to guide states in the implementation of SD. The Declaration indicates what SD has come to mean today.

The Rio Declaration requires individual states to enact effective environmental legislation.³ This paper explores whether New Zealand has implemented environmental legislation in accordance with SD. This entails analysis of the definition of sustainable management (SM) enacted in the Resource Management Act 1991. Differences in the scope and relevant spheres of SD and SM are readily apparent. This paper suggests differences between the two concepts are even more pervasive. SD and SM are fundamentally incompatible.

Deficiencies and dangers inherent in the pursuit of SD are then exposed. SD as currently formulated does not guarantee environmental security. The paper concludes a fundamental reconsideration of our goals and values is essential. The sustainability of our environment is dependent upon our will to change.

¹ World Commission on Environment and Development *Our Common Future* (Oxford University Press, Oxford, 1987) 1 - the Brundtland Report.

 $^{^2}$ The Rio Declaration is a statement of principles to guide states in the implementation of SD. It was one of the outputs of the United Nations Conference on Environment and Development held in Rio de Janeiro, June 1992.

³ Principle 11.

II SUSTAINABLE DEVELOPMENT

A The Evolution of Sustainable Development

1 The Stockholm Declaration

Before 1972, comparatively few international agreements concerned the environment.⁴ The first global conference on the environment was held in 1972 at Stockholm.⁵ The Stockholm Conference is considered a landmark in the development of global environmental concern. The Conference adopted the Stockholm Declaration on the Human Environment.⁶ The Declaration attempts to establish basic rules of international environmental law. Several of its principles are reiterated 20 years later in the Rio Declaration.

The preamble to the Stockholm Declaration maintains "[o]f all things in the world, people are the most precious." Principle 1 declares humans have a right to "adequate conditions of life in an environment of a quality that permits a life of dignity and well-being," and bear "a solemn responsibility to protect and improve the environment for present and future generations." The environment must be protected and enhanced in order to benefit human beings.

Subsequent principles reiterate the responsibility to protect and improve the environment,⁷ safeguard ecosystems, and maintain resources.⁸ The Stockholm Declaration accords priority to effects on humans, but also exhibits real concern to protect the natural environment.

Environment and development issues are explicitly linked in principle 8. The relationship is one of dependence, not conflict. Environmental quality is dependent on development.

⁴ EB Weiss "Introductory Note" (1992) 31 I.L.M. 814, 814.

⁵ The United Nations Conference on the Human Environment (the Stockholm Conference).

⁶ The Stockholm Declaration on the Human Environment, adopted 16 June 1972 and reprinted at (1972) 11 I.L.M 1416. For a comprehensive analysis of the Stockholm Declaration, see L Sohn "The Stockholm Declaration on the Human Environment" (1973) 14 Harvard Int'l. L.J. 423.

⁷ Principles 13, 14, 19 and 24.

⁸ Principles 2, 4, 5 and 6.

Economic and social development are essential to ensure a favourable environment for humans.

The Declaration drew on existing international principles of state responsibility. States must ensure activities within their jurisdiction or control do not cause damage to the environment of other states, or to areas beyond national limits.⁹ This responsibility is now a well established principle of international law. This limitation aside, the Declaration affirms the sovereign right of states to exploit resources within national jurisdiction.¹⁰ Principle 24 requires that due account be taken of the sovereignty of all states. National sovereignty, an almost "sacred principle"¹¹ of international law, was positively affirmed in the first international declaration on the environment.

2 The World Conservation Strategy

In 1980, the World Conservation Strategy (WCS) was published.¹² The WCS aimed to "advance the achievement of sustainable development through the conservation of living resources."¹³ It imbues SD with an ecological flavour, advocating maintenance of essential ecological processes and life support systems; preservation of genetic diversity; and sustainable utilisation of species and ecosystems.¹⁴ The WCS sought to integrate conservation and development, but its primary emphasis on ecological sustainability was not politically attractive. The WCS was accordingly unable to maintain international prominence.

⁹ Principle 21. The proposition that a state may not use or permit the use of its territory in a manner as to cause damage to the environment of another state is drawn from the *Corfu Channel* case, and the *Trail Smelter* and *Lake Lanoux* arbitrations - see S Bleicher "An Overview of International Environmental Regulation" (1972) 2 Ecology L. Q. 1, 16-30; G Palmer "New Ways to Make International Environmental Law" (1992) 86 American J. of Int'l. L. 259, 265.

¹⁰ Subject to the Charter of the United Nations and principles of international law - principle 21.

¹¹ A Adede "International Environmental Law from Stockholm to Rio" (1992) 22 Envtl. Pol'y & L. 88, 102.

¹² IUCN-UNEP-WWF, World Conservation Strategy (1980).

¹³ Above n 12, preamble.

¹⁴ Above n 12, ch 1.

3 The Brundtland Report

SD was revitalised in 1987 on release of the Brundtland Report.¹⁵ The Brundtland Commission¹⁶ was established to propose long-term strategies for achieving SD. The Commission's mandate was to formulate "a global agenda for change."¹⁷

The Brundtland Report itself was a change from other environmental reports of the time. It did not predict increasing environmental degradation, but presented an optimistic vision for the future. The Report claimed we have "the power to reconcile human affairs with natural laws and to thrive in the process."¹⁸ It defined SD as development that "meets the needs of future generations without compromising the ability of future generations to meet their own needs."¹⁹ This definition refocusses priority on meeting the needs of humans.

The Report stressed the need to integrate economic and ecological issues. While the WCS failed to effectively promote this union, the Brundtland Report was widely acclaimed. The Report's political palatability lay in its endorsement of a "new" era of economic growth. While emphasising the quality of growth must change, the Report claimed economic growth was essential to achieve a more prosperous and secure future for all.²⁰

The Brundtland Report proposed seven national strategic imperatives.²¹ In order to achieve necessary changes in attitudes and institutions, the Commission claimed active follow up to the Report was essential. It called for an international conference to review

¹⁵ Above n 1. The Report has become commonly known as the Brundtland Report after the Commission's Chairperson, Mrs Gro Harlem Brundtland.

¹⁶ The Brundtland Commission, officially the World Commission on Environment and Development, was established in 1983 by resolution 38/161 of the United Nations General Assembly.

¹⁷ Above n 1, foreword ix.

¹⁸ Above n 1, 1.

¹⁹ Above n 1, 8. The Report actually posited at least six other definitions of SD, but this is the most widely accepted definition.

²⁰ Above n 1, 28.

²¹ These were reviving growth; changing the quality of growth; meeting essential needs; ensuring a sustainable level of population; conserving and enhancing the resource base; reorienting technology and managing risk; and merging economics and environment in decision making - above n 1, 49.

progress made, and a charter to guide states in the transition to SD.²² The 1992 United Nations Conference on Environment and Development was convened in response to this call

B The Rio Declaration²³

The United Nations Conference on Environment and Development (the Rio Conference) was held on the 20th anniversary of the Stockholm Conference. The Rio Conference constituted history's greatest gathering of heads of state.²⁴ Representatives from more than 170 countries, including over 110 prime ministers and presidents,²⁵ met to discuss the future of the environment and global implementation of SD.

The Conference adopted the Rio Declaration without a vote.²⁶ The Declaration comprises 27 non-binding principles to guide states in the global implementation of SD.²⁷ Together with Agenda 21,²⁸ the Declaration was intended to launch the world into a new era of economic and environmental responsibility.²⁹

The Rio Declaration exhorts states to implement policies in accordance with SD, but does not define what SD means. The meaning of the concept so enthusiastically endorsed at the Rio Conference must therefore be gleaned from an examination of the Declaration's 27 principles.

²² Above n 1, 332.

²³ "The Rio Declaration on Environment and Development," reprinted at (1992) 31 I.L.M. 874. See Appendix I.

 ²⁴ N Schoon "After the Summit - Fog of Self-Interest Blocks Views from Rio" *Independent on Sunday*,
 London, United Kingdom, 14 June 1992, 12.

²⁵ D Esty "Beyond Rio: Trade and the Environment" (1993) 23 Envt'l. L. 387, 388.

²⁶ Anonymous "Follow up to Rio" (1992) 22 Envtl. Pol'y & L. 302, 310.

²⁷ SD is expressly referred to in 12 of the 27 principles of the Rio Declaration (principles 1, 4, 5, 7, 8, 9, 12, 20, 21, 22, 24, and 27). The concept clearly undergirds the Declaration.

²⁸ Agenda 21 is the environmental action plan for implementing SD - reprinted in *United Nations Conference on Environment and Development* (Ministry of External Relations and Trade and Ministry for the Environment, Wellington, 1992). Other outputs of the Conference were Conventions on Biological Diversity and on Climate Change, and a Statement of Principles on Forests - reprinted at (1992) 31 I.L.M. 818, 848 and 881 respectively.

²⁹ Erik Heinrich "Earth Summit Chief Frets about Follow-up" *Financial Post*, Ontario, Canada, 16 October 1992, 9.

1 The principles of the Rio Declaration

The Rio Declaration commences by reaffirming the Stockholm Declaration.³⁰ It purports to work toward international agreements that "respect the interests of all and protect the integrity of the global environmental and developmental system."³¹ Yet despite the sentimental proclamation of concern for "Earth, our home,"³² pursuit of SD is not driven by an altruistic recognition of environmental integrity. SD is instead propelled by a desire to ensure human development and human survival.

(a) The purpose of sustainable development

The opening principle of the Rio Declaration declares:³³

Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.

This principle identifies the primary reason for promoting SD. Humans are of central importance as SD aims to meet the developmental and environmental needs of all human generations.³⁴

The focus on human needs and potential recurs throughout the Declaration. Eradicating poverty is an indispensable requirement of SD in order to better meet the needs of the majority of people of the world.³⁵ Complementary aims to SD are achieving a higher quality of life, and better future, for all people.³⁶ Human needs and rights are the dominant concern of the Rio Declaration.

The concluding words of principle 1, "in harmony with nature," could qualify the right to a healthy and productive life. Limiting human rights to those in harmony with nature would give prominence to environmental integrity. However, it is submitted this phrase

 $^{^{30}}$ The Rio Declaration is widely seen as the Rio counterpart to the Stockholm Declaration .

³¹ Preamble to the Rio Declaration.

³² Above n 31.

³³ Principle 1.

³⁴ Principle 3.

³⁵ Principle 5.

³⁶ Principles 8 and 21.

suggests a life in harmony with nature is yet another human right.³⁷ Environmental conditions must not frustrate human aspirations.

Asserting the right of all people to a life in harmony with nature imposes limits on present actions. The environment must be protected to ensure this right can be fulfilled for both present and future generations. The rationale for environmental protection is thus to ensure both *intra*generational and *inter*generational equity.³⁸ The environmental and developmental needs of all human generations must be met.

(b) Routes to achieving sustainable development

The Rio Declaration identifies a number of prerequisites to achieving SD. The primary foundations of SD are cooperation, participation, economic growth, and environmental protection.

(i) Cooperation

A recurrent theme in the Declaration is the need for cooperation.³⁹ The stated goal of the Declaration is to establish a "global partnership through the creation of new levels of

³⁷ While this could be seen as approaching a substantive right to environmental integrity, this was sidestepped during preparations for both the Stockholm and Rio Conferences. Direct references to the right to a "safe, healthy and wholesome" environment were ultimately deleted from the Stockholm Declaration. The Brundtland Report had proposed the principle that all humans have a "fundamental right to an environment adequate for their health and well-being" (above n 1, 348). In preparation for the Rio Conference, principle 1 originally stated humans "are entitled to live in a sound environment [in dignity and harmony with nature for which they bear the responsibility for protection and enhancement] (brackets in original text). This was hotly debated at preparatory meetings, and the present principle 1 was enacted instead. At best, the right to environmental quality is indirect in both the Stockholm and Rio Declarations.

³⁸ EB Weiss defines *intra*generational duties as those owed to members of the same generation, while *inter*generational duties are those owed by each generation to its successors - see "The Planetary Trust: Conservation and Intergenerational Equity" (1984) 11 Ecology L. Q. 495, 499 at n 15. The importance of intergenerational equity is expressed in principle 3 of the Rio Declaration.

³⁹ Principles 5, 7, 9, 12, 13, 14, 24, and 27 all use the word "cooperate," and principles 7, 21 and 27 use the word "partnership."

cooperation."⁴⁰ While some principles call on "all people" to cooperate,⁴¹ the exhortation to cooperate is primarily directed at sovereign states.

States must cooperate to prevent the transfer of harmful activities and substances to other states.⁴² Potentially affected states must be notified of natural disasters or emergencies in other states, and of activities that may have significant transboundary effects.⁴³ SD also requires cooperation to extend past neighbouring states. It promotes global cooperation, and encourages a sense of global community. States should help other states afflicted by emergencies,⁴⁴ and protect the environment and natural resources of people under oppression.⁴⁵ The special situation and needs of the least developed and most environmentally vulnerable states are assigned priority.⁴⁶

Concepts of global partnership and cooperation figure predominantly in the advancement of SD. However, the Rio Declaration also reaffirms the sovereign right of states to exploit resources within national jurisdiction.⁴⁷ Tensions between the principles of national sovereignty and cooperation seem likely. Sovereign rights eclipse global responsibilities. In an era where cooperation is so vital, it may no longer be appropriate to affirm sovereign rights over resources. The Rio Declaration fails to adequately resolve the potential conflict between the cooperation and sovereignty principles.

⁴³ Principles 18 and 19.

⁴⁴ Principle 18.

⁴⁵ Principle 23. Warfare is deemed "inherently destructive of sustainable development" (principle 24), and states are required to resolve environmental disputes peacefully (principle 26). In the event of warfare, states must respect international law providing protection for the environment (principle 24). Under principle 25, peace, development and environmental protection are seen as "interdependent and indivisible."

46 Principle 6.

⁴⁷ Subject to the Charter of the United Nations and principles of international law - principle 2. This principle echoes principle 21 of the Stockholm Declaration - above n 10.

⁴⁰ Above n 31.

⁴¹ Principles 5 and 27.

⁴² Principle 14. The long established principle that states must ensure activities within their jurisdiction or control do not cause damage to the environment of other states is reiterated in principle 2. This is an updated version of principle 21 of the Stockholm Declaration - see above n 9.

(ii) Participation

Participation by groups and interests traditionally outside the formal decision-making processes is central to SD. Women, indigenous people, and local communities have vital roles in environmental management and development.⁴⁸ Principle 10 underscores the need for general public participation in the environmental decision-making process. States must facilitate and encourage public awareness by making information widely available.

These principles recognise the importance of integrating public participation in environmental decision making. Individuals are more accepting of, and responsible for, decisions they have helped to make.⁴⁹ Affected persons are given an opportunity to present their views,⁵⁰ and a sense of community is enhanced. Participation may also provide useful additional information, especially concerning values that cannot be easily quantified. Public participation increases the range of factors taken into account. It may provide insight into long term effects, useful knowledge about alternatives, and different outlooks on the impact of proposals.⁵¹

(iii) Economic growth

Economic growth is seen as the key to overcoming environmental degradation. A basic premise of SD is that poverty is largely responsible for environmental degradation. Economic growth is therefore essential to achieving environmental sustainability.⁵² Economic growth is also deemed necessary to eradicate poverty. Eradicating poverty is "an indispensable requirement for SD," in order to decrease disparities in living standards.⁵³

States are encouraged to cooperate to promote a "supportive and open international economic system that would lead to economic growth and sustainable development in *all*

⁴⁸ Principles 20 and 22.

⁴⁹ D Edmond "Participation and the Environment: A Strategy for Democratizing Canada's Environmental Protection Laws" (1975) 13 Osgoode Hall L. J. 783, 785.

⁵⁰ A Lucas "Legal Foundations for Public Participation in Environmental Decisionmaking" (1976) 16 N.R.J. 73, 74.

⁵¹ N Pain "Third Party Rights Public Participation under the Environment Planning Assessment Act 1979 (NSW): Do the Floodgates Need Opening or Closing?" (1989) 6 E.P.L.J. 26, 27.

⁵² S Lele "Sustainable Development: A Critical Review" (1991) 19 World Development 607, 614.
⁵³ Principle 5.

countries."⁵⁴ Even states with flourishing economies are encouraged to achieve further economic growth. The Rio Declaration does nothing to stem the current global fixation with economic growth.

(iv) Environmental Protection

The Rio Declaration purports to address both environmental and developmental issues, but falls short of according the environment any real protection. Destruction and depletion of resources is not clearly condemned, and states are not required to safeguard resources.⁵⁵ States have the sovereign right to exploit national resources pursuant to their own environmental and developmental policies.⁵⁶

Principle 4 of the Declaration asserts "to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it." Declaring environmental protection a part of the development process co-opts environmental protection into serving the goals of development. Environmental protection is not a legitimate goal in itself, but is subject to the overriding goals and purposes of the development process. The environment is protected to the extent necessary to enable further exploitation and development.

States are required by principle 11 to enact "effective environmental legislation." However, the principle goes on to read:

Standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries.

Standards that would accord protection to the environment are thus secondary to economic and social concerns. Such concerns are more subjective than data on environmental limitations. A state could justify standards that do not adequately protect

⁵⁴ Principle 12 (emphasis added).

⁵⁵ The weak commitment to environmental protection is apparent on comparison with the Stockholm Declaration. Principles 2, 3, 4 and 5 of the Stockholm Declaration are explicitly directed at safeguarding resources, and wildlife and their habitat; maintaining ecological capacity; and guarding against the exhaustion of non-renewable resources. These principles have no counterpart in the Rio Declaration. The title of the Rio Declaration also exhibits lack of commitment to environmental protection. While the Brundtland Report had called for a declaration on environmental *protection* and SD (above n 1, 332), the Rio Declaration is merely on "environment and development."

the environment on the basis of "unwarranted economic and social cost," according to that state's subjective interpretation.

Lack of full scientific certainty of damage is not a reason for postponing cost-effective measures to prevent environmental degradation.⁵⁷ This precautionary approach is limited, however, to situations where serious or irreversible damage to the environment could result. In addition, precautionary measures that are not cost-effective could presumably be postponed.

Under principle 13, states must develop law regarding liability and compensation for adverse effects of environmental damage. The focus here is on compensating for harm to human interests, not on preventing or rectifying environmental damage. Environmental impact assessments must be undertaken for activities likely to have *significant* adverse impacts on the environment,⁵⁸ but such activities are not prohibited. Limitation to activities with significant impacts also overlooks the cumulative effect of impacts. Activities not having a significant adverse impact may contribute to significant environmental degradation in combination with other effects.

Principle 7 calls upon states to cooperate to conserve, protect and restore the health and integrity of the Earth's ecosystem. The remainder of the principle, however, stresses the differentiated responsibilities of states in this cooperative effort, rather than stressing the importance of environmental protection. The only time the environment is accorded any real protection is when the activities of one state adversely impact the environment of another.⁵⁹ Such principles relate more to international rights and obligations than to a concern to protect the environment. The Rio Declaration does not assure true environmental protection.

C Summary of Sustainable Development

In the 20 years from Stockholm to Rio, SD has grown to be an internationally recognised concept. Yet while SD has grown in popularity, international commitment to good environmental outcomes is increasingly elusive. The Rio Declaration is not the inspiring Earth Charter it might have been. States tenaciously clung to the principle of national

⁵⁷ Principle 15.

⁵⁸ Principle 17 (emphasis added).

⁵⁹ Principles 2, 14, 23 and 24.

sovereignty, and failed to guarantee environmental security. However, the Declaration does indicate what SD has come to mean today.

The primary aim of SD is to meet the developmental and environmental needs of all human generations. The paths to achieving this are cooperation, participation, economic growth, and environmental protection. All states and all people have a role to play in constructing these paths. To ensure sufficient resources remain for future generations, our resource pool must be both protected and more efficiently used.

SD is primarily concerned to protect the rights and interests of humans. Environmental integrity is of secondary importance. Protection of the environment is valued only to the extent that this allows further development, and enables humans to fulfil their entitlement to a life in harmony with nature.

The Rio Conference has been criticised as being "about development, not environment."⁶⁰ While fundamental environmental problems faced the delegates at Rio, ecological concerns were effectively outshone by the glorious promise we can pursue economic growth, and achieve sustainability at the same time. The opportunity to secure good environmental outcomes was diluted by the fixation with continued economic growth.

III SUSTAINABLE MANAGEMENT

A The New Zealand Context

At the time of the Brundtland Report, New Zealand stood among the many states in which decisive political action was necessary to protect and sustain the natural environment. Despite the clean-green, unspoiled image of New Zealand promoted by our tourist industry,⁶¹ the New Zealand environment has not been developed in accordance with principles of sustainability.

New Zealand was colonised by Polynesians around 950 AD and by Europeans around 1800. While Polynesian settlement and hunting practices contributed to species extinction

⁶⁰ Comment noted by L Zwicky "Rio and Back" (1992) Environmental Views 22, 23.

⁶¹ Our clean-green image is also attractive to environmentally sensitive importing States - see "UNCED will Explore Challenge of Sustainable Development" (1992) 26 Environment Update 4. This image was recently challenged in an article on toxic wastes sites in New Zealand - see below n 69.

and soil erosion,⁶² European colonisation has had the largest environmental impact. The first 60 years of European settlement in New Zealand were characterised by exploitation of marine mammals, kauri forests and gold.⁶³ In the period 1860 to 1920, half the total land area of New Zealand was converted from forest to pasture land. Before European settlement, native bush covered 70 percent of New Zealand's land area; now it covers 22 percent.⁶⁴

The flora and fauna of almost 60 percent of the land area of New Zealand have been modified for direct economic reasons.⁶⁵ Hydro-electric and other developments have affected the flow regime of many New Zealand rivers, and geothermal activity has diminished.⁶⁶ Substantial wetlands areas have been drained, and New Zealand has a history of overexploitation of fisheries.⁶⁷ Unsustainable land use has significantly induced erosion, while urbanisation and agriculture have resulted in the pollution of waterways. Agricultural development has been achieved through the destruction of natural ecosystems, and reduction of genetic diversity through monoculture.⁶⁸ Agriculture, forestry and industry have left "a legacy of toxic waste."⁶⁹ Rubbish disposal, noise, traffic congestion, and pollution are problems in many New Zealand cities and towns.⁷⁰ The New Zealand environment is more modified than most people realise.

⁶² M McGlone "The Polynesian Settlement of New Zealand in Relation to Environmental and Biotic Changes" (1989) 12 N.Z. Journal of Ecology 115, 121-122.

⁶³ G Glasby "A Review of the Concept of Sustainable Management as Applied to New Zealand" (1991)

²¹ Journal of the Royal Society of New Zealand 61, 63-64.

⁶⁴ G Glasby "Modification of the Environment in New Zealand" (1986) 15 Ambio 266, 266.

⁶⁵ A Campbell "Agricultural Ecology" in *The Natural History of New Zealand* (AH & AW Reed, Wellington, 1973) 205.

⁶⁶ M Duncan "River Hydrology and Sediment Transport" (1987) DSIR Bulletin 113, 133.

⁶⁷ C Lough et al "Environmental Scanning Paper" paper 1 of *Resource Management Law Reform Working Paper No. 10* (Ministry for the Environment, Wellington, 1988) 3-4 and 7.

⁶⁸ K Cronin "Ecological Principles for Resource Management: A Summary" in *Resource Management Law Reform Working Paper No. 1* (Ministry for the Environment, Wellington, 1988) 32, 42.

⁶⁹ M Szabo "New Zealand's Poisoned Paradise" (1993) 137 New Scientist 29.

⁷⁰ Managing Our Future (Ministry for the Environment, Wellington, 1991) 10.

Prior to October 1991, no standard purpose applied to the management of natural and physical resources.⁷¹ New Zealand's resource laws had accumulated on a statute by statute basis in response to particular environmental problems. Land use, water management, and mining were all subject to different statutory regimes, and a host of one-off regimes regulated particular problems such as noise, air pollution, petroleum exploration and geothermal energy.⁷² The legislation overlapped and conflicted, and good environmental outcomes were often compromised.⁷³ The fragmented, incremental development of New Zealand's environmental laws clearly did not constitute effective environmental legislation.⁷⁴ The need for a more holistic approach was evident.

B Introduction to the Resource Management Act 1991

Arising from the ashes of an uncoordinated legislative patchwork, the RMA91 is a virtual phoenix. This ambitious creature brought a unified approach to the management of New Zealand's natural and physical resources.⁷⁵ The RMA91 came into force on 1 October 1991, repealing more than 70 statutes and amending over 150 other laws.⁷⁶ Natural and physical resources are now regulated under a single statutory regime, and a single purpose applies - promotion of the sustainable management of natural and physical resources.⁷⁷

73 Above n 70, 10.

77 Subsection 5(1) RMA91.

⁷¹ A Randerson "Part II - Purpose and Principles" *The Resource Management Act 1991* (NZLS Seminar, 1991).

⁷² G Palmer *Sustainability - New Zealand's Resource Management Legislation* (Unpublished paper presented at the Fifth Canadian Institute of Resources Law Conference on Natural Resources Law, Ottawa, Ontario, 1991) 4. This paper provides a comprehensive history of the resource management law reform process in New Zealand prior to enactment of the RMA91.

⁷⁴ Principle 11 of the Rio Declaration requires all states to enact "effective environmental legislation."

⁷⁵ Natural and physical resources are widely defined under s 2 to include "land, water, air, soil, minerals, and energy, all forms of plants and animals (whether native to New Zealand or introduced), and all structures." However, provisions relating to minerals were largely severed from the RMA91 (see para 5(2)(a)). Minerals are now regulated under the Crown Minerals Act 1991.

⁷⁶ NZ Parliamentary debates Vol 20, 1991: 3017, 3018. The RMA91 was enacted on 22 July 1991. Among the major Acts repealed by the RMA91 were the Town and Country Planning Act 1977, the Water and Soil Conservation Act 1967, and the Clean Air Act 1972.

This umbrella purpose is defined in subsection 5(2):

In this Act, "sustainable management" means managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety, while -

- Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
- (b) Safeguarding the life-supporting capacity of air, water, soil and ecosystems; and
- (c) Avoiding, remedying or mitigating any adverse effects of activities on the environment.⁷⁸

All decisions made under the RMA91 must accord with this overriding purpose.⁷⁹ The principles to apply in achieving this purpose are expressed in sections 6, 7 and 8.⁸⁰ These principles are subordinate to section 5, as each is to be applied "[i]n achieving the purpose of this Act."

Section 6 specifies matters that must be recognised and provided for. As matters "of national importance," they are of greater weight than regional or district goals. Section 6 matters include preservation of the natural character of the coastal environment, rivers and lakes; protection of outstanding natural features and landscapes; and protection of areas of significant indigenous vegetation and fauna.

Section 7 specifies matters that persons exercising functions and powers under the RMA91 must "have particular regard to." These factors are of less importance than section 6 matters. They include maintenance and enhancement of amenity values and environmental quality; intrinsic values of ecosystems; and finite characteristics of resources.

78 Environment is defined in s 2 to include:

- (a) Ecosystems and their constituent parts, including people and communities; and
- (b) All natural and physical resources; and
- (c) Amenity values; and
- (d) The social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters."

⁷⁹ The Planning Tribunal recently stated "great weight must be accorded a section which sets forth the base philosophy of the whole Act." - *Shell Oil NZ Ltd* v *Wellington City Council* (1992) 2 NZRMA 80, 86. The only exception relates to Water Conservation Orders, to which a stated purpose applies notwithstanding anything to the contrary in Part II - s 199 RMA91.
⁸⁰ See Appendix II.

Under section 8, the principles of the Treaty of Waitangi must be taken into account.⁸¹

IV COMPARING THE CONCEPTS

A Sustainable Management is Not Sustainable Development

The Ministry for the Environment (the Ministry) has acknowledged that SM and SD are not interchangeable concepts.⁸² SD covers a wide range of concerns,⁸³ and is explicitly concerned to address social and economic issues. SM is limited to the regulation of natural and physical resources. The RMA91 was not designed to achieve social or economic outcomes.

SD and SM also operate in different spheres. SD is global in its perspective and aims. The pursuit of SD is a soft law obligation, and is largely dependent on the motivation and inclinations of individual states. In contrast, SM is a domestic measure in response to domestic issues. It is tailored to national needs, and may not be appropriate in other spheres.

Differences in the scope and relevant spheres of SD and SM are readily apparent. Global implementation of SD, however, is dependent on more than cooperation in matters of direct international importance. It requires the enactment of domestic legislation in accordance with its principles.

The Ministry claims the RMA91 is part of a national agenda for implementing SD in New Zealand.⁸⁴ This statement acknowledges the narrower scope of SM. However, it assumes promoting SM is consistent with attainment of SD. SD and SM do exhibit similarities. Both are concerned to achieve sustainability, to address environmental

⁸¹ This is the first provision in planning and water legislation requiring that Treaty principles be taken into account. Section 8 is not considered further in this paper.

^{82 &}quot;Sustainable Management" Information Sheet No. 6 *Sustainable Management of Resources* (Ministry for the Environment, 1992); "The Resource Management Act and Sustainable Management: Introduction and Key Principles" Information Sheet No. 2 *Sustainable Management of Resources* (Ministry for the Environment, Wellington, 1992).

⁸³ For example, SD is concerned to address social inequities and global distribution of wealth.

⁸⁴ "The Context: Sustainable Development as a Backdrop for the Resource Management Act" Information Sheet No. 1 *Sustainable Management of Resources* (Ministry for the Environment, Wellington, 1992).

degradation, and to enable the needs of all human generations to be met. The purpose of this paper, however, is to explore the fundamental differences between SD and SM. The writer believes SD and SM are fundamentally incompatible.

1 Anthropocentric v ecocentric approaches to sustainability

Approaches to sustainability can be characterised as either ecocentric or anthropocentric in orientation. An ecocentric view:⁸⁵

regards ecosystems and the resources within them as having intrinsic values independent of humans...an ecocentric approach advocates that resources should only be used provided the integrity of the environment is preserved and human welfare is only to be maximised within this constraint.

An anthropocentric approach views ecosystems and their resources from a welfaremaximising perspective. Resources are:⁸⁶

available in the environment to be used to maximise human welfare. In other words, rights and obligations do not exist of themselves but are conferred and accepted by humans.

SD adopts an anthropocentric approach to sustainability. The opening principle of the Rio Declaration asserts the centrality of humans in the implementation of SD. Non-human ecosystems do not have rights, and intrinsic values are not recognised. The environment is only accorded derivative value - its value derives from its utility to humans. As the environment has no intrinsic value, environmental protection is not a valuable concept in its own right, and cannot be considered in isolation from the development process.⁸⁷ Protecting the "health and integrity of the Earth's ecosystem"⁸⁸ is only prioritised to ensure its capacity to sustain further human growth and development. The Rio Declaration expounds an unashamedly anthropocentric approach to sustainability.

⁸⁵ A Gibson et al "Statements on Sustainability" in *Resource Management Law Reform Working Paper No. 1* (Ministry for the Environment, Wellington, 1988) 96, 98.

86 Above n 85, 98. This definition is similar to what C Tisdell describes as the "basic stand of virtually all economists" - that the ultimate goal is human welfare; conservation is not a valuable goal in itself, but it enables maximisation of the satisfaction of human needs - "Conserving our Biological Resources: Economics, Ecology and Ethics" No. 8811 of *Economics Discussion Papers* (University of Otago, Dunedin, 1988) 13.

87 Principle 4.

88 Principle 7.

The RMA91, in contrast to the Rio Declaration, adopts an ecocentric approach to sustainability.⁸⁹ This is evident from the RMA91 itself, the drafting history of the RMA91, and ministerial statements preceding and following its enactment.

(a) The Resource Management Act 1991⁹⁰

(i) Intrinsic values of ecosystems

The RMA91 invests ecosystems with intrinsic value.⁹¹ This is consistent with recognition of intrinsic values in the Environment Act 1986 and the Conservation Act 1987. Intrinsic values are defined as "those aspects of ecosystems and their constituent parts which *have value in their own right.*"⁹² SM therefore recognises that ecosystems have inherent value, and are not to be considered in solely utilitarian terms.

Recognition of intrinsic values does not elevate ecosystems above humans. However, it does oblige humans to respect and protect natural systems. It is submitted that recognition

⁹⁰ This paper is only concerned with the Part II of the RMA91. Other aspects of the RMA91 support the submission it is concerned with ecological factors ahead of social and economic considerations. For example, financial inability is no defence to breach of an enforcement order - below n 100, 551. Further, the definition of "effect" in s 3 only refers to effects on the natural and physical environment, not the social, cultural or economic environment.

⁹¹ Subsection 7(d) RMA91. The term intrinsic value is also used in ss 189 and 199 in relation to heritage orders and water conservation orders respectively. Although "ecosystem" is not defined in the RMA91, it is defined in s 2 of the Environment Act 1987 as meaning "any system of interacting terrestrial or acquatic organisms within their natural and physical environment." Human interactions are presumably included in this definition, but non-human organisms are clearly the primary consideration.

92 Section 2 RMA91 (emphasis added). The term "value" is not used in the sense of economic worth. For discussions on intrinsic value, see the following *Resource Management Law Reform Working Papers* (Ministry for the Environment, Wellington, 1988): No. 25 J Caldwell "Intrinsic Value: Thoughts from a Legal Perspective" paper 2; No. 24 K Cronin "The Intrinsic Value of Ecosystems" paper 5; No. 10 C Meurk "Intrinsic Values of Ecosystems: Some Thoughts on the Historical and Philosophical Aspects" paper 6.

⁸⁹ This does not mean that the New Zealand government is more concerned about nature than people. Societal objectives can only be met if the functioning of ecosystems, and sustainability of resources, are maintained. Recognition of environmental integrity and maintenance of ecological processes ultimately benefits human society. The RMA91 seeks to preserve environmental integrity for both humans and nature itself.

of intrinsic values will facilitate proactive policies to protect the environment. Once it is recognised that ecosystems have value in their own right, standards will be set to ensure their maintenance and enhancement.

It is apparent that the Rio Declaration and the RMA91 express fundamentally different views of the value of the environment. SD values the environment for its utility to humans. The Rio Declaration does not attribute intrinsic values to the natural environment, or foster respect for ecological processes. In contrast to this, SM invests the environment with intrinsic value, whatever its utility to humans. The environment is not a mere quarry of resources, but a dynamic and valuable system.

(ii) Ancillary principles

The ecological focus of the RMA91 is also borne out in the ancillary principles to section 5. The predominant qualities and values in sections 6 and 7 are ecological, environmental, and cultural.⁹³ These sections were included in the RMA91 "mainly for the purpose of sustaining our levels of environmental quality."⁹⁴ The matters identified in section 6, which must be actively provided for, include preservation and protection of natural features. Under section 7, particular regard must be had to the maintenance and enhancement of amenity values and the quality of the environment, and to the protection of particular habitats. Ecosystems are recognised as having intrinsic value. These ancillary principles provide guidance on the primarily environmental and ecological focus of SM.

(iii) Subsection 5(2)

The concern of SM for ecological and environmental preservation is apparent in paragraphs 5(2)(b) and (c) of the RMA91. The core principle of SD, meeting the needs of present generations without compromising the ability of future generations to meet their own needs, is reflected in paragraph 5(2)(a). SM adds to this the equally⁹⁵ important requirements of safeguarding the life-supporting capacity of resources and ecosystems, and avoiding, remedying, or mitigating adverse effects on the environment. Although these requirements will incidentally sustain resources for future generations, SM is not

94 Above n 82, No. 2, 5.

⁹³ D Fisher "The Resource Management Legislation of 1991: a Juridical Analysis of its Objectives" in *Resource Management* (Brooker & Friend Ltd, Wellington, 1991) Intro-15.

^{95 &}quot;And" is a conjunction that does not imply any weighting, but links propositions of equal value.

motivated by purely anthropocentric considerations. Sustaining resources to meet future needs is at the heart of SD, but is only one facet of SM.

Paragraph 5(2)(b) was added by Cabinet to give the RMA91 a firmer biophysical "bottom line." It is submitted this paragraph should be strictly interpreted. The ability of ecosystems and resources to support life is their most basic and necessary function. If life-supporting capacities are impaired, both human and non-human lives are imperilled.

Paragraph 5(2)(c) appears to impose a hierarchy of duties.⁹⁶ Adverse effects⁹⁷ should be avoided altogether whenever this is practical.⁹⁸ The extent of allowable adverse effects will depend upon the extent and nature of the effects, and the practicality of avoiding them.⁹⁹ Only where avoidance is impractical will the "backstop measures"¹⁰⁰ of remedy or mitigation become relevant. This interpretation is supported by the conjunction "or." In contrast to the equalising effect of "and," "or" indicates the most appropriate option should be followed. As the RMA91 seeks to minimise adverse effects, avoidance must have first priority. This paragraph provides a strong presumption in favour of good environmental outcomes.

The interpretation of subsection 5(2) as a whole is more difficult, as it is comprised of two philosophies. The first is anthropocentric.¹⁰¹ The anthropocentric philosophy

⁹⁶ Many commentators share this opinion. - see D Brash "Sustainable Development and the Environmental Bottom Line" No. 2 of *Resource Management Ideas* (Ministry for the Environment, Wellington, 1992) 4; Information Sheet No. 6, above n 82, 2; J McLean, below n 100, 546; A Randerson, below n 99, 448; S Upton, below n 126.

⁹⁷ The wide definition of "effect" in s 3 has the potential to secure good environmental outcomes, as it includes "any" actual or potential effects, regardless of scale, intensity, duration or frequency.

⁹⁸ The RMA91 does not seek to avoid all adverse effects. That some adverse effects are permissible is implicit in para 5(2)(c) itself, which allows for remedy or mitigation as alternatives to avoidance. Other sections of the RMA91 support the proposition that some adverse effects are permissible, employing such terms as "reasonable" and "best practicable option" - ss 16, 60, 70, and 108(8) - below n 99, 445.

⁹⁹ A Randerson "The Exercise of Discretionary Powers under the Resource Management Act 1991" (1991) N.Z. Recent Law Review 444, 448.

¹⁰⁰ J McLean "New Zealand's Resource Management Act 1991: Process with Purpose?" (1992) 7 Otago L. R. 538, 546.

¹⁰¹ The anthropocentric philosophy in s 5(2) is not strongly formulated. It does not seek to ensure "welfare maximisation," but merely to enable people to provide for their own wellbeing. See statement of the Hon. Simon Upton at text of n 124.

focuses on human outcomes in resource management: "in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety." This is directly concerned with human welfare and needs.

The ecocentric philosophy is expressed in paragraphs 5(2)(a), (b) and (c). These paragraphs comprise principles of sustaining the potential of resources to meet future needs;¹⁰² safeguarding the life-supporting capacity of air, water, soil and ecosystems; and avoiding, remedying or mitigating any adverse environmental effects. While human needs are not excluded from the ecocentric philosophy, these needs are encompassed in a wider concern for long-term ecological and environmental sustainability. Paragraph 5(2)(a) is accordingly weakly formulated. Only resource *potential* must be sustained for future generations, not actual resources. The principle explicitly applies to natural and physical resources, but not to minerals, ecosystems, or the wider environment. It is further limited in scope to "reasonably foresceable" needs. Future generations must be taken into account, but environmental outcomes are the main focus of the RMA91.

The anthropocentric and ecocentric philosophies in subsection 5(2) are linked by the conjunction "while." This unassuming word has been ascribed crucial significance by Professor D Fisher. He believes the fundamental direction of the RMA91 depends on the interpretation of this word.¹⁰³

"While" can be interpreted as a coordinating conjunction meaning "and."¹⁰⁴ Under this interpretation, the anthropocentric and ecocentric philosophies are accorded equal weight, and "neither is dependent or conditional on the other."¹⁰⁵ Human values are to be achieved at the same time as ecocentric values.

¹⁰² The legislative history suggests this means the needs of future *human* generations. The writer includes it as an ecocentric principle as it is concerned with long term needs, and maintenance of the *human* ecosystem.

¹⁰³ Above n 93, Intro-13. An extract of this discussion is also reproduced in "Clarity in a Little 'While'" (1991) 11 Terra Nova 50. The distinction drawn by Professor Fisher is between "management" and "ecological" functions. The distinction has also been defined as between "social" and "physical" factors - above n 100, 545-546.

¹⁰⁴ Above n 93, Intro-12.

¹⁰⁵ Above n 93, Intro-13.

Alternately, "while" can be interpreted as a subordinating conjunction meaning "if."¹⁰⁶ This interpretation renders the anthropocentric philosophy subordinate to the ecocentric philosophy - resources may be managed in accordance with short-term human values *if* ecocentric values are sustained. Under this interpretation, human well-being is dependent on, and subordinate to, meeting the ecocentric constraints.

On a strictly grammatical interpretation, Professor Fisher claims "while" is a subordinating conjunction. On the face of the RMA91, "while" accords primacy to the ecocentric philosophy. Resource management decisions must in all cases sustain the potential of resources to meet reasonably foreseeable future needs, safeguard life-supporting capacities, and avoid, remedy or mitigate adverse environmental effects. The writer believes this is the correct and logical interpretation of subsection 5(2).¹⁰⁷ Unless these three constraints are met, social, cultural and economic aims will not be able to be achieved and sustained. Society's goals are dependent and conditional upon maintenance of a healthy environment, so the constraints must be absolute.

106 Above n 93, Intro-12.

107 Other commentators have suggested it is more appropriate to interpret while as meaning "and." The writer is unable to concur. As the Planning Tribunal recently stated in relation to another section of the RMA91, "if Parliament had intended [the words to mean 'and'] ... it would have been very easy and straightforward for it to have said so, by using the word 'and.'" - *Kennet* v *Dunedin City Council* (1992) 1 NZRMA 22, 30.

(b) Drafting history

(i) The conjunction "while"

Despite his conclusion on the grammatical interpretation of "while," Professor Fisher speculates the drafting history of subsection 5(2) "perhaps suggests...something more in the nature of a balance between the use, development and protection of resources and ecological and environmental sustainability."¹⁰⁸ Unfortunately, the learned commentator does not indicate what material this speculation is premised on. The writer respectfully submits that the drafting history of subsection 5(2) instead suggests "while" is intended to act as a subordinating conjunction.

Following its introduction to Parliament in December 1989, the Resource Management Bill was referred to a special Select Committee.¹⁰⁹ The Committee reported back to the House on 14 August 1990, proposing the following definition of SM:

In this Act, "sustainable management" means managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people to meet their own needs *and includes the following considerations*:¹¹⁰

- (a) The maintenance and enhancement of the quality of the environment, including the life supporting capacity of the environment and its intrinsic values:
- (b) The use, development, or protection of natural and physical resources in a way which provides for the social, economic, and cultural needs and opportunities of people and communities:
- (c) Where the environment is modified by human action, the adverse effects of
 irreversible change are fully recognised and avoided or mitigated to the extent
 practicable:
- (d) The use, development, or protection of renewable natural and physical resources so that their ability to yield long term benefits is not endangered:

¹⁰⁸ Above n 93, Intro-13. P Ross is critical of Professor Fisher's comments on the legislative history of s 5(2). As the literal construction of the section is clear, and no particular ambiguity or conflict exists on its face, Ross claims s 5(2) should be taken at face value without having to "dip into" its history - "Clarity Now" (1992) 13 Terra Nova 4.

109 See Report of the Committee on the Resource Management Bill. Parliament. House of Representatives. August 1990.

¹¹⁰ Emphasis added.

The use or development of non-renewable natural and physical resources in a way that sees an orderly and practical transition to adequate substitutes including renewable resources:

(f) The exercise of kaitiakitanga which includes an ethic of stewardship.

The Review Group, appointed to secure greater certainty and workability of the Bill and report back to the Minister for the Environment, was asked to review this definition. The objectives of the Review Group included striking a reasonable balance between present and future requirements for resources, and defining the relationship between biophysical and socio-economic considerations.¹¹¹

It was at this stage that the word "while" was incorporated in the definition of SM.¹¹² The Review Group explained the difference between its definition and that proposed by the Select Committee in the following terms:¹¹³

While clause 4 as reported by the Select Committee contained an unweighted balancing of socioeconomic and biophysical aspects, the recommendation of the Review Group conceives the biophysical characteristics of resources as a constraint on resource use.

The Review Group stated the socio-economic aspect of the definition (the anthropocentric philosophy) was "subject to" the "parameters" of sustaining resources for future generations, and avoiding, remedying or mitigating adverse effects on the environment. Thus the Review Group intended the word "while" to operate as a subordinating conjunction. Resources may be managed in accordance with short term human values only if the ecocentric constraints are not transgressed.

(ii) Purpose and principles

(e)

The drafting history of Part II of the RMA91 evidences an increasingly ecocentric emphasis. At the genesis of the law reform process, the Government's goal was clearly anthropocentric. The original primary objective of government in resource management law reform was "to produce an enhanced quality of life both for individuals and the community as a whole through the allocation and management of physical resources."¹¹⁴

¹¹² The definition of SM proposed by the Review Group was similar in content to the enacted definition, except that para 5(2)(b) had not been formulated.

¹¹¹ Report of the Review Group on the Resource Management Bill (Unpublished, February, 1991) 6.

¹¹³ Above n 111, 7. Clause 4 was subsequently enacted as the present s 5.

¹¹⁴ People, Environment, and Decision Making: the Government's Proposals for Resource Management Law Reform (Ministry for the Environment, Wellington, 1988) 12; Core Group on Resource

Another main objective was "to ensure that resources provide the greatest benefit to society."¹¹⁵

This anthropocentric hue gradually faded as the principles of the Resource Management Bill became steadily 'greener.' In 1988, Cabinet added "ecological limits" to the list of relevant considerations to be addressed in resource management.¹¹⁶ In contrast to the original primary objective of SM, the Ministry now stated "the overall objective of resource management is managing the use of natural resources in a way that maintains and enhances the quality of the environment."¹¹⁷

In 1990, the concept of intrinsic values of ecosystems was added.¹¹⁸ Following the report of the Review Group in 1991, Part II was redrafted to change the focus away from development planning and toward "ensuring better environmental outcomes."¹¹⁹ The requirement that life-supporting capacities be safeguarded was also added at this stage. It had not formed part of the recommendations of the Review Group, but was added by Cabinet to provide a firmer biophysical "bottom line" to the RMA91.¹²⁰

This drafting history suggests that the primary concern of SM is environmental integrity. Although sustainability remained the cornerstone of the RMA91, the focus of the principles changed from ensuring quality of life for humans, to ensuring good

Management Law Reform "Guidelines for Resource Management Law Reform" Paper E Resource Management Law Reform (Ministry for the Environment, Wellington, 1988).

115 Above n 114, People, Environment, and Decision Making, 12.

¹¹⁶ Ministry for the Environment "Objectives for Resource Management: Why, What and How" *Resource Management Law Reform Working Paper No. 13* (Ministry for the Environment, Wellington, 1988) 7.

¹¹⁷ Above n 116, 7. Although the term "resources" implies an anthropocentric perspective of environmental elements, use of the term "environment" was considered inappropriate due to its broad scope. The Select Committee believed sustainable management of natural and physical resources "would have the same effect as promoting the sustainable management of the quality of the environment" - above n 109, 7.

¹¹⁸ "Resource Management Bill: Purpose and Principles" in *Resource Management Bill Information Kit: The Government's Response to the Review Group Recommendations* (Ministry for the Environment, Wellington, 1991) 2.

¹¹⁹ Above n 118, 3.

¹²⁰ A Randerson "Part II - Purpose and Principles" in *The Resource Management Act 1991* (Unpublished, NZLS Seminar 1991) 7.

environmental outcomes. The initially anthropocentric approach to resource management law reform was progressively marginalised in favour of an ecocentric approach.

(c) Ministerial statements

A number of ministerial statements indicate subsection 5(2) was intended to avoid attempts to balance the anthropocentric and ecocentric philosophies. The Hon S Upton, Minister for the Environment (the Minister) at the Third Reading of the Bill, stated subsection 5(2):¹²¹

enables people and communities to provide for their social, economic and cultural well-being. Significantly, it is not for those exercising powers under the Bill to promote, to control or to direct.... Rather, those who exercise powers under the legislation are referred to a purpose clause that is about sustaining, safeguarding, avoiding, remedying, and mitigating the effects of activities on the environment. It is not a question of trading off those responsibilities against the pursuit of well-being. Well-being is [only] mentioned because the Bill is, of course, about the effects of human agency on the environment.

It appears clear from this statement that people exercising powers under the RMA91 must not attempt to balance anthropocentric and ecocentric concerns. People and communities must pursue their own wellbeing, and are only mentioned in subsection 5(2) because the RMA91 seeks to address the environmental effects of human activity. Decision makers are required to turn their attention to sustaining and safeguarding resources and ecosystems, and ensuring environmental effects are avoided, remedied, or mitigated. The RMA91 seeks to institute a "biophysical bottom line"¹²² that must not be compromised by human activity.

During the reading of a supplementary order paper on the Bill, the Minister stated subsection 5(2) had been redrafted to ensure that the potential of natural physical resources were sustained, and to ensure that life-supporting capacities were safeguarded.¹²³ He stressed changes made to the Bill attempted "to focus the Bill on the

¹²¹ NZ Parliamentary debates Vol 20 1991: 3017, 3018. The Minister preceded this elaboration on subs 5(2) by stating at 301 - "To the extent that judicial notice is taken of *Hansard* - and I hope it will be taken in this case - I should like to take the trouble to make a carefully considered assessment of the intention of Parliament on this occasion." This speech is therefore particularly relevant in assessing the legislative intention behind subs 5(2).

¹²² Above n 121, 3018.

¹²³ NZ Parliamentary debates Vol 14 1991: 1873, 1874 (emphasis added).

physical environment we want to protect."¹²⁴ Two months before the Bill was enacted, the Minister announced "the Bill sets out to ensure that from now on, there will be no trade-offs at the environment's expense."¹²⁵

After the RMA91 was enacted, the Minister sought to clarify the meaning of subsection 5(2). In discussing "the point" of SM, the Minister only referred to the ecocentric philosophy in subsection 5(2), and did not even mention the anthropocentric philosophy.¹²⁶ The Minister also elaborated on the intended effect of paragraph 5(2)(c):

It spells out a requirement to ensure that adverse effects of use and development are minimised to the greatest extent practicable.

The Minister's statements suggest environmental concerns are at the forefront of SM, and balances and trade-offs at the environment's expense are inappropriate and unacceptable. It was clearly Parliament's intention to accord priority to the ecological considerations in the RMA91. The RMA91 is not about ensuring good social and economic outcomes, but seeks to identify the limits beyond which adverse environmental effects are unacceptable.

The RMA91 exhibits real concern to maintain ecological processes and preserve environmental quality. Yet whatever its potential, its ultimate effectiveness depends on how it is practically applied. The implementation of SM may produce less ecologically favourable outcomes than the theory renders possible. The Planning Tribunal has generally eschewed making broad statements on the RMA91 in its infancy.¹²⁷ While the Tribunal has not stated that the ecocentric philosophy has priority, it has noted the RMA91 "clearly places the environment in a pre-eminent position, along with the principle of sustainability."¹²⁸ While not conclusive evidence of the attitude of the Planning Tribunal, this statement accords with an ecocentric interpretation of subsection 5(2).

¹²⁴ Above n 124, 1874.

^{125 &}quot;Resource Management Bill Decision Released," above n 118.

¹²⁶ S Upton "Legislation Promotes Sustainable Management" (1991) 23 Environment Update 2.

¹²⁷ In *Aro Valley Community Trust Inc* v *Wellington City Council* (1992) 1 NZRMA 221, 227 the Tribunal stated "so far as the Resource Management Act 1991 is concerned, it is still early days. We should therefore avoid determining issues that do not need to be determined in order to deal effectively with the particular proceedings before us."

¹²⁸ Marlborough Hockey Association Inc v Marlborough District Council (1991) 1 NZRMA 274, 279.

2 *Fundamentally different purposes*

SD and SM seek to achieve fundamentally different objectives. The purpose of SD is to achieve good social and economic outcomes. This is evidenced by the central concern for human beings in the pursuit of SD, and the meeting of their developmental and environmental needs. The rationale for environmental protection is that human needs and aspirations can only be met if there is a safe and healthy environment to support them.

In contrast, the central purpose of SM is to achieve good environmental outcomes. As human activity impacts on the environment, that environment must be positively protected and maintained. People and communities must be able to provide for their wellbeing, but SM is not primarily motivated by welfare objectives. The SM rationale for environmental protection extends beyond concern to provide for humans, to more altruistic ends.

These different purposes imply different toleration levels of adverse effects on the environment. Under SD, adverse environmental effects need only be limited when they conflict with, or threaten, social and developmental aims. Under SM, adverse environmental effects are to be minimised to the greatest extent practicable. Even when human objectives are not prejudiced, a presumption of minimal adverse impact applies.

3 Development v management

Development is a positive word. It suggests growth and advancement,¹²⁹ and has enabled the evolution and expansion of human civilizations.¹³⁰ However, development also connotes change. It requires the alteration of ecological systems to serve human needs. Management has less dynamic connotations. It involves organisation and regulation, but does not exhibit a bias toward transformation of resources.¹³¹

The Rio Declaration is clearly pro-development. Human beings are entitled to a "productive life,"¹³² and a "right to development"¹³³ is asserted. A primary aim of SD is

¹²⁹ The Concise Oxford Dictionary (7 ed, Oxford University Press, Oxford, 1982) 262.

¹³⁰ M Holdgate "The Environment of Tomorrow" (1991) 33 Environment 13, 15. Holdgate defines development as "the alteration of the Earth's environmental systems so that an increasing proportion of their non-living resources and biological productivity serves human needs."

¹³¹ Above n 93, Intro-11 - "the word 'manage' is a relatively neutral term which does not import any particular values or priorities."

¹³² Principle 1.

to ensure continued development, in order to meet the needs of present and future generations. Sustaining environmental processes is merely the means to achieve that end.

The RMA91 is development-neutral. It is "not pro-development or anti-development; it is about environmental management."¹³⁴ A major thrust in the drafting of the RMA91 was to move away from statutory requirements for the direction and control of development.¹³⁵ While the Town and Country Planning Act 1977 required decision-makers to plan and direct development,¹³⁶ the RMA91 is a conscious legislative redirection toward controlling environmental effects.¹³⁷

Retreat from the direction and control of development is evidenced in the definition of SM. SM involves "managing the use, development *and* protection of natural and physical resources."¹³⁸ While development is envisaged, the conjunctive word "and" implies protection is equally as important as development; "[n]either use nor development nor protection is given priority over the other."¹³⁹ The weight given to each element in a particular resource management decision will vary according to the particular circumstances.

The Rio Declaration stresses the importance of developing human potential, and providing for continued growth and development. A higher quality of life is sought for *all*,¹⁴⁰ whatever their present quality of life. SD seeks to secure the greatest possible benefit for present generations without compromising future needs. In contrast, the RMA91 does not seek to direct or promote development, but merely to enable people and communities to provide for their own wellbeing.

¹³³ Principle 3.

¹³⁴ Above n 121, 3034.

¹³⁵ Review Group *Discussion Paper on the Resource Management Bill* (Unpublished, December 1990)4.

¹³⁶ Section 4 TCPA 1977.

¹³⁷ This is most clearly illustrated by para 5(2)(c).

¹³⁸ Subsection 5(2) (emphasis added).

¹³⁹ Above n 93, Intro-12. See n 95.

¹⁴⁰ Principle 8.

4 Balance v environmental bottom lines

The delegates at Rio sought to find "a viable and equitable *balance* between environment and development."¹⁴¹ This reflects the nature of SD - it does not establish an environment/development interface, but requires each conflict to be balanced. The problem with a balancing approach is that values that cannot be easily quantified are almost invariably outweighed by those which can.¹⁴² Despite the fundamental necessity of maintaining environmental quality and sustainability, the needs of future generations and the integrity of ecosystems have traditionally been the losers in the resource management process. It is therefore unlikely that a balancing approach will produce ecologically favourable outcomes.

The disadvantage the environment has in this weighting process is compounded by the status SD accords environmental protection. Environmental protection is coopted into the development process, and serves the goals of development. There is no identifiable point at which environmental protection crystallises. The environment is constantly subject to the overriding concern for development.

In contrast, SM seeks to ensure that clear environmental bottom lines (EBLs) are established. Every ecosystem has a limit beyond which point adverse impacts will result in break down of essential processes. The precise point at which an adverse effect will destroy a system is difficult to assess. However, it is possible to establish limits beyond which adverse impacts will not be tolerated.¹⁴³ Paragraphs 5(2)(a) and (b) establish statutory EBLs.¹⁴⁴ Activities must not transgress the requirement to sustain the potential of resources to meet future needs, and to safeguard life-supporting capacities.

¹⁴¹ Statement of M Strong, Secretary-General of the Rio Conference, cited by R Blakely "UNCED Seeking Balance Between Environment and Development" (1991) 22 Environment Update 4 (emphasis added).

¹⁴² J Caldwell above n 92, 2. In addition, compromises are not always an appropriate solution to environmental problems - "half a hole in the ozone layer may be as bad as a whole hole" - J Wright "Future Generations' as an Object in Resource Management Law" paper 6 of *Resource Management Law Reform Working Paper No 24* (Ministry for the Environment, Wellington, 1988) 1.

¹⁴³ Commentators generally agree that resource use should operate at an optimal rather than maximum level of carrying capacity, to allow for fluctuations and uncertainty.

¹⁴⁴ The ecological principles in paras 5(2)(a) and (b) cannot be traded off. Paragraph 5(2)(c) does, however, allow decision makers to apply a balancing approach once these EBLs are met. The choice

The setting of EBLs requires developers to operate within clearly established environmental parameters.¹⁴⁵ Environmental quality cannot be traded off against individual developments, as EBLs cannot be compromised. Environmental imperatives and standards are established first, and any development that occurs cannot transgress those limits.¹⁴⁶ In this sense, SM makes developmental preferences conditional on environmental integrity. If development cannot occur without infringing an EBL, that development cannot proceed. This brings concreteness to the environment/development debate.

Therefore SD is clearly different from SM in its approach to resolving the environment/development interface. SD requires a balance to be struck between environmental and developmental goals. In contrast, SM seeks to ensure that EBLs are not traded off against development. SM eschews a balancing approach where environmental integrity is at stake.¹⁴⁷

between avoiding, remedying, or mitigating adverse effects introduces considerations of reasonableness and practicality in resource management decisions.

145 Above n 116, 9.

¹⁴⁶ This means that planning must be considered "initially from the biophysical/ecological perspective with attention to biophysical limits and thresholds. Having done that, communities should be able to consider social and economic objectives within that framework." - "Sustainable Urban Development - With Case Studies" Information Sheet No. 4 of *Sustainable Management of Resources* (Ministry for the Environment, Wellington, 1992) 1.

¹⁴⁷ This is evidenced by a statement of the Hon S Upton when explaining restriction of the use of the best practicable option mechanism: "[t]he Government thought it had too much potential for trading, potentially to the detriment of the environment" - above n 123, 1875.

B Conclusion on the Differences Between SD and SM

SM is not a subset of SD. While environmental policy is a component of SD, SM and SD are fundamentally incompatible. SD adopts an anthropocentric approach to sustainability, and is only concerned to protect the environment in order to maintain its usefulness to humans. In contrast, SM is ecocentric in approach. While the needs of humans are recognised, environmental outcomes are the primary focus. Recognition of the intrinsic values of ecosystems means resources may only be used if the integrity of the environment is preserved, and adverse effects must be minimised to the greatest extent practical.

The central purpose of SD is to achieve good social and economic outcomes. Adverse environmental effects are irrelevant until they impact on human welfare. SM, however, seeks to minimise all adverse impacts to the greatest practical extent, whether or not human welfare is threatened. The central purpose of SM is to ensure good environmental outcomes.

SD imposes a presumption in favour of development, but SM does not exhibit a developmental bias. Rather, SM imposes a presumption in favour of the environment.

Finally, SD does not set the "bottom line" of environmental protection. In every instance, conflicts between environmental protection and development must be balanced. While SM is not a total lock up of resources, the restraints in paragraphs 5(2)(a) and (b) cannot be traded off. Whatever the potential short-term benefits, the bottom line of SM cannot be transgressed. SM has the potential to secure good environmental outcomes. It is to be hoped that this potential will be realised in decisions made under the RMA91.

V A HARD LOOK AT SUSTAINABLE DEVELOPMENT

Whatever the differences between SD and SM, the New Zealand Government has expressed a commitment to SD.¹⁴⁸ It is therefore necessary to determine whether commitment to the principles of SD really will ensure a sustainable future. The writer has serious reservations about inviting SD home.

¹⁴⁸ See New Zealand's National Report to UNCED *Forging the Links* (Ministry for the Environment, Wellington, 1992).

A All Things to All People

SD is a concept to which a variety of interests subscribe. Environmentalists and economists can link arms and begin the march toward a prosperous and ecologically secure future. However, this solidarity may only be theoretical. Once we begin building our tower to the heavens, we may discover we are not speaking the same language after all.

Most people have some notion of what SD means, but multiple definitions and interpretations abound.¹⁴⁹ Although the vagueness of the Rio Declaration enabled states to claim common ground at Rio, the policies and corrective strategies to be implemented in achieving SD are unclear.¹⁵⁰ As states implement policies toward SD, different ideological perceptions will emerge. Implementing SD will involve continual trade-offs between biological, economic and social goals.¹⁵¹ Trade-offs are inevitable in a balancing approach, as in a limited world it is impossible to maximise everything for everyone. Improving the status of women, or the state of technology, may conflict with the preservation of traditional values and reliance on traditional skills.¹⁵² Moreover, the environment has traditionally been the loser when trade-offs are made.¹⁵³ The writer believes it is essential to assess ecological limits, and actively implement environmental protection measures, to ensure environmental integrity is maintained.

B Scientific Uncertainty

Although many commentators have turned their attention to the problems of implementing SD, less attention has been paid to whether the concept is scientifically sound. The importance of ascertaining whether SD is a feasible route is imperative. All life on earth, human and non-human, depends on the effective functioning of ecosystems. In order to

¹⁴⁹ At one OECD seminar, 64 different definitions of SD were advanced - see M Edwards "Urban Sustainability" No 5 of *Resource Management Ideas* (Ministry for the Environment, Wellington, 1992)
3.

¹⁵⁰ K Shirley "Taking Cheer From Rio" (1992) 19 Terra Nova 45. This makes the Rio Declaration a weak convention. It permits the illusion problems are being tackled, when in fact they are not.

¹⁵¹ E Barbier "The Concept of Sustainable Economic Development" (1987) 14 Environmental Conservation 101, 105.

¹⁵² Above n 151, 105.

¹⁵³ See the discussion on EBLs, above Part IV, A 4.

survive, we must keep our rate of resource use and waste outputs within the capacity of ecological systems.

The clear message of recent decades is that the carrying capacity of the earth is limited.¹⁵⁴ The earth is a closed system, with a finite supply of materials and finite rate of energy throughput.¹⁵⁵ Increasing use of natural resources and energy cannot continue indefinitely. The inevitable consequence of exponential material growth in a finite world is that we will cannibalise our ecological 'capital.' Even states appearing able to afford to reduce their natural capital are at risk, as we are unable to foresee all the consequences of our actions. The nature and timing of a response cannot always be predicted, and "several responses may combine to create a result greater than the sum of the individual factors."¹⁵⁶ The loss of an ecological function may be irreversible, and we may be unable to find effective substitutes.¹⁵⁷

As most current production uses scarce resources and generates pollution,¹⁵⁸ a generalised growth policy is premature. It encourages a growth ethic among countries currently unable to implement the efficient systems SD policies are premised on. Although energy efficiency and 'clean' production are increasing in sophistication and use, this will do little to minimise the environmental impact of human industry if accompanied by exponential increases in production and consumption. Continued growth makes even the most impressive gains in efficiency meaningless in the end.¹⁵⁹

Whether or not SD is feasible cannot be answered due to lack of sufficient empirical information.¹⁶⁰ The appropriate response in the face of uncertainty must be caution.¹⁶¹

¹⁵⁴ See for example D Meadows et al *The Limits to Growth* (Pan, London, 1974); G Hardin "The Tragedy of the Commons" (1968) 162 Science 1243.

¹⁵⁵ K Cronin Ecological Principles for Resource Management (Ministry for the Environment, Wellington, 1988) 30.

¹⁵⁶ K Cronin "Ecological Principles for Resource Management: A Summary" in *Resource Management Law Reform Working Paper No 1* (Ministry for the Environment, Wellington, 1988) 32, 47.

¹⁵⁷ E Hughes et al (ed) *Environmental Law and Policy* (Preliminary ed, Edmond-Montana Publications Ltd, Toronto, 1992) 1:10.

¹⁵⁸ J Gowdy "Economic Growth *versus* the Environment" (1992) 19 Environmental Conservation 102, 103.

¹⁵⁹ Anonymous "Does Wealth Cure Environmental Degradation?" (1992) 22 The Ecologist 168.

¹⁶⁰ J Bojo et al *Environment and Development: An Economic Approach* (Kluwer Academic Publishers, Dordrecht, 1992) 15.

Even if the probability of environmental collapse is low, and the information unreliable, the stakes are high.¹⁶² There is no second option if the biosphere's life-support systems break down.¹⁶³ If SD merely masks business as usual, our future is not secure.

C The Semantics of Development

Development is a positive word. It is intended to denote qualitative as well as quantitative improvement.¹⁶⁴ However, development also has denotations that may hinder effective resolution of environmental problems. It recalls the distinction between developed and developing states. Developed states are perceived as further advanced and more civilised than 'backward' developing states.¹⁶⁵ Thus pursuit of development is equated with attainment of the economies, possessions and lifestyles of developed states. This denigrates social and cultural integrity, and obscures human diversity.

The endorsement of increased development for all nations is culturally insensitive. Generalised industrial development is "neither feasible nor desirable" for many states - for example, Pacific Island states and thinly-populated countries in sub-Saharan Africa.¹⁶⁶ A more appropriate focus is on sustainable societies. Focusing on sustainability rather than development recognises culturally and socially diverse aims within and between societies, and an advanced/backward dichotomy is rendered irrelevant.

¹⁶² J Baines et al in "Sustainability and its Significance for the Resource Management Law Reform" paper 2 of *Resource Management Law Reform Working Paper No 10* (Ministry for the Environment, Wellington, 1988) 13 compare it to buckling up a child's seatbelt - "The probability of disaster is low; we judge the risk to be high."

163 Above n 156, 45.

¹⁶⁴ M Jacobs Sustainable Development: Greening the Economy Fabian Tract 538 (Fabian Society, London, 1991) 2.

165 W Sachs "On the Archaeology of the Development Idea" (1990) 20 The Ecologist 42, 42.

166 D Simon "Sustainable Development: Theoretical Construct or Attainable Goal?" (1989) 16 Environmental Conservation 41, 46. At the 47th Session of the United Nations General Assembly, the New Zealand government "welcomed the decision to convene a global conference on the sustainable development of small island countries" - see "Follow-up to Rio" (1992) 22 EPLJ 302, 304.

¹⁶¹ K Cronin "The Intrinsic Value of Ecosystems" paper 5 of *Resource Management Law Reform Working Paper No 24* (Ministry for the Environment, Wellington, 1988) 8 - "Given the cumulative effects of environmental degradation, locally and globally, and the limits to our knowledge of ecosystem response to change, the wise resource management policy is to proceed with caution."

D Shortcomings of an Economic Growth Precept

It is difficult to reconcile concepts of economic growth and sustainability. Development projects that maximise economic returns are rarely ecologically benign. Frantic pursuit of affluence commonly leads to excessive waste and rapid resource depletion.¹⁶⁷ The contradictions between economic growth and sustainability are yet to be adequately reconciled.

SD views economic growth as essential to good environmental outcomes. However, economic growth is neither inherently detrimental or beneficial to the environment. It is possible for gross national product¹⁶⁸ to climb with fewer resources being used, and less pollution being generated. Conversely, it is possible for environmental degradation to increase when growth levels are zero or negative.¹⁶⁹ As no rate of economic growth - positive, zero, or negative - ensures good environmental outcomes, economic growth is not a useful target for environmental policy.¹⁷⁰ It is misleading to propose economic growth is the answer to our environmental ills.

Neither is human well-being necessarily improved by increases in economic output.¹⁷¹ While global economic output has increased fivefold since 1950, today more people than ever live in absolute poverty.¹⁷² Benefits of growth are rarely equitably distributed within or between societies.¹⁷³ Rather than accepting economic growth as a fundamental element of social policy, we should look instead at what our real needs are, and the most effective way to meet them.

¹⁶⁷ I Barbour (ed) Earth Might be Fair (Prentice Hall Inc, New Jersey, 1972) 11.

¹⁶⁸ GNP is not always a reliable indicator of economic growth, but is the one most commonly used.

¹⁶⁹ Above n 164, 4.

¹⁷⁰ Above n 164, 4.

¹⁷¹ H Daly "U.N. Conferences on Environment and Development: Retrospect on Stockholm and Prospects for Rio" (1992) 5 Ecological Economics 9, 13.

¹⁷² S Postel, C Flavin "Recharging the Global Economy" in *State of the World 1991* (New York, Norton, 1991) 188.

¹⁷³ D Simon, above n 166, 43.

VI TOWARD ENVIRONMENTAL SUSTAINABILITY

The call to reassess our values is so prevalent in environmental literature that it is something of a cliche. Yet until new attitudes form part of our consciousness, the call must continue to go out. There must be a profound change in our attitudes toward nature, and our concept of fulfilment.

A Awareness of the Value of Nature

We are slowly realising human well-being and survival depend on the effective functioning of ecosystems. If ecological systems are damaged or destroyed, human objectives will be frustrated. However, concern for the environment must extend past enlightened self-interest. The environment is more than a source of raw material. The intrinsic value of the environment must be recognised if the environment is to be truly respected and protected.

Ecosystems and their constituent parts have value without reference to humans. The functional value of the biosphere exists irrespective of human valuations.¹⁷⁴ Yet the biosphere also has intrinsic value as part of the created world.¹⁷⁵ We must rediscover respect for what God has created. Nature should not be worshipped or romanticised, but its intrinsic value should be recognised.

Recognition of intrinsic value does not detract from provision for human needs. Human needs must be adequately provided for. Asserting the importance of humans, however, does not reduce the value of the environment to nothing. A more holistic understanding of the world is essential. Humans are part of an interactive and dynamic system of life. As part of a larger whole, we must reassess our role as a participant in the community of

¹⁷⁴ K Cronin "Legal Mechanisms for Implementing Sustainability" paper 1 of *Resource Management Law Reform Working Paper No 25* (Ministry for the Environment, Wellington, 1988) 4.

¹⁷⁵ The natural environment derives intrinsic value from its source in God. Despite the apparent contradiction in claiming natural elements have intrinsic value that *derives* from a external source, the assumption is that once something is brought into existence by God, it automatically and necessarily has value as part of God's creation. This inherent and essential value exists irrespective of human valuations.

life. We have a responsibility to protect values jeopardised by our behaviour, and to respect value wherever it is found.¹⁷⁶

B Reconsidering Our Attitudes on Fulfilment

Recent generations have over-emphasised economic performance. Human welfare is commonly measured solely in economic terms. While eradication of poverty is a laudable goal, the distinction between real material poverty and culturally perceived poverty has been increasingly blurred. Standard of living is not necessarily synonymous with quality of life.

Quality of life is determined by a variety of factors, of which economic achievement is only a part. Psychological data suggests the main determinants of happiness are not related to consumption, but to satisfaction with family life, work, leisure, and friendships.¹⁷⁷ Consumption must be put in its proper place among other sources of personal fulfilment. The goal of policy makers should be to improve human welfare, rather than to increase production and consumption.

This requires a fundamental revision of our values and preferences. The goal should be to identify the real determinants of quality of life. We must collectively reassess our values and priorities, and determine to live within the Earth's carrying capacity.

VII CONCLUSION

The unprecedented scale of environmental degradation in recent years has prompted the search for a new approach to environmental affairs. New Zealand is both affected by, and contributes to, environmental degradation and resource depletion. The New Zealand government has professed a commitment to sustainability, and has achieved a monumental task in enacting the RMA91. This ambitious and promising start should not be followed by blind adherence to the concept of SD enunciated at Rio.

SM is not compatible with SD. While differences in scope are readily apparent, disparities between the two concepts are even more profound. The concepts proceed from

¹⁷⁶ H Rolston "Rights and Responsibilities on the Home Planet" (1993) 18 Yale L. J. of Int'l. L. 251, 264.

¹⁷⁷ A Durning "Asking How Much is Enough" in *State of the World 1991* (Allen & Unwin, Sydney, 1991) 156, 162.

fundamentally different approaches to sustainability, and accord different values to both humans and nature.

The Rio Conference raised global awareness of environmental concerns, but it will take more than international agreements and Earth Charters to ensure the sustainability of our environment. The challenge lies with us. We must collectively reassess the values that will determine our future.

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APPENDIX I - THE RIO DECLARATION ON ENVIRONMENT AND DEVELOPMENT

Preamble

The United Nations Conference on Environment and Development,

Having met at Rio de Janeiro from 3 to 14 June 1992,

<u>Reaffirming</u> the Declaration of the United Nations Conference on the Human Environment, adopted at Stockholm on 16 June 1972, and seeking to build upon it,

With the goal of establishing a new and equitable global partnership through the creation of new levels of cooperation among States, key sectors of societies and people,

<u>Working towards</u> international agreements which respect the interests of all and protect the integrity of the global environmental system,

<u>Recognizing</u> the integral and interdependent nature of the Earth, our home, Proclaims that:

<u>Principle 1</u> Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.

<u>Principle 2</u> States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

<u>Principle 3</u> The right to development must be fulfilled so as to equitably meet developmental an environmental needs of present and future generations.

<u>Principle 4</u> In order to achieve sustainable development, environmental protection shall constitute and integral part of the development process and cannot be considered in isolation from it.

<u>Principle 5</u> All States and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of people of the world.

<u>Principle 6</u> The special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable, shall be given special priority. International actions in the field of environment and development should also address the interests and needs of all countries.

<u>Principle 7</u> States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.

<u>Principle 8</u> To achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies

<u>Principle 9</u> States should cooperate to strengthen endogenous capacity-building for sustainable development by improving scientific understanding through exchanges of scientific and technological knowledge, and by enhancing the development, adaptation, diffusion and transfer of technologies, including new and innovative technologies.

<u>Principle 10</u> Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.

<u>Principle 11</u> States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply. Standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries.

<u>Principle 12</u> States should cooperate to promote a supportive and open international economic system that would lead to economic growth and sustainable development is all countries, to better address the problems of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on an international consensus.

<u>Principle 13</u> States shall develop national law regarding liability and compensation for the victims of pollution and other environmental damage. States shall also cooperate in an expeditious and more determined manner to develop further international law regarding liability and compensation for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction.

<u>Principle 14</u> States should effectively cooperate to discourage or prevent the relocation and transfer to other States of any activities and substances that cause severe environmental degradation or are found to be harmful to human health.

<u>Principle 15</u> In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

<u>Principle 16</u> National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.

<u>Principle 17</u> Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.

<u>Principle 18</u> States shall immediately notify other States of any natural disasters or other emergencies that are likely to produce sudden harmful effects on the environment of those States. Every effort shall be made by the international community to help States so afflicted.

<u>Principle 19</u> States shall provide prior and timely notification and relevant information to potentially affected States on activities that may have a significant adverse transboundary environmental effect and shall consult with those States at an early stage and in good faith.

<u>Principle 20</u> Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development.

<u>Principle 21</u> The creativity, ideals and courage of the youth of the world should be mobilized to forge a global partnership in order to achieve sustainable development and ensure a better future for all.

<u>Principle 22</u> Indigenous people and their communities, and other local communities, have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognise and duly support their identity, culture and interests, and enable their effective participation in the achievement of sustainable development.

<u>Principle 23</u> The environment and natural resources of people under oppression, domination and occupation shall be protected.

<u>Principle 24</u> Warfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and cooperate in its further development, as necessary.

<u>Principle 25</u> Peace, development and environmental protection are interdependent and indivisible.

<u>Principle 26</u> States shall resolve all their environmental disputes peacefully and by appropriate means in accordance with the Charter of the United Nations.

<u>Principle 27</u> States and people shall cooperate in good faith and in a spirit of partnership in the fulfilment of the principles embodied in this Declaration and in the further development of international law in the field of sustainable development.

. Other matters, in objecting the persons of this Act, all persons each nuunctions and powers under it, in relation to managing the use, development, a retection of behavior and physical remainers, shall have particular regard to

- (b) The officient use and development of notural and populate research
- (c). A the maintenative and enhancement of emerging sum
- (d) Intrinsic values of coosystems:

APPENDIX II - PART II OF THE RESOURCE MANAGEMENT ACT 1991

5. Purpose- (1) The purpose of this Act is to promote the sustainable management of natural and physical resources.

(2) In this Act, "sustainable management" means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while-

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

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

6. Matters of national importance- In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

(a) The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and the lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:

(b) The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:

(c) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:

(d) The maintenance and enhancement of public access to and along the coastal marine area, lakes and rivers:

(e) The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.

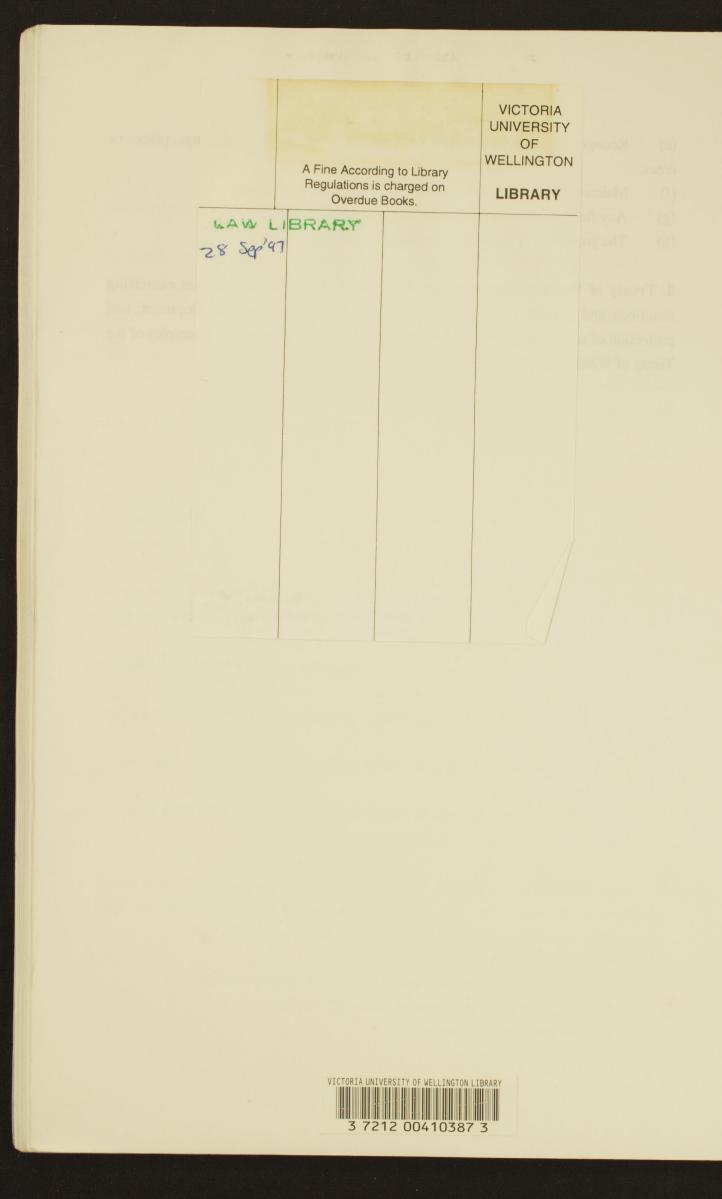
7. Other matters- In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to-

- (a) Kaitiakitanga:
- (b) The efficient use and development of natural and physical resources:
- (c) The maintenance and enhancement of amenity values:
- (d) Intrinsic values of ecosystems:

(e) Recognition and protection of the heritage values of sites, buildings, places or areas:

- (f) Maintenance and enhancement of the quality of the environment:
- (g) Any finite characteristics of natural and physical resources:
- (h) The protection of the habitat of trout and salmon.

8. Treaty of Waitangi- In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).



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