

ECOLOGICALLY SUSTAINABLE DEVELOPMENT IN NEW SOUTH WALES¹

*Justice Peter Biscoe,
Judge of the Land and Environment Court of New South Wales.*

1. In Australia in the last decade of the twentieth century and the first decade of the twenty-first century, the concept of ecologically sustainable development (ESD) was planted in numerous statutes² and blossomed in a significant number of cases.³ This paper analyses the treatment of ESD in New South Wales legislation and in the more significant Australian cases, and briefly traces the background of its evolution in international and national instruments.
2. The main impetus for Australian legislation came from three national and international instruments created in 1992. The first was the *Intergovernmental Agreement on the Environment* between the Commonwealth, States and Territories of Australia and the Australian Local Government Association in May 1992.⁴ The second was the *Rio Declaration* (and associated instruments) created by the United Nations Conference on Environment and Development in June 1992.⁵ The third was the *National Strategy for Ecologically Sustainable Development* endorsed by the Council of Australian Governments in December 1992.⁶

¹ A paper delivered on 2 June 2007 at the 5th Worldwide Colloquium of the IUCN Academy of Environmental Law, Paraty, Brazil.

² New South Wales and Commonwealth of Australia legislation referring to ESD as at May 2007 are listed in Appendix D and selected extracts appear in Appendix E.

³ These cases are listed in Appendix F. A selected Australian bibliography is in Appendix G.

⁴ A copy is in Appendix A.

⁵ A copy is in Appendix C.

⁶ A copy of Part 1 of this document is in Appendix B.

3. ESD is a goal that requires environmental protection to be taken into consideration effectively when making development decisions. Four recognised principles inform that process. First, the precautionary principle. Secondly, the principle of inter-generational equity, which incorporates the notion of intra-generational equity. Thirdly, the principle of conservation of biological diversity and ecological integrity. Finally, the principle of improved valuation, pricing and incentive mechanisms, which emphasises the internalisation of environmental costs.⁷

International Background

4. Australia's embrace of ESD has been part of a global phenomenon. The concept of ESD evolved in a number of documents adopted at international conferences on the environment, including the following. The process began in 1972 at the United Nations Conference on the Human Environment in Stockholm attended by 113 nations. The Conference created two instruments: the *Declaration on the Human Environment* which proclaimed 26 principles for international cooperation; and the *Action Plan for the Human Environment*. Principle 13 of the former touched on ESD as follows:

In order to achieve a more rational management of resources and thus to improve the environment, States should adopt an integrated and coordinated approach to their development planning so as to ensure that development is compatible with the need to protect and improve the environment for the benefit of their population.

⁷ These principles are recognised and explained in, for example, s 6(2) of the *Protection of the Environment Administration Act 1991* (NSW) set out below at [25].

5. In 1980, the *World Conservation Strategy*, prepared by the International Union for Conservation of Nature and Natural Resources (now known as the World Conservation Union), aimed to achieve three main objectives of living resource conservation: to maintain essential ecological processes and life-support systems; to promote genetic diversity; and to ensure the sustainable utilisation of species and ecosystems. This strategy identified the failure to integrate conservation with development as one of the main obstacles to achieving conservation. It made the following legislative proposal:

There should be specific legislation aimed at achieving the objectives of conservation by providing for both the sustainable utilisation and the protection of living resources and of their support systems. Comprehensive conservation legislation should provide for the planning of land and water uses and should regulate both direct impacts on the resource, such as exploitation and habitat removal, and indirect ones, such as pollution or introduction of exotic species. In addition, it should include requirements to undertake ecosystem evaluations, environmental assessments, and like mechanisms to ensure the incorporation of ecological considerations into policy making. The law should also provide for the participation of citizens in the elaboration of policies, for the provision of sufficient information for participation to be effective, and for legal recourse to implement these rights. In addition there is a need to revise traditional concepts of the law of remedy, which currently envisage compensation only for economic loss, narrowly defined, and do not provide for indirect or long term damage to individuals and communities through the depletion of species or the destruction or degradation of ecosystems.

Special attention should be paid to the enforcement of conservation law...⁸

6. In response, in 1983, Australia adopted the *National Conservation Strategy for Australia: Living Resource Conservation for Sustainable Development*.

⁸ Section 11 paragraphs 8 and 9.

7. In 1983, the United Nations established the World Commission on Environment and Development. The 1987 World Commission's report *Our Common Future* (commonly referred to as the *Brundtland Report*) defined "*sustainable development*" as development that meets the needs of present generations while not compromising the ability of future generations to meet their own needs. The *Brundtland Report* recognised that the world's current pattern of economic growth was not ecologically sustainable. It contained proposals for long term environmental strategies for achieving ESD by 2000 and beyond, and recommended ways that concern for the environment may be translated into greater cooperation between countries. The report emphasised that the environment and development must no longer be regarded as separate concerns but were interlocked, and that sustainability should be a vehicle for integrating economic development and ecological integrity.

8. In June 1992, in response to the *Brundtland Report's* recommendations, the "Earth Summit", the United Nations Conference on Environment and Development was held in Rio de Janeiro. Its mandate was to "*elaborate strategies and measures to halt and reverse the effects of environmental degradation in the context of increased national and international efforts to promote sustainable and environmentally sound development in all countries*".⁹ Australia was among the 172 nations that attended. Documents created at the conference included the *Rio Declaration* which

⁹ Resolution 44/228 of the United Nations General Assembly 85th Plenary Meeting, 22 December 1989.

was a statement of 27 general principles; *Agenda 21* which was a lengthy action plan; the *United Nations Framework Convention on Climate Change*; the *Convention on Biological Diversity*; and an agreed *Statement of Principles on Forests*. Four of the *Rio Declaration* principles are substantially reflected in subsequent Australian legislation, namely:

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

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

Principle 15. 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.

Principle 16. 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.

9. The central concept of ESD, the integration of environmental protection and development, appeared in Principle 4. Three of the four pillars on which the concept rests - the precautionary principle, the principle of intergenerational and intra-generational equity and the internalisation of environmental costs principle - were embodied in, respectively, Principles 15, 3 and 16. However, Principle 16 was heavily qualified. The fourth pillar, the principle of conservation of biological diversity, was reflected in the accompanying *Convention on Biological Diversity* Article 1 which stated:

The objectives of this Convention, to be pursued in accordance with its relevant provisions, are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding.

10. The role of the law in relation to sustainable development was stated in the

Principle 11 of the *Rio Declaration*:

States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and development 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

11. *Agenda 21* described itself as a “blueprint for action in all areas relating to the sustainable development of the planet”. It provided mechanisms, in the form of policy, plans, programs and guidelines, for national governments to apply the principles contained in the *Rio Declaration*. Chapter 8 of *Agenda 21* provided that laws and regulations suited to the conditions of each country were among the most important instruments for transforming environment and development policies into action. Chapter 28 acknowledged the importance of local authorities in furthering ESD and contemplated, among other things, the establishment of *Agenda 21* programmes in local government jurisdictions and the implementation of local authority programmes, policies and laws. Principle 10 of the *Rio Declaration* proclaimed that environmental issues were best handled with informed public participation. Similarly *Agenda 21* in Chapter 23

emphasised that “*one of the fundamental prerequisites for the achievement of sustainable development is broad public participation in decision-making*”.

12. In 1993, a United Nations Commission on Sustainable Development was created to progressively administer the implementation of *Agenda 21*. Many nations, including Australia, have committed to reporting regularly to the Commission on their actions to achieve sustainable development. The 2000 *Millennium Declaration* adopted by the United Nations General Assembly identified fundamental values that were essential to international relations in the twenty first century including:

*Respect for nature. Prudence must be shown in the management of all living species and natural resources, in accordance with the precepts of sustainable development. Only in this way can the immeasurable riches provided to us by nature be preserved and passed on to our descendants. The current unsustainable patterns of production and consumption must be changed in the interest of our future welfare and that of our descendants.*¹⁰

The *Millennium Declaration* identified objectives to translate these values into action, one of which was “*Protecting our common environment*”.

13. In 2002, the World Summit on Sustainable Development took place in Johannesburg, South Africa, and adopted *the Johannesburg Declaration on Sustainable Development* and the *Johannesburg Plan of Implementation*. The former affirmed a will to “*assume a collective responsibility to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development – economic development, social development and*

¹⁰ Millennium Declaration Chapter I Clause 6.

environmental protection – at the local, national, regional and global levels”.

Thus, social development came to be highlighted as one of the pillars of ESD, joining economic development and environmental protection.

14. The Global Judges Symposium held in conjunction with the Johannesburg World Summit adopted the *Johannesburg Principles on the Role of Law and Sustainable Development*. The Symposium agreed four principles to guide the judiciary in promoting the goals of sustainable development through the application of the rule of law and the democratic process:

1) *A full commitment to contributing towards the realization of the goals of sustainable development through the judicial mandate to implement, develop and enforce the law, and to uphold the Rule of Law and the democratic process,*

2) *To realise the goals of the Millenium Declaration of the United Nations General Assembly which depend upon the implementation of national and international legal regimes that have been established for achieving the goals of sustainable development,*

3) *In the field of environmental law there is an urgent need for a concerted and sustained programme of work focused on education, training and dissemination of information, including regional and sub-regional judicial colloquia, and*

4) *That collaboration among members of the Judiciary and others engaged in the judicial process within and across regions is essential to achieve a significant improvement in compliance with, implementation, development and enforcement of environmental law.¹¹*

15. For the realisation of these principles, the Global Judges Symposium proposed that the program of work should include the following:

¹¹ These principles were listed in Part 4 of the Final Report of the Global Judge’s Symposium on Sustainable Development and the Role of the Law, 18- 20 August 2002, Johannesburg South Africa.

- a) *The improvement of the capacity of those involved in the process of promoting, implementing, developing and enforcing environmental law, such as judges, prosecutors, legislators and others, to carry out their functions on a well informed basis, equipped with the necessary skills, information and material,*
- b) *The improvement in the level of public participation in environmental decision- making, access to justice for the settlement of environmental disputes and the defense and enforcement of environmental rights, and public access to relevant information,*
- c) *The strengthening of sub-regional, regional and global collaboration for the mutual benefit of all peoples of the world and exchange of information among national Judiciaries with a view to benefiting from each other's knowledge, experience and expertise,*
- d) *The strengthening of environmental law education in schools and universities, including research and analysis as essential to realizing sustainable development,*
- e) *The achievement of sustained improvement in compliance with and enforcement and development of environmental law,*
- f) *The strengthening of the capacity of organizations and initiatives, including the media, which seek to enable the public to fully engage on a well-informed basis, in focusing attention on issues relating to environmental protection and sustainable development,*
- g) *An Ad Hoc Committee of Judges consisting of Judges representing geographical regions, legal systems and international courts and tribunals and headed by the Chief Justice of South Africa, should keep under review and publicise the emerging environmental jurisprudence and provide information thereon,*
- h) *UNEP and its partner agencies, including civil society organizations should provide support to the Ad Hoc Committee of Judges in accomplishing its task,*
- i) *Governments of the developed countries and the donor community, including international financial institutions and foundations, should give priority to financing the implementation of the above principles and the programme of work,*
- j) *The Executive Director of UNEP should continue to provide leadership within the framework of the Montevideo Programme III, to the development and implementation of the programme designed to improve*

the implementation, development and enforcement of environmental law including, within the applicable law of liability and compensation for environmental harm under multilateral environmental agreements and national law, military activities and the environment, and the legal aspects of the nexus between poverty and environmental degradation, and

k) This Statement should be presented by the Chief Justice of South Africa to the Secretary-General of the United Nations as a contribution of the Global Judges Symposium to the forthcoming World Summit on Sustainable Development, and for broad dissemination thereof to all member States of the United Nations.¹²

Australian Background

16. As mentioned earlier, the main impetus for Australian legislation referring to ESD came from three 1992 instruments: the *Rio Declaration* of June 1992; the *Intergovernmental Agreement on the Environment* between the Commonwealth, States and Territories of Australia and the Australian Local Government Association of May 1992; and the *National Strategy for Ecologically Sustainable Development* in December 1992. Section 3 of the *Intergovernmental Agreement* provided:

SECTION 3 - PRINCIPLES OF ENVIRONMENTAL POLICY

3.1 The parties agree that the development and implementation of environmental policy and programs by all levels of Government should be guided by the following considerations and principles.

3.2 The parties consider that the adoption of sound environmental practices and procedures, as a basis for ecologically sustainable development, will benefit both the Australian people and environment, and the international community and environment. This requires the effective integration of economic and environmental considerations in decision-making processes, in order to improve community well-being and to benefit future generations

¹² The program of work was detailed in Part 4 of the Final Report of the Global Judge's Symposium on Sustainable Development and the Role of the Law, 18- 20 August 2002, Johannesburg South Africa.

3.3 *The parties consider that strong, growing and diversified economies (committed to the principles of ecologically sustainable development) can enhance the capacity for environmental protection. In order to achieve sustainable economic development, there is a need for a country's international competitiveness to be maintained and enhanced in an environmentally sound manner.*

3.4 *Accordingly, the parties agree that environmental considerations will be integrated into Government decision-making processes at all levels by, among other things:*

- (i) ensuring that environmental issues associated with a proposed project, program or policy will be taken into consideration in the decision making process;*
- (ii) ensuring that there is a proper examination of matters which significantly affect the environment; and*
- (iii) ensuring that measures adopted should be cost-effective and not be disproportionate to the significance of the environmental problems being addressed.*

3.5 *The parties further agree that, in order to promote the above approach, the principles set out below should inform policy making and program implementation.*

3.5.1 precautionary principle -

Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:

- (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment; and*
- (ii) an assessment of the risk-weighted consequences of various options.*

3.5.2 intergenerational equity -

the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.

3.5.3 conservation of biological diversity and ecological integrity -

conservation of biological diversity and ecological integrity should be a fundamental consideration.

3.5.4 improved valuation, pricing and incentive mechanisms -

- environmental factors should be included in the valuation of assets and services.*
- polluter pays i.e. those who generate pollution and waste should bear the cost of containment, avoidance, or abatement*

- *the users of goods and services should pay prices based on the full life cycle costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any wastes*
- *environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, which enable those best placed to maximise benefits and/or minimise costs to develop their own solutions and responses to environmental problems.*

17. It can be seen that the four well-known pillars or principles of ecologically sustainable development – the precautionary principle, intergenerational equity, conservation of biological diversity and ecological integrity, and improved valuation, pricing and incentive mechanisms – are included in section 3.5. The intra-generational equity principle is not expressly mentioned in this part of the agreement. However, it may be included by implication on the basis that it is necessarily incorporated within the notion of inter-generational equity. This implication is supported by one of the recitals to the first part of the *Intergovernmental Agreement* where it is recognised that the concept of ESD provides potential for integration of environmental and economic considerations in decision making and for “*balancing the interests of current and future generations*”. Those inclusions and the omission later carried through to New South Wales legislation. The precautionary principle is expressed in the *Intergovernmental Agreement* in similar terms to Principle 15 of the *Rio Declaration*. Differences include the addition of the adjective “*environmental*” to the *Rio Declaration*’s reference to “*damage*” and the omission of the adjective “*cost-effective*” before the *Rio Declaration*’s reference to “*measures*”.

18. Implementation and application of the principles are addressed in nine schedules to the *Intergovernmental Agreement* dealing with specific areas of environmental policy and management. They are: (1) data collection and handling; (2) resource assessment, land use decisions and approval processes; (3) environmental impact assessment; (4) national environment protection measures; (5) climate change; (6) biological diversity; (7) national estate; (8) world heritage; and (9) nature conservation.
19. Schedule 3.3(iii) provided that all levels of government would ensure that their environmental impact assessment processes were based on (among other things) assessing authorities providing all participants in the process with guidance on the criteria for environmental acceptability of potential impacts, including the concept of ESD. Schedule 2 included the following provisions:

1. The parties agree that the concept of ecologically sustainable development should be used by all levels of Government in the assessment of natural resources, land use decisions and approval processes.

2. The parties agree that it is the role of government to establish the policy, legislative and administrative framework to determine the permissibility of any land use, resource use or development proposal having regard to the appropriate, efficient and ecologically sustainable use of natural resources (including land, coastal and marine resources).

Schedule 5 addressed the need for Australia to be part of an international response to the problem of greenhouse-enhanced climate change. It adopted an interim planning target to stabilise greenhouse gas emissions, based on 1988 levels, by the year 2000, and to reduce these emissions by twenty percent by the year 2005. However, significantly, this was expressed

to be “*subject to Australia not implementing response measures that would have net adverse economic impacts nationally or on Australia’s trade competitiveness, in the absence of similar action by major greenhouse gas emitting countries*”.

20. In December 1992, as foreshadowed in the *Intergovernmental Agreement* of May 1992 and following the Rio Conference a month later, the Australian *National Strategy for Ecologically Sustainable Development* was endorsed by the Council of Australian Governments. It set out the broad strategic and policy framework under which governments would cooperatively make decisions and take actions to pursue ESD. It stated that it was to be used by governments to guide policy and decision-making, particularly in key industry sectors which rely on the utilisation of natural resources. The *National Strategy’s* goal, core objectives and guiding principles were defined as follows:

Australia's goal, core objectives and guiding principles for the Strategy

The Goal is:

Development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends.

The Core Objectives are:

- to enhance individual and community well-being and welfare by following a path of economic development that safeguards the welfare of future generations*
- to provide for equity within and between generations*
- to protect biological diversity and maintain essential ecological processes and life-support systems*

The Guiding Principles are:

- *decision making processes should effectively integrate both long and short-term economic, environmental, social and equity considerations*
- *where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation*
- *the global dimension of environmental impacts of actions and policies should be recognised and considered*
- *the need to develop a strong, growing and diversified economy which can enhance the capacity for environmental protection should be recognised*
- *the need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised*
- *cost effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms*
- *decisions and actions should provide for broad community involvement on issues which affect them*

These guiding principles and core objectives need to be considered as a package. No objective or principle should predominate over the others. A balanced approach is required that takes into account all these objectives and principles to pursue the goal of ESD.

Who will be affected by ESD?

Every one of us has a role to play in national efforts to embrace ESD. The participation of every Australian - through all levels of government, business, unions and the community - is central to the effective implementation of ESD in Australia.

21. It can be seen that intra-generational equity (equity “within” a generation) is listed as a core objective even though it had not been expressly mentioned in the Australian *Intergovernmental Agreement on the Environment* earlier in the year.
22. Both the *Intergovernmental Agreement* and the *National Strategy* acknowledged that while the Australian Local Government Association

endorsed the ESD policy and would do all within its power to ensure compliance, it could not bind local government authorities to observe its terms. Nevertheless, it has been held by the Land and Environment Court of New South Wales that a proper exercise of the powers of local government authorities would mean that they (and the Land and Environment Court of New South Wales on a merits appeal) would apply the ESD policy unless there were cogent reasons to depart from it.¹³

23. In 1996 the *National Strategy for the Conservation of Australia's Biological Diversity* was adopted. It was prepared by the Australian and New Zealand Environment and Conservation Council, in consultation with the Agricultural and Resources Management Council of Australia and New Zealand, the Australian Forestry Council, the Australian and New Zealand Fisheries and Aquaculture Council, the Australian and New Zealand Minerals and Energy Council, and the Industry Technology and Regional Development Council. This document committed their respective governments to implement it as a matter of urgency, subject to budgetary priorities and constraints in individual jurisdictions. The stated goal was to protect biological diversity and maintain ecological processes and systems. This document recognised ESD and adopted the following principles as a basis for its objectives and actions and as a guide for implementation:

1. *Biological diversity is best conserved in-situ.*
2. *Although all levels of government have clear responsibility, the cooperation of conservation groups, resource users, indigenous peoples, and the community in general is critical to the conservation of biological diversity.*

¹³ *BGP Properties Pty Ltd v Lake Macquarie City Council* (2004) 138 LGERA 237 at [93] per McClellan CJ.

3. *It is vital to anticipate, prevent and attack at source the causes of significant reduction or loss of biological diversity.*
4. *Processes for and decisions about the allocation and use of Australia's resources should be efficient, equitable and transparent.*
5. *Lack of full knowledge should not be an excuse for postponing action to conserve biological diversity.*
6. *The conservation of Australia's biological diversity is affected by international activities and requires actions extending beyond Australia's national jurisdiction.*
7. *Australians operating beyond our national jurisdiction should respect the principles of conservation and ecologically sustainable use of biological diversity and act in accordance with any relevant national or international laws.*
8. *Central to the conservation of Australia's biological diversity is the establishment of a comprehensive, representative and adequate system of ecologically viable protected areas integrated with the sympathetic management of all other areas, including agricultural and other resource production systems.*
9. *The close, traditional association of Australia's indigenous peoples with components of biological diversity should be recognised, as should the desirability of sharing equitably benefits arising from the innovative use of traditional knowledge of biological diversity.*

New South Wales Legislation

24. As early as December 1991, there was a New South Wales statute which referred to ESD. This was in s 6, the objectives provision, of the *Protection of the Environment Administration Act 1991*. Following the May 1992 *Australian Intergovernmental Agreement on the Environment*, the June 1992 *Rio Declaration* and the December 1992 *Australian National Strategy for Ecologically Sustainable Development*, all nine Australian jurisdictions (the Commonwealth, six States and two Territories) now have legislation which incorporates ESD principles. As at May 2007, New South Wales alone had

55 Acts and regulations which refer to ESD and the Commonwealth had 16.¹⁴

25. ESD is described in New South Wales legislation either within the legislation or, more commonly, by reference to the description in s 6(2) of the *Protection of the Environment Administration Act 1991*, as follows:

Ecologically sustainable development requires the effective integration of economic and environmental considerations in decision-making processes. Ecologically sustainable development can be achieved through the implementation of the following principles and programs:

- (a) *the precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.*

In the application of the precautionary principle, public and private decisions should be guided by:

- (i) *careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and*
- (ii) *an assessment of the risk-weighted consequences of various options,*
- (b) *inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,*
- (c) *conservation of biological diversity and ecological integrity—namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,*
- (d) *improved valuation, pricing and incentive mechanisms—namely, that environmental factors should be included in the valuation of assets and services, such as:*
- (i) *polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,*

¹⁴ They are listed in Appendix D to this paper (not listed are a number of Commonwealth appropriation Acts which refer to ESD). By way of illustration, selected extracts are included in Appendix E.

- (ii) *the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,*
- (iii) *environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.*

26. New South Wales legislation does not mandate ESD as an outcome but, in varying ways, as part of a process. The most prevalent treatment is to refer to ESD in the objects clause of the statute or to provide that the decision-maker is obliged to take ESD into account as part of the decision-making process, or both. An example of both is found in one of New South Wales' most important environmental statutes, the *Environmental Planning and Assessment Act 1979*. Section 5 has as one of its objects "to encourage" ESD:

The objects of this Act are:

- (a) *to encourage:*
 - (i) *the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
 - (ii) *the promotion and co-ordination of the orderly and economic use and development of land,*
 - (iii) *the protection, provision and co-ordination of communication and utility services,*
 - (iv) *the provision of land for public purposes,*
 - (v) *the provision and co-ordination of community services and facilities, and*
 - (vi) *the protection of the environment, including the protection and conservation of native animals and plants, including*

- threatened species, populations and ecological communities, and their habitats, and*
- (vii) ecologically sustainable development, and*
- (viii) the provision and maintenance of affordable housing, and*
- (b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and*
- (c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.*

27. It may be noted that the object of encouragement of ESD is not stated to override any other object. Section 79C(1) prescribes the matters that a consent authority must take into consideration (as must, on a merits appeal, the Land and Environment Court of New South Wales) in determining a development application, as follows:

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

- (a) the provisions of:*
 - (i) any environmental planning instrument, and*
 - (ii) any draft environmental planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the draft instrument has been deferred indefinitely or has not been approved), and*
 - (iii) any development control plan, and*
 - (iiia) any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and*
 - (iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),*
that apply to the land to which the development application relates,
- (b) the likely impacts of that development, including environmental impacts on both the natural and built*

environments, and social and economic impacts in the locality,

- (c) the suitability of the site for the development,*
- (d) any submissions made in accordance with this Act or the regulations,*
- (e) the public interest.*

28. Although s 79C(1) does not specifically refer to ESD, it has been held by the Land and Environment Court that the requirement of consideration of the “*public interest*” is ample enough, having regard to the subject matter, scope and purpose of the *Environmental Planning and Assessment Act 1979*, to embrace the principles of ESD where those principles are relevant to an issue.¹⁵

29. Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* prescribes the contents of environmental impact statements that accompany development applications. Clause 6(1) of Schedule 2 provides that the statement must include:

The reasons justifying the carrying out of the development or activity in the manner proposed, having regard to biophysical, economic and social considerations, including the following principles of ecologically sustainable development..

It then describes the principles of ESD as set out above at [25].

30. Three other examples may be given of how ESD is treated in the objects clauses of New South Wales statutes. The *Protection of the Environment Administration Act 1991* s 6(1)(a) provides that:

¹⁵ *Carstens v Pittwater Council* (1999) 111 LGERA 1 at 25 (Lloyd J); *BGP Properties v Lake Macquarie City Council* (2004) 138 LGERA 237 at 257 (McClellan CJ); and *Telstra Corp Ltd v Hornsby Shire Council* (2006) 146 LGERA 10 at [123] (Preston CJ).

The objectives of the [Environment Protection] Authority are:

(a) to protect, restore and enhance the quality of the environment in New South Wales, having regard to the need to maintain ecologically sustainable development

The *Coastal Protection Act 1979* s 3(b) provides:

The objects of this Act are to provide for the protection of the coastal environment of the State for the benefit of both present and future generations and, in particular:

(b) to encourage, promote and secure the orderly and balanced utilisation and conservation of the coastal region and its natural and man-made resources, having regard to the principles of ecologically sustainable development.

The *Water Management Act 2000* s 3(a) provides:

The objects of this Act are to provide for the sustainable and integrated management of the water sources of the State for the benefit of both present and future generations and, in particular:

(a) to apply the principles of ecologically sustainable development

31. In some New South Wales statutes the ESD requirement has been expressed more stringently to also include implementation of objects, strategies or plans by reference to ESD. For example, s 2A(2) of the *National Parks and Wildlife Act 1974* provides that its objects “are to be achieved by applying the principles of ecologically sustainable development”. Section 3 of the *Fisheries Management Act 1994* provides that its objects include ESD and, “consistently with those objects”, its objects include the provisions of viable commercial fishing and aquaculture industries. Sections 7E, 57 and 143 require a fishery management strategy, a management plan for a share management fishery and an aquaculture industry plan to include performance indicators to monitor whether ESD is being attained.

32. A number of New South Wales statutory authorities, such as fire brigades, are now required by statute to exercise their functions with due regard to the principles of ESD.¹⁶
33. By way of comparison with the New South Wales legislation, reference may be made to a federal Act, the *Environment Protection and Biodiversity Conservation Act 1999*. Section 3(b) provides that one of its objects is “to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources”. Sections 3A and 136 relevantly provide:

3A *The following principles are principles of ecologically sustainable development :*

(a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;

(b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;

(c) the principle of inter-generational equity--that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;

(d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;

(e) improved valuation, pricing and incentive mechanisms should be promoted.

¹⁶ See *Fire Brigades Act 1989* s 10A; *Coastal Protection Act 1979* ss 37A and 54A; *Sydney Harbour Foreshore Authority Act 1998* s 15; *Rural Fires Act 1997* ss 3 and 9; *Energy Services Corporation Act 1995* ss 5 and 8.

136(1) *In deciding whether or not to approve the taking of an action, and what conditions to attach to an approval, the Minister must consider the following, so far as they are not inconsistent with any other requirement of this Subdivision:*

(a) *matters relevant to any matter protected by a provision of Part 3 that the Minister has decided is a controlling provision for the action;*

economic and social matters.

Factors to be taken into account

(2) *In considering those matters, the Minister must take into account:*

(a) *the principles of ecologically sustainable development; and*

...

34. A federal statute which contains a more stringent ESD requirement is the

Fisheries Management Act 1991 which relevantly provides in s 3:

(1) *The following objectives must be pursued by the Minister in the administration of this Act and by AFMA [Australian Fisheries Management Authority] in the performance of its functions:*

...

(b) *ensuring that the exploitation of fisheries resources and the carrying on of any related activities are conducted in a manner consistent with the principles of ecologically sustainable development (which include the exercise of the precautionary principle), in particular the need to have regard to the impact of fishing activities on non-target species and the long term sustainability of the marine environment; and*

(c) *maximising the net economic returns to the Australian community from the management of Australian fisheries;*

...

(2) *In addition to the objectives mentioned in subsection (1), or in section 78 of this Act, the Minister, AFMA and Joint Authorities are to have regard to the objectives of:*

(a) *ensuring, through proper conservation and management measures, that the living resources of the AFZ [Australian Fishing Zone] are not endangered by over-exploitation; and*

(b) *achieving the optimum utilisation of the living resources of the AFZ; and*

...

35. Local environmental plans made under the *Environmental Planning and Assessment Act 1979* (NSW) also commonly identify ESD as one of their aims or objectives: for example, the North Sydney Local Environmental Plan 2001 cl 2.

Australian Cases

36. ESD and its supporting principles are broad concepts which the legislature has left to the courts to flesh out through the cases. Two imperfect Australian analogies may be drawn. Section 52 of the *Trade Practices Act 1974* (Cth) provides that: “A corporation shall not, in trade or commerce, engage in conduct that is misleading or deceptive or is likely to mislead or deceive”. Section 181 of the *Corporations Act 2001* (Cth) provides that “A director or other officer of a corporation must exercise their powers and discharge their duties: (a) in good faith in the best interests of the corporation; and (b) for a proper purpose”. Those broad statutory rules have led to innumerable cases in which their content and application have been fleshed out incrementally. As the principles supporting ESD are more subtle and probably still evolving, ESD jurisprudence is likely to take longer to develop.

37. The more significant Australian cases on ESD are reviewed below. Most have concerned the precautionary principle. Most have been in the Land and Environment Court of New South Wales, a specialist court established by the *Land and Environment Court Act 1979*, with civil and criminal jurisdiction over environmental, development, planning and other disputes. As a superior court of record, it has the same status as the Supreme Court of New South Wales. One of the reasons that it has delivered most of the significant Australian decisions on ESD is that its civil jurisdiction includes not only traditional judicial review, which is restricted to determining the legality of administrative decisions, but also merits review, which is not a traditional judicial function. Under principles of judicial review, the court's jurisdiction is a discretionary one. Where it cannot be seen that the decision-maker has erred in law, or has failed to take into account relevant considerations or has taken into account irrelevant considerations, the traditional view has been that the courts will only intervene on the ground that the decision is shown to be an irrational one. It is generally for the decision-maker and not the court to determine the weight to be given to matters which are required to be taken into account in exercising a statutory power and the Court exceeds its supervisory role by reviewing the decision on its merits.¹⁷ In contrast, when exercising merits review jurisdiction, the Land and Environment Court of New South Wales stands fully in the shoes of the administrative decision-maker, usually a local council. That is because s 39(2) of the *Land and Environment Court Act 1979* provides:

¹⁷ *Minister for Aboriginal Affairs v Peko-Wallsend Ltd* (1986) 162 CLR 24; *Town Planning Board v Society for the Protection of the Harbour Ltd* [2004] 1 HKLRD 296 at [66] – [68] (Hong Kong Final Court of Appeal).

*In addition to any other functions and discretions that the Court has apart from this subsection, the Court shall, for the purposes of hearing and disposing of an appeal, have all the functions and discretions which the person or body whose decision is the subject of the appeal had in respect of the matter the subject of the appeal.*¹⁸

38. Section 39(4) provides that the Court must have regard to, among other things, the “*public interest*.” This includes ESD, consistently with the interpretation that has been given to the reference to the “*public interest*” in s 79C of the *Environmental Planning and Assessment Act 1979*.¹⁹
39. A merits appeal in the Land and Environment Court of New South Wales is by way of re-hearing. The Court is required to conduct the proceedings with as little formality and technicality (and with as much expedition) as proper consideration permits; it is not bound by the rules of evidence and may inform itself in such manner as it thinks appropriate and as proper consideration permits (a quasi-inquisitorial function); and it may obtain the assistance of any person having professional or other qualifications relevant to the issue.²⁰
40. The civil decisions on ESD by the Land and Environment Court sometimes have been in the context of judicial review, but mostly have been in its merit review jurisdiction. It is because the Court has an unusual merits review jurisdiction that it has been able to deliver a significant number of judgments

¹⁸ In *McDougall v Warringah Shire Council* (1993) 30 NSWLR 258 at 264, Kirby P in the New South Wales Court of Appeal said that by s 39(2) it was intended that the Land and Environment Court “be placed fully in the shoes of a council at the time an application is lodged...The result of this interpretation is that all the functions and discretions the council could have exercised when considering the application are open to the Land and Environment Court on appeal and not only those strictly necessary to the approval.”

¹⁹ Refer to note 15.

²⁰ *Land and Environment Court Act 1979* s 38.

on ESD in which, standing in the shoes of the administrative decision-maker, it has determined the dispute on the merits. Currently, the leading Australian case on ESD is the merits appeal judgment of Preston CJ, the Land and Environment Court's Chief Judge, in *Telstra Corp Ltd v Hornsby Shire Council*.²¹ This case contains the most extensive comparative review of global case law and learning that has been undertaken by an Australian court. His Honour also wrote comprehensively on the subject in a paper presented to the second Kenya National Judicial Colloquium on Environmental Law and subsequently published.²²

Leatch

41. The first significant judicial consideration of any aspect of ESD by an Australian Court was in 1993 in *Leatch v National Parks and Wildlife Services*.²³ The Shoalhaven City Council proposed to construct a road in an area known to be a habitat of the Giant Burrowing Frog which was listed as an endangered species. The council applied to the Director-General of the National Parks and Wildlife Service for a licence to “take or kill” endangered fauna, as was required by the *National Parks and Wildlife Act 1974*. Section 5 (since amended) defined “take” to include the disturbance, injury or “significant modification of the habitat of the fauna which is likely to adversely affect its essential behavioural patterns”. The licence was granted on conditions. An objector appealed on the merits of the decision to the Land and Environment Court of New South Wales. Neither the *National*

²¹ (2006) 146 LGERA 10.

²² Brian J Preston, “The Role of the Judiciary in Promoting Sustainable Development: The Experience of Asia and the Pacific” (2005) 9 APJEL 109.

²³ (1993) 81 LGERA 270.

Parks and Wildlife Act 1974 or the *Land and Environment Court Act 1979* expressly referred to ESD or the precautionary principle. Stein J decided that the licence should not be granted. His Honour noted that the precautionary principle had been referred to in almost every recent international agreement including the *Rio Declaration* of 1992, as well as the Australian *Intergovernmental Agreement on the Environment* of 1992.²⁴ However, Stein J declined to enter into a debate as to whether it had become part of Australian domestic law by incorporation of international law.²⁵

42. Although the precautionary principle had been incorporated into one New South Wales statute, s 6(2)(a) of the *Protection of the Environment Administration Act 1991*, that statute was not relevant to the matter before the Court. The factors to be taken into account under the relevant statute, the *National Parks and Wildlife Act 1974*, included any matter considered to be relevant. In addition, s 39(4) of the *Land and Environment Court Act 1979* required the Court to have regard to the public interest. Stein J held that while there was no express provision requiring consideration of the precautionary principle, consideration of the state of knowledge or uncertainty regarding a species, the potential for serious or irreversible harm to endangered fauna and the adoption of a cautious approach in protection of endangered fauna was consistent with the subject matter, scope and purpose of the *National Parks and Wildlife Act 1974*.²⁶ His Honour held:

²⁴ Ibid at 281.

²⁵ Ibid at 282.

²⁶ Ibid at 282 – 284.

*In my opinion the precautionary principle is a statement of commonsense and has already been applied by decision-makers in appropriate circumstances prior to the principle being spelt out. It is directed towards the prevention of serious or irreversible harm to the environment in situations of scientific uncertainty. Its premise is that where uncertainty or ignorance exists concerning the nature or scope of environmental harm (whether this follows from policies, decisions or activities), decision-makers should be cautious.*²⁷

43. Stein J held that the Director-General must have regard to the distribution, habitat, depletion and ultimate security of the species and to this end the “commonsense” principle is not an “extraneous consideration”.²⁸ His Honour said, “Application of the precautionary principle appears to me to be most apt in a situation of a scarcity of scientific knowledge of species population, habitat and impacts”.²⁹ He noted the dearth of knowledge about the population, habitat and behavioural patterns of the Giant Burrowing Frog and refused the licence because of inadequate scientific understanding of the possible impacts of road building on the species. Thus, the precautionary principle operated as a determining factor in the decision.

Nicholls, Greenpeace

44. In *Nicholls v Director-General of National Parks and Wildlife*³⁰ Talbot J referred to the precautionary principle as a political aspiration and expressed the view that it might prove to be unworkable.³¹ However, his Honour did say that an approach which incorporated “Careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment; and

²⁷ Ibid at 282.

²⁸ Ibid at 282.

²⁹ Ibid at 284.

³⁰ (1994) 84 LGERA 397.

³¹ Ibid at 419.

..as [sic] assessment of the risk-weighted consequences of various options” was axiomatic when dealing with environmental assessment.³² His Honour accepted the approach of Stein J in *Leatch*³³ that although there were then no express statutory provisions making the consideration of the precautionary principle mandatory, the application of a cautious approach was consistent with the subject matter, scope and purpose of the *National Parks and Wildlife Act 1974*.³⁴ A decade later Talbot J acknowledged that as a result of the intervening formal adoption of ESD by various statutes, it had become more than a political aspiration and that there was a legal obligation to have regard to it in relation to the legislation that he was considering.³⁵

45. In *Greenpeace Australia Ltd v Redbank Power Company Pty Ltd*³⁶, there was an objector merits appeal to the Land and Environment Court of New South Wales by Greenpeace Australia against the decision of a council to grant development consent to the construction of a power station. The objector’s concern was that when fully operational the project would increase the total amount of CO₂ emitted from State power stations, consequently contributing to the greenhouse effect. The Court was invited to apply the precautionary principle and refuse development consent. Pearlman J found that the project’s CO₂ emissions would contribute to the greenhouse effect but that there was uncertainty about the effect the emissions would have on

³² Ibid at 419.

³³ Note 23.

³⁴ Note 30 at 418.

³⁵ *Port Stephens Pearls Pty Ltd v Minister for Infrastructure and Planning* [2005] NSWLEC 426 at [54].

³⁶ (1994) 86 LGERA 143.

global warming.³⁷ Taking into account other beneficial environmental effects of the project, Pearlman J decided that the development application should be approved on conditions. Reference was made to the formulation of the precautionary principle in the Australian *Intergovernmental Agreement on the Environment* of 1992. Her Honour referred to the approach adopted in *Leatch*³⁸ and concluded:

*The important point about the application of the precautionary principle in this case is that 'decision-makers should be cautious'...The application of the precautionary principle dictates that a cautious approach should be adopted in evaluating the various relevant factors in determining whether or not to grant consent; it does not require that the greenhouse issue should outweigh all other issues.*³⁹

Hinchinbrook

46. The next case is a decision of the Federal Court of Australia in *Friends of Hinchinbrook Society Inc v Minister for Environment*.⁴⁰ This was a challenge to the validity of a decision of the Minister to grant consents, related to the development of a proposed tourist resort, under the *World Heritage Properties Conservation Act 1983* (Cth) for the dredging of a marina access channel in an area that formed part of the Great Barrier Reef World Heritage Area and was proclaimed under the Act. One of the grounds of challenge was failure to have regard to the precautionary principle. The legislation did not expressly refer to the principle. There were submissions based upon principles of international law and the principles in the Australian

³⁷ Ibid at 153 – 154.

³⁸ Note 23.

³⁹ Note 36 at 154.

⁴⁰ (1997) 93 LGERA 249.

Intergovernmental Agreement on the Environment of May 1992. Sackville J

held:

I do not think that the precautionary principle in the form adopted by the 1992 Intergovernmental Agreement (nine years after the enactment of the World Heritage Act), is a relevant consideration that the Minister is bound to take into account in exercising the powers conferred by the World Heritage Act. There is nothing to suggest that in 1983 any particular formulation of the precautionary principle commanded international approval, let alone endorsement by the Parliament. It may be that the ‘commonsense principle’ identified by Stein J [in Leatch] is one to which the Minister must have regard. But this would flow from the proper construction of the relevant legislation and of its scope and purpose, rather than the adoption by representatives of Australian governments of policies and objectives relevant to a national strategy on the environment: cf Nicholls v Director-General of National Parks and Wildlife (1994) 84 LGERA 397 at 419. It would be difficult, for example, for the Minister to have regard only to the protection, conservation and presentation of particular property, as required by s 13(1) of the World Heritage Act, unless he or she takes account of the prospect of serious and irreversible harm to the property in circumstances where scientific opinion is uncertain or in conflict.

To the extent that the Minister was required to take account of the need to exercise caution on the fact of scientific uncertainty, in my opinion he did so...

It is true that the Minister did not expressly refer to the precautionary principle or some variation of it, in his reasons. But it is equally clear that before making a final decision, he took steps to put in place arrangements designed to address the matters of concern identified in the scientific reports and other materials available to him.⁴¹

47. His Honour concluded that the Minister had taken into account “the commonsense principle that caution should be exercised where scientific

⁴¹ Ibid at 296 – 297.

opinion is divided or scientific information is incomplete".⁴² The application was dismissed.

Carstens

48. In *Carstens v Pittwater Council*⁴³ Lloyd J dismissed an appeal against a decision of a Commissioner of the Land and Environment Court of New South Wales. The Commissioner had held that under the *Environmental Planning and Assessment Act 1979* the principles of ESD must be a factor in the assessment of the impact on the environment of a combined development application and construction certificate. His Honour held:

*I have previously discussed under ground (1) above the relationship between the objects of the EP&A Act described in s 5 and the matters to be taken into consideration in determining a development application set out in s 79C(1). In the light of that discussion and for the reasons which I have there stated, I concluded that s 79C(1) sets out the matters that must be taken into consideration, but that subsection does not exclude from consideration matters not listed and which may be of relevance to the particular development application and which further the objects of the Act. That is to say, it is not an irrelevant consideration for the decision-maker to take into account a matter relating to the objects of the Act. One of those objects is to encourage ecologically sustainable development (s 5(a)(vii)). Moreover, one of the considerations expressly mentioned in s 79C(1) is "(e) the public interest". In my opinion it is in the public interest, in determining a development application, to give effect to the objects of the Act. For these reasons I do not accept the submission that the Commissioner erred in holding that the principles of ESD must be a factor in the consideration of a combined development application and construction certificate.*⁴⁴

⁴² Ibid at 297.

⁴³ (1999) 111 LGERA 1.

⁴⁴ Ibid at [74].

Tuna Boat

49. In *Tuna Boat Owners Association of SA Inc v the Development Assessment Commission*⁴⁵ the applicant sought and obtained development consent for the establishment of tuna farms. There was a successful appeal by the Conservation Council of SA Inc to the Environment, Resources and Development Court of South Australia. Under the relevant legislation, the development had to be assessed against the provisions of a prescribed development plan which contained as an objective that development of the marine environment should be in an ecologically sustainable way. The Environment, Resources and Development Court said: “*We accept that an adaptive management approach, implemented by way of licence conditions to achieve ecologically sustainable development, which could be varied in response to new knowledge is one means by which the development could proceed in an ecological (sic) sustainable manner*”.⁴⁶ It also held that the onus lay on the proponent to show that the development would meet the policies set out in the development plan.⁴⁷ On further appeal to the Full Court of the Supreme Court of South Australia, Doyle CJ, delivering the judgment of the Full Court, held:

... It is true that generally there is no onus on an applicant for development consent to establish that the development consent should be granted. The relevant authority must simply assess the proposed development against the relevant Development Plan. But in this case, the DP [Development Plan] contains an objective and principle that invokes the concept of ESD. That in turn, in a case like the present, invites the use of the precautionary principle, simply because all of the consequences of the proposed development are not known and fully understood.

⁴⁵ (2000) 110 LGERA 1.

⁴⁶ Ibid at 7 – 8.

⁴⁷ Ibid at 7.

In such a case, assessing the proposal against the DP requires a consideration of whether it is a development which is ecologically sustainable. As the longer term consequences of the proposed development are not known, it is appropriate to require measures that will avert adverse environmental impacts that might emerge.

That was the ERD Court's approach. It was open to it to so proceed. The Court did not wrongly impose an onus on the Association in relation to the assessment of the proposal against the DP. The approach of the Court simply reflected what was inherent in one of the matters that the Court had to consider, the issue of ESD.

There can be no hard and fast rules about what is required in a case such as this. Everything will depend upon the circumstances of the particular case, especially the level of knowledge about the environmental impacts of the particular proposal. I agree broadly with what the Court said:

The proponent would have to satisfy the burden of proof by evidence as to the likely consequences of the proposal, including scientific evidence (with its limitations), evidence as to the proposed management regime and measures, and evidence to assist the Court in the assessment of the risk-weighted consequences of the proposal.

This should not be taken as a proposition of law, but simply as an expression in the particular case of what, in general terms, was required before the ERD Court could properly find for the Association when considering whether the development would be managed so as to be ecologically sustainable.⁴⁸

50. As regards the “adaptive management approach” accepted by the Environment, Resources and Development Court, Doyle CJ held:

That seems to me to be an appropriate approach in the light of the relevant objectives and principles in the DP, and in the light of the nature of the proposed development and, in particular, bearing in mind that the medium and longer term impacts of the fish farming are unknown. The DP requires the relevant authority to consider the proposed management of marine aquaculture, and the impact of any such proposed development on the environment. Pursuit of ESD requires careful consideration of the longer term consequences of such development. In such cases, the concept underlying the

⁴⁸ Ibid at 6-7.

*precautionary principle is obviously appropriate. To say that is not to say that the precautionary principle is elevated to a principle of law. Simply that it is sound commonsense in relation to provisions of the DP such as those in question, and a proposal such as that under consideration here.*⁴⁹

51. Thus, as in *Leatch*⁵⁰, the precautionary principle was categorised as a matter of “commonsense”.

BGP Properties

52. In *BGP Properties Pty Ltd v Lake Macquarie City Council*⁵¹ the applicant lodged an integrated development application with a local council seeking consent to subdivide land into 48 lots for industrial use and storage. The site was located in an area of environmental sensitivity and encroached on a wetland. It contained the threatened species known as *Crinia tinnula* (the Wallum Froglet) and the threatened population *Tetratheca juncea*. It also contained some threatened ecological communities. A species impact statement prepared in accordance with the *Threatened Species Conservation Act 1995* concluded that the proposed industrial subdivision would provide an opportunity to improve the environmental management of the land. There was a deemed refusal by the council of the application. The applicant appealed on the merits to the Land and Environment Court of New South Wales. The *Environmental Planning and Assessment Act 1979* applied and included within its objects the encouragement of “ecologically sustainable development” which was defined in s 6(2) of the *Protection of the Environment Administration Act 1991* set out at [25] above. Matters

⁴⁹ Ibid at 8.

⁵⁰ Note 23.

⁵¹ (2004) 138 LGERA 237.

which a consent authority were required to take into consideration under s 79C(1) of the *Environmental Planning and Assessment Act 1979* included “the public interest”.

53. McClellan CJ dismissed the appeal. His Honour referred to his earlier decision in *Murrumbidgee Ground-Water Preservation Association v Minister for Natural Resources*⁵² where he said that statutory recognition of the precautionary principle has made it “a central element in the decision making process and cannot be confined. It is not merely a political aspiration but must be applied when decisions are being made under the Water Management Act and any other Act which adopts the principles”. Following *Carstens*⁵³, his Honour held that by requiring a consent authority to have regard to “the public interest”, s 79C obliged the decision-maker to have regard to the principles of ESD in cases where issues relevant to those principles arose. This would have the consequence that, among other matters, consideration had to be given to matters of inter-generational equity, conservation of biological diversity and ecological integrity.⁵⁴ His Honour held that where there was a lack of scientific certainty, the precautionary principle must be utilised.⁵⁵ This meant that the decision-maker must approach the matter with caution but also required the decision-maker to avoid, where practical, serious or irreversible damage to the

⁵² [2004] NSWLEC 122 at [178].

⁵³ Note 43.

⁵⁴ Note 51 at [113].

⁵⁵ *Ibid.*

environment. In that regard his Honour followed *Leatch*⁵⁶ and indicated that he did not follow the view expressed in *Nicholls*.⁵⁷

54. It was held that consideration of these principles would not preclude a decision to approve an application in cases where the overall benefit of the project outweighed the likely environmental harm. However, care needed to be taken to determine whether appropriate and adequate measures had been incorporated into such a project to confine any likely harm to the environment.⁵⁸ The applicant's proposal would destroy a substantial area of the Sydney Freshwater Wetland and, in time, the indirect effects could remove it entirely and affect the resilience and the integrity of the wetland system, both on and off the site. Due to these known impacts, together with the possible future impacts, the development application was refused.⁵⁹

BT Goldsmith, Port Stephens Pearls, Providence Projects, Gales Holdings

55. In 2005 and 2006 the precautionary principle was considered in four decisions of the Land and Environment Court of New South Wales. The first was *BT Goldsmith Planning Services Pty Ltd v Blacktown City Council*⁶⁰ where Pain J took a precautionary approach to consideration of factors relevant to determining the likelihood of significant impact on an endangered ecological community under the *Threatened Species Conservation Act 1995* (NSW).

⁵⁶ Note 23.

⁵⁷ Note 30.

⁵⁸ Note 51 at [114].

⁵⁹ *Ibid* at [150].

⁶⁰ [2005] NSWLEC 210.

56. In *Port Stephens Pearls Pty Ltd v Minister for Infrastructure and Planning*⁶¹ there was a merits review appeal against the Minister's decision to refuse development consent for a pearl farm. The Minister was concerned about its likely impacts such as the risks and potential consequences for marine life, including dolphins. Talbot J had regard to the precautionary principle. Although his Honour found that there was no real threat of irreversible environmental damage, he decided that consent should be granted on conditions that there be a monitoring regime that would detect any emerging adverse impacts and thus enable the appropriate authority to require them to be addressed if required.⁶²
57. In *Providence Projects Pty Ltd v Gosford City Council*⁶³ there was a merits review appeal against a council's refusal to approve a retirement village. There was scientific uncertainty as to the distribution of an endangered ecological community over the development site. Consequently there was scientific uncertainty as to the threat of serious or irreversible damage that might be caused to that community. Bignold J considered that the precautionary principle justified an approach that avoided the risk of serious or irreversible environmental damage by assuming the widespread distribution of the endangered community.⁶⁴
58. In *Gales Holdings Pty Ltd v Tweed Shire Council*⁶⁵ there was an appeal against a council's deemed refusal to approve a shopping and commercial

⁶¹ [2005] NSWLEC 426.

⁶² *Ibid* at [54] – [58].

⁶³ (2006) 147 LGERA 274.

⁶⁴ *Ibid* at [76] – [77].

⁶⁵ (2006) 146 LGERA 236.

development. One issue was whether the development application should be accompanied by a species impact statement, which was required by legislation if the proposed development significantly affected a threatened species. Present on the development site was a threatened species, Mitchell's Rainforest Snail (*Thersites mitchellae*). There was scientific uncertainty as to the extent and location of its most important habitat and the relationship of the habitat to the proposed drainage works. Talbot J, applying the precautionary principle, held that the proposed development was likely to significantly affect the threatened species and that a species impact statement was required before the development application could be determined.⁶⁶

Bentley

59. *Bentley v BGP Properties Pty Ltd*⁶⁷ was a criminal sentencing case in the Land and Environment Court of New South Wales. Section 118A(2) of the *National Parks and Wildlife Act 1974* provided that “*A person must not pick any threatened species, population or ecological community, being a plant*”. By contravening that provision the defendant committed an offence. A plea of guilty was entered. Section 2A(2) of the *National Parks and Wildlife Act 1974* provided that “*The objects of this Act are to be achieved by applying the principles of ecologically sustainable development*”. Preston CJ commented:

Ecologically sustainable development is fundamental to meeting the needs of the present and future generations. It is a

⁶⁶ Ibid at 247 – 248.

⁶⁷ (2006) 145 LGERA 234.

*touchstone, 'a central element' in decision-making relating to planning for and development of the environment and the natural resources that are the bounty of the environment.*⁶⁸

60. Preston CJ described the role of environmental impact assessment and approval as a key means of achieving ESD, as follows (omitting some citations):

Requiring prior environmental impact assessment and approval is a key means of achieving ecologically sustainable development. It facilitates achievement of the principle of integration ("ecologically sustainable development requires the effective integration of economic and environmental considerations in decision-making processes": s 6(2) of Protection of the Environment Administration Act adopted by s 5(1) of NPW Act. See also Principle 4 of Rio Declaration on Environment and Development 1992 (Int)). If environmental considerations are to be an integral part of decision-making processes, it is necessary to assess the environmental impacts and risks associated with proposed activities. Environmental impact assessment is widely applied to predict the impacts of proposed activities on the environment.

Prior environmental impact assessment and approval are important components in a precautionary approach. The precautionary principle is intended to promote actions that avoid serious or irreversible damage in advance of scientific certainty of such damage. Environmental impact assessment can help implement the precautionary principle in a number of ways including:

- (a) enabling an assessment of whether there are threats of damage to threatened species, populations or ecological communities;*
- (b) enabling an evaluation of the conclusiveness or certainty of the scientific evidence in relation to the threatened species, populations or ecological communities or the effect of proposed development on them;*
- (c) enabling informed decisions to be made to avoid or mitigate, wherever practicable, serious or irreversible damage to the threatened species, populations or ecological communities and their habitats; and*
- (d) shifting the burden of proof (evidentiary presumption) to persons responsible for potentially harmful activity to demonstrate that their actions will not cause*

⁶⁸ Ibid at [57].

environmental harm: Conservation Council of SA Inc v Development Assessment Commission [1999] SAERDC 86 at [24] and [25] upheld in Tuna Boat Owners Assn of SA Inc v Development Assessment Commission (2000) 77 SASR 369, 110 LGERA 1 at [27]-[30]...

The requirement for prior environmental impact assessment and approval enables the present generation to meet its obligation of intergenerational equity by ensuring the health, diversity and productivity of the environment is maintained and enhanced for the benefit of future generations.

Finally, prior environmental impact and assessment and approval can facilitate the internalisation of external environmental costs by including environmental factors in the valuation and costs of assets and services (such as in the price of allotments created by subdivision and development), by implementing the user pays or polluter pays principle (those who cause harm to the environment should bear the cost of containment, avoidance or abatement) and by ensuring that users of goods and services should pay prices used on the full life cycle costs of providing goods and services including the use of natural resources and assets (such as the full life cycle costs of maintaining reserved, existing habitat and of establishing and maintaining compensatory habitat of threatened species, populations and ecological communities).⁶⁹

61. Focusing on the polluter pays principle, Preston CJ quoted from *Axer Pty Ltd v Environment Protection Authority*⁷⁰ where Mahoney JA in the NSW Court of Criminal Appeal said that:

..I believe legislation of this kind contemplates that, in general, the cost of preventing pollution will be absorbed into the costing of the relevant industries and in that way will be borne by the community or by that part of it which uses the product which the industry produces. In assessing the quantum of a fine considerations of this kind are to be taken into account. The fine should be such as will make it worthwhile that the cost of precautions be undertaken...

I do not mean by this that the legislature saw the legislation as providing, by payment of a fine, a licence to pollute. In the end, the object of the legislation is to prevent pollution and to do this,

⁶⁹ Ibid at [67]- [70].

⁷⁰(1993) 113 LGERA 357 at 359.

*inter alia, by the deterrent effect of a substantial fine and by, in consequence, persuading the industries concerned to adopt preventive measures...*⁷¹

62. Preston CJ said in relation to this dictum:

*By a court taking such factors into account, it promotes the achievement of ecologically sustainable development. The fourth pillar of ecologically sustainable development is the internalisation of external environmental costs. Ecologically sustainable development requires accounting for the short term and long term, external environmental impacts of development. One way...of doing so is by adoption of the user pays or polluter pays principle...*⁷²

Telstra

63. In the leading case of *Telstra Corp Ltd v Hornsby Shire Council*,⁷³ the respondent council refused an application for development consent of Telstra, Australia's largest telecommunications provider, relating to the installation of mobile phone towers disguised as chimneys on the roof of a recreational club in a suburb of Sydney. The application was opposed by some members of the local community and councillors who were concerned that the proposed facility would emit radiofrequency electromagnetic energy (RF EME) that would harm the health and safety of residents. Telstra appealed on the merits to the Land and Environment Court of New South Wales. The appeal was allowed. The case provides guidance in relation to the following questions identified by Preston CJ:

The case raises questions about fear, rationality and the law. How should a responsible decision-maker respond to public fear? Responsiveness to public fear entails a commitment to rational deliberation, in the form of reflection and reason-giving. An

⁷¹ Note 67 at 257.

⁷² Ibid at [157].

⁷³ (2006) 146 LGERA 10.

*approach with some currency at the moment is the precautionary principle. What is the precautionary principle and how is it to be applied when thinking about public health and safety and the environment? How can it be invoked to respond to public fear?*⁷⁴

64. The precautionary principle was invoked on the basis of potential public health threats posed by exposure to RF EME emitted by mobile phone towers. A court appointed expert was engaged to provide advice on the health effects of RF EME exposure. He strongly supported the consensus scientific view regarding RF EME risks that the proposed tower could not conceivably cause any adverse biological or health effect. Telstra also presented evidence from two experts who testified that the tower was designed to minimise RF EME exposure and who estimated that its emissions would be less than one fortieth of those permitted under the relevant Australian Standard. The evidence of these three experts was not challenged and there was no expert evidence to the contrary. Some local residents, however, expressed their concerns over uncertainty about long term health effects and argued the need for the application of the precautionary principle.

65. Following *Carstens*⁷⁵ and *BGP*⁷⁶, it was held that under the *Environmental Planning and Assessment Act 1979* s 79C(1), ESD was one of the matters which the council, and on the appeal the Court standing in the shoes of the council, had to take into account.⁷⁷ That Act adopted the definition of ESD in

⁷⁴ Ibid at [9].

⁷⁵ Note 43.

⁷⁶ Note 51.

⁷⁷ Note 73 at 37–38.

s 6(2) of the *Protection of the Environment Administration Act 1991* set out at [25] above.

66. Preston CJ noted that ESD involves a cluster of elements or principles, six of which he highlighted.⁷⁸ First, from the name itself comes the principle of sustainable use. Secondly, ESD requires the effective integration of economic and environmental considerations in the decision-making process. Thirdly, the precautionary principle. Fourthly, the principles of equity: the need for inter-generational equity and the need for intra-generational equity. Fifthly, the principle that conservation of biological diversity and ecological integrity should be a fundamental consideration. Finally, the principle of the internalisation of environmental costs.
67. Preston CJ identified two cumulative conditions precedent to the application of the statutory description of the precautionary principle. First, “*a threat of serious or irreversible environmental damage*”. Secondly, “*scientific uncertainty as to the environmental damage*”. His Honour held that once both of those conditions precedent are satisfied, “*a precautionary measure may be taken to avert the anticipated threat of environmental damage, but it should be proportionate*”.⁷⁹
68. As to the first condition precedent, his Honour pointed out two things: (a) it is not necessary that serious or irreversible environmental damage has actually occurred – it is the threat of such damage that is required; and (b) the

⁷⁸ Ibid at 35-38.

⁷⁹ Ibid at [128].

environmental damage threatened must attain the threshold of being serious or irreversible.⁸⁰ Significantly, it was held that, although the assessment of whether the threat is serious or reversible will be enhanced by taking into account the views of relevant stakeholders, the threat “*must be adequately sustained by scientific evidence*”.⁸¹

69. As to the second condition precedent, that there be “*a lack of full scientific certainty*”, the uncertainty was said to be as to the nature and scope of the threat of environmental damage.⁸² Although, on a literal reading, this condition precedent is satisfied whenever there is a lack of “*full*” scientific certainty, that literal interpretation would render the condition meaningless because it is impossible to be completely certain about threats of environmental damage. The question then is: how much scientific uncertainty need there be as to the threat of environmental damage before the second condition precedent is fulfilled? His Honour concluded that considerable scientific uncertainty must exist.⁸³ Where, in contrast, the threat of seriously irreversible environmental damage can be classified as relatively certain, measures will still need to be taken but these will be preventative measures to control or regulate the relatively certain threat, rather than precautionary measures which are appropriate in relation to uncertain threats.⁸⁴

⁸⁰ Ibid at [129].

⁸¹ Ibid at [134].

⁸² Ibid at [140].

⁸³ Ibid at [145] - [149].

⁸⁴ Ibid at [149].

70. The burden of proof shifts once the two condition precedents are fulfilled. At this point the decision-maker must assume that the threat of serious or irreversible environmental damage is no longer uncertain but is a reality. The burden of showing that this threat does not in fact exist or is negligible shifts to the proponent of the project. A rationale for this shift in the evidentiary burden is that, to avoid environmental harm, it is better to err on the side of caution. The consequence of failure to discharge the burden is not necessarily fatal and the relevant legislation does not give the precautionary principle overriding weight:

...If a proponent of a plan, programme or project fails to discharge the burden to prove that there is no threat of serious or irreversible environmental damage, this does not necessarily mean that the plan, programme or project must be refused. It simply means that, in making the final decision, the decision-maker must assume that there will be serious or irreversible environmental damage. This assumed factor must be taken into account in the calculus which decision-makers are instructed to apply under environmental legislation (such as s 79C(1) of the EPA Act). There is nothing in the formulation of the precautionary principle which requires decision-makers to give the assumed factor (the serious or irreversible environmental damage) overriding weight compared to the other factors required to be considered, such as social and economic factors, when deciding how to proceed.⁸⁵

71. Where the precautionary principle applies, the precautionary measures required should be proportionate to the potential threat, should not be used to try to avoid all risks, and a reasonable balance should be struck having regard to the costs of the measures. Preston CJ said:

The type and level of precautionary measures that will be appropriate will depend on the combined effect of the degree of seriousness and irreversibility of the threat and the degree of uncertainty. This involves assessment of risk in its usual

⁸⁵ Ibid at [154].

*formulation, namely the probability of the event occurring and the seriousness of the consequences should it occur. The more significant and the more uncertain the threat, the greater the degree of precaution required*⁸⁶

72. Prudence would suggest that some margin for error should be retained until all the consequences of the decision to proceed are known. The precautionary principle should not be used to try to avoid all risks; a zero risk precautionary standard is inappropriate.⁸⁷ His Honour said (citations omitted):

*Rationality dictates that the precautionary principle and any preventative measure cannot be based on a purely hypothetical approach to the risk, founded on mere conjecture which has not been scientifically verified...Rather, a preventative measure may be taken only if the risk, although the reality and extent of the risk have not been 'fully' demonstrated by conclusive scientific evidence, appears nevertheless to be adequately backed up by the scientific data available at the time when the measure was taken.*⁸⁸

73. Where the precautionary principle applies, *"measures should be adopted that are proportionate to the potential threats. A reasonable balance must be struck between the stringency of the precautionary measures, which may have associated costs, such as financial, livelihood and opportunity costs, and the seriousness and irreversibility of the potential threat"*.⁸⁹

74. In the case before him, Preston CJ decided that the first condition precedent for the application of the precautionary principle, that there be a threat of serious or irreversible environmental damage, was not satisfied.⁹⁰ The level

⁸⁶ Ibid at [161].

⁸⁷ Ibid at [158].

⁸⁸ Ibid at [159].

⁸⁹ Ibid at [167].

⁹⁰ Ibid at [184].

of RF EME emitted from the proposed base station would easily comply with the relevant Australian Standard. Any harm to the health and safety of people or the environment caused by exposure to such extremely low levels was negligible. The same conclusion had been reached by other courts and tribunals dealing with other proposed mobile phone base stations and antennas which emitted RF EME that complied with the relevant regulatory standards. That conclusion did not mean that there had been an avoidance of a precautionary approach. On the contrary, the conclusion was a direct consequence of the fact that a precautionary approach had already been adopted in the standard setting process, the terms of the relevant Australian standard, the design and location of the proposed base station, the equipment to be provided, the operation of the equipment, the application of the Australian Standard to the RF EME generated from the base station, and the likelihood of actual RF EME being significantly less than predicted. The cumulative effect of those precautionary approaches was to prevent any threat of serious or irreversible environmental damage. Hence, there was no basis to invoke the precautionary principle.⁹¹

Gray

75. *Gray v The Minister for Planning*⁹² was a judicial review case in the Land and Environment Court of New South Wales. It concerned a development proposal for the construction of an open cut coal mine capable of producing up to 10.5 million tonnes of coal per annum over a lifespan of over 21 years.

⁹¹ Ibid at [186]. For commentary on the *Telstra* case see Jacqueline Peel, "When (Scientific) Rationality Rules: (Mis) Application of the Precautionary Principle in Australian Mobile Phone Tower Cases (2007) 19(1) JEL 103.

⁹² [2006] NSWLEC 720.

The coal was destined for use in coal-fired power stations in New South Wales and overseas. The project required environmental assessment under Part 3A of the *Environmental Planning and Assessment Act 1979* which applies to major infrastructure and other significant development proposals in New South Wales. The applicant sought, and the Court made, a declaration that the view of the Director-General of the Department of Planning that the environmental assessment adequately addressed the Director-General's environmental assessment requirements was void and without effect. Pain J accepted that greenhouse gas emissions from the burning of coal to be extracted from the new mine should have been considered in the proponent's environmental assessment because of their potential contribution to global warming.⁹³ It was indicated that both the direct and indirect impacts of the project on the environment of New South Wales were relevant to the assessment process.⁹⁴ Her honour held that environmental assessment had to take proper account of ESD principles and that the precautionary principle and the inter-generational equity principle had not been taken into account.⁹⁵

The Future

76. Globalisation of ESD as a legal concept has the potential benefit for courts that, subject to any applicable local legislation and local circumstances, a global jurisprudence can develop. The courts of one nation may draw on the

⁹³ Ibid at [100].

⁹⁴ Ibid at [91].

⁹⁵ Ibid at [126], [135], [143].

decisions of courts of other nations.⁹⁶ This may facilitate their role in responding to one of the world's greatest challenges, the goal of ecologically sustainable development.

⁹⁶ Similarly in other areas of common environmental interest such as climate change. A recent example of a climate change decision that may be influential internationally is that of the Supreme Court of the United States acknowledging the harms associated with global warming and the obligation of the US Environmental Protection Agency to regulate the emission of greenhouse gasses: *Massachusetts v Environmental Protection Agency* (2007) 549 US.