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Protecting Environmental Values in Water Resources in Australia

and

A Note on Indigenous Rights to Water in Australia

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Papers for a panel presentation
at the conference on

“Allocating and Managing Water for a Sustainable Future:
Lessons from Around the World”

Natural Resources Law Center
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Protecting Environmental Values in Water Resources in Australia¹

Abstract. After providing a broad biophysical, constitutional, historical and policy context, this paper examines recent initiatives in the eastern mainland States of Australia relating to water resource planning. It focuses on issues of water sharing, particularly sharing water between consumptive users and the environment, while emphasising that this issue cannot be dealt with in isolation from broader questions of river health and catchment management. In the context of water sharing, it examines provisions in the legislation addressing issues relating to institutional structures for water resource planning, scientific uncertainty (the precautionary principle and adaptive management), prioritisation between public and private values, and compensation.

The Australian Context

Low or temporally variable rainfall in many areas combined with high rates of evaporation, have led to a significant focus within Australia on measures to harvest available water supplies. Large dams built in all states with the exception of South Australia are the primary source of water for domestic purposes and irrigation.² Most run-off occurs after large rainfall events, and as a result, only 32% of the total run-off can feasibly be pumped from rivers or stored in dams. Much of this water comprises baseflows and low to moderate river flows that are very important for river health.³

Most water resources development has taken place in the south east of Australia, and many river systems in the Murray-Darling Basin and along the east coast of Australia are either overdeveloped or approach full development status. Water use has increased dramatically over the last 15 years. Overall, there was a 65% increase in water use between 1985 and 1996-7 (from 14,600GL to 24,060GL). Surface waters represent 79% of water extracted and groundwaters 21%.⁴

Irrigated agriculture (broadacre crops such as cotton, sugarcane, oilseeds and rice; vineyards and orchards; and horticulture) accounts for about 75% of water use in Australia. In 1988-89, half of this comprised irrigated pasture, with most of this in NSW and Victoria. But in terms of the value of irrigated production (4.6 billion in 1988-89),

¹ The primary focus is on the eastern States of New South Wales, Queensland, South Australia and Victoria, all of which have areas in the Murray-Darling Basin

² Ecologically Sustainable Development Working Group Chairs, *Intersectoral Issues Report* (1992), 111; Industry Commission, Report No 26, *Water Resources and Waste Water Disposal* (1992), 22.

³ *Australia State of the Environment 2001*, Independent Report to the Commonwealth Minister for the Environment and Heritage (Commonwealth of Australia 2001), Thematic Findings. Available at <http://www.ea.gov.au/soe/2001/water.html>

⁴ *Ibid.*

irrigated pasture accounted for only 20%. Surface irrigation (eg, flood and furrow) is the usual method of application, but there is growing use of pressurised systems (eg, spray, micro-spray and drip), primarily for horticultural production.⁵ In 1996-97, Australians extracted 17,940GL from surface waters for irrigation, as compared with 10,200GL in 1985, an increase of 76%.⁶

The Murray-Darling Basin

The Murray-Darling Basin is Australia's largest river system, comprising 14% of the total area of the country.⁷ It extends over one million square kilometres of land in south eastern Australia, from the southern part of the state of Queensland in the north, through the state of New South Wales (NSW), the Australian Capital Territory (ACT) and the state of Victoria, to the mouth of the Murray river in the state of South Australia (SA). The Basin includes most of the country's best farmland. In 1997, 1.472 million hectares of land was irrigated in the Basin, 71% of the total area irrigated in Australia.⁸ Around 75% of total surface water use in Australia occurs in the Basin, and it is estimated that 85% of the available surface water supply is used.⁹ Of water extracted between 1988/89 and 1992/93, over 95% was for irrigation. The Basin provides just over 41% of the gross value of Australia's agriculture production.¹⁰ The value of agricultural production is in excess of \$10 billion, and irrigation accounts for \$3 billion of this.¹¹

An audit of water use in the Basin showed that between 1988 and 1994, water diversions grew by about 8%. The greatest increases were in northern NSW and Queensland because of the high returns available from irrigated cotton. The increase in Queensland was 89.3%, but from a small base. In NSW, these increases were not fuelled by the grant of new water allocations for consumptive uses (cf Queensland where new licences have been granted) but by operating within the flexibilities of the allocation system existing at that time, discussed below.¹²

⁵ Industry Commission, Report No 26, *Water Resources and Waste Water Disposal* (1992), 193-194.

⁶ *Australia State of the Environment 2001*, Independent Report to the Commonwealth Minister for the Environment and Heritage (Commonwealth of Australia 2001), Thematic Findings. Available at <http://www.ea.gov.au/soe/2001/water.html>

⁷ Murray-Darling Basin Commission, "Basin Statistics," available at <http://www.mdbc.gov.au>

⁸ *Australia State of the Environment 2001*, Independent Report to the Commonwealth Minister for the Environment and Heritage (Commonwealth of Australia 2001), Thematic Findings. Available at <http://www.ea.gov.au/soe/2001/water.html>

⁹ Industry Commission, *Water Resources and Waste Water Disposal*, Report No 26 (1992), 22.

¹⁰ Murray-Darling Basin Ministerial Council, *Integrated Catchment Management in the Murray-Darling Basin 2001-2010: Delivering a Sustainable Future* (June 2001), 1.

¹¹ Murray-Darling Basin Ministerial Council, *An Audit of Water Use in the Murray-Darling Basin* (1995), 2.

¹² *Ibid*, 6, 9-10.

The Basin faces formidable environmental problems, resulting from poor land and water management.¹³

- o dryland salinity stemming from rising water tables caused by land clearing;
- o loss of biological diversity, with 20 mammals already extinct and at least 35 birds and 16 mammals endangered;¹⁴
- o water quality problems caused by diffuse run-off (fertilisers and pesticides) from agricultural operations, and saline water discharges from both irrigation areas and dryland sources, as well as the impact of urban communities;
- o degradation of instream values, in particular damage to ecosystems, resulting from river regulation and water extraction for consumptive uses that reduces the frequency of high flows, shifts flows from spring to summer and autumn, when irrigation water is needed, and changes flow variability;
- o changes in river flow characteristics resulting, on the one hand, in permanent inundation of some floodplain wetlands and, on the other, reductions in the flooding of others in spring, impacting on fish and bird breeding;¹⁵
- o loss of up to 50% of the freshwater/inland wetlands since European settlement,¹⁶ with consequent loss of ecosystem services, such as nutrient cycling, flood mitigation, water filtration and sediment trapping;
- o reductions in river flow, contributing to conditions for the growth of blue-green algal blooms, with 115 occurrences in NSW in the drought year of 1993-94, 54 of which were serious;¹⁷
- o irrigation salinity, caused by rising water tables and waterlogging of typically saline sediments.

Some of these problems, such as blue-green algae and salinity, pose immediate and transparent threats to human self-interest in terms of health impacts and loss of productivity, while in the case of others - loss of ecosystem services and reductions in

¹³ Murray-Darling Basin Ministerial Council, *Natural Resources Management Strategy* (1990); Murray-Darling Basin Ministerial Council, *An Audit of Water Use in the Murray-Darling Basin* (1995); P Knights, B Fitzgerald and R Denham, "Environmental Flow Policy Development in NSW," *Proceedings of the National Agricultural and Resources Outlook Conference*, Australian Bureau of Agricultural and Resource Economics (1995), 252-261.

¹⁴ Murray-Darling Basin Commission, "Basin Statistics," available at <http://www.mdbc.gov.au>

¹⁵ NSW Environment Protection Authority, *State of the Environment 1995* (1995), 43-44.

¹⁶ *Ibid*, 43.

¹⁷ *Ibid*, 49.

biodiversity - the threats posed are long-term and cumulative, and, consequently, less real to those whose behaviour contributes to their existence.

Constitutional Division of Power Relating to Natural Resource Management

The general position under the Australian Constitution is that the Commonwealth Parliament has powers to legislate only in specifically designated areas, primarily found in section 51, with the residue left to the States. Even within these areas, Commonwealth power is not plenary, but shared with the States. However, if State legislation in these areas is inconsistent with Commonwealth legislation, the latter prevails.¹⁸

While the Commonwealth Parliament has no direct power to legislate on natural resource and environmental management issues, in recent years the High Court of Australia has interpreted the Commonwealth's enumerated powers in section 51 of the Constitution expansively.¹⁹ This is particularly true of the external affairs power,²⁰ under which legislation can be enacted to implement international environmental conventions to which Australia is a party, the corporations power,²¹ covering the environmental operations of foreign, financial and trading corporations, at least where they involve their trading activities, and the trade and commerce power.²²

So far as water management issues are concerned, however, additional constraints are placed on the Commonwealth by section 100 of the Australian Constitution, which provides:

The Commonwealth shall not, by any law or regulation of trade or commerce, abridge the right of a State or of the residents therein to the reasonable use of the waters of rivers for conservation or irrigation.

The full implications of this provision have not been explored. Crawford points out that its effect was to qualify the federal power over river navigation by giving a qualified right to the States relating to the use of water in rivers, and that "conservation" was treated by many of the delegates to the Constitutional Conventions in the late 19th century as equivalent to "storage for use".²³ On one view its effect is limited to the use of waters in

¹⁸ Constitution of the Commonwealth of Australia, s 109.

¹⁹ *Murphyores v Commonwealth* (1976) 136 CLR 1; *Commonwealth v Tasmania* (1983) 46 ALR 625; *Richardson v Forestry Commission* (1988) 77 ALR 237; *Queensland v Commonwealth* (1989) 86 ALR 519; *NSW v Commonwealth* (1975) 135 CLR 337; *Victoria v Commonwealth* (1996) 138 ALR 129.

²⁰ Constitution of the Commonwealth of Australia, s 51(xxix).

²¹ *Ibid*, s 51(xx).

²² *Ibid*, s 51(i).

²³ J Crawford, "The Constitution" in T Bonyhady, *Environmental Protection and Legal Change* ((1992), 1-23 at 2-5. He also notes that the function of section 100 is now purely intergovernmental: there is nothing in it that protects the rights of individuals against State laws, and in practice these rights have now been subsumed under State legislation.

rivers used for interstate trade and commerce purposes.²⁴ In practice, however, the management of water resources has been treated as a matter for the States, with the Commonwealth Government's role substantially confined to one of moral and financial persuasion.

In 1992, the primacy of the States in natural resource management more generally was confirmed by the *Intergovernmental Agreement on the Environment*, an informal agreement between State, Territory and Commonwealth Governments setting out jurisdictional boundaries. However, the Agreement recognised the Commonwealth's interest in meeting its obligations under international conventions, such as the United Nations Convention for the Protection of the World Cultural and Natural Heritage, the Convention on Wetlands (Ramsar Convention), the United Nations Convention on Biological Diversity²⁵ and bilateral migratory bird treaties with China²⁶ and Japan²⁷.

Flowing from this, the Commonwealth has recently enacted the *Environment Protection and Biodiversity Conservation Act 1999*. Under this legislation, assessment by and approval from the Commonwealth Minister for the Environment is required for actions that "are likely to have a significant impact" on specified values, defined as "matters of national environmental significance".²⁸ Many of these so-called "triggers" are derived from Australia's obligations under the international conventions referred to above. They include:

- o the ecological character of a declared Ramsar wetland;²⁹
- o listed threatened species and ecological communities;³⁰ or
- o listed migratory species.³¹

²⁴ Mason J in *Commonwealth v Tasmania* (1983) 158 CLR 1, discussed by D Fisher, "Water" in *Laws of Australia* (1995), Chapter 14.9: 1-210 at 31-32.

²⁵ On the implementation of these Conventions in Australia, see D Farrier and L Tucker, "Wise Use of Wetlands under the Ramsar Convention: A Challenge for Meaningful Implementation of International Law" (2000) 12 *Journal of Environmental Law* 21-42; D Farrier and L Tucker, "Beyond a Walk in the Park: The Impact of International Nature Conservation Law on Private Land in Australia (1998) 22 *Melbourne University Law Review*, 564-591; D Farrier, "Implementing the In-situ Conservation Provisions of the United Nations Convention on Biological Diversity" (1996) 3 *Australasian Journal of Natural Resources Law and Policy*, 1-24.

²⁶ Agreement between the Government of Australia and the Government of the People's Republic of China for the Protection of Migratory Birds and their Environment (CAMBA).

²⁷ Agreement between the Government of Australia and the Government of Japan for the Protection of Migratory Birds and Birds in Danger of Extinction and their Environment (JAMBA).

²⁸ Environment Protection and Biodiversity Conservation Act 1999, ss 11-28A.

²⁹ Fifty six wetlands in Australia have been listed under the Ramsar Convention. See <http://www.biodiversity.environment.gov.au/environm/wetlands/ramsar/siteindx.htm>

³⁰ Over 1500 threatened species and 23 endangered communities are listed under the Act: see <http://www.ea.gov.au/biodiversity/threatened/index.html>

³¹ See <http://www.ea.gov.au/bodiversity/threatened/index.html>

Any activity which has a significant impact on the ecological character of a Ramsar wetland is covered, regardless of where it takes place.³² There is, therefore, the potential for the Commonwealth Government to become more actively involved in the regulation of activities which impact on river flows, particularly on the availability of water for extensive wetlands at the end of inland flowing rivers in the Murray-Darling Basin. These provide breeding habitat for migratory and threatened bird species, and some of them have been listed as Ramsar wetlands. Statistics for the period mid-2000 to mid-2001 show that the migratory species and Ramsar wetlands triggers led to regulation and assessment of 47 and 16 proposed activities respectively, but it is not clear how many of these involved river flow issues.³³

In practice, this legislation is only likely to impact on the management of instream flows at the margins. Apart from Queensland, where significant irrigation development involving new water allocations is on the drawing books, the problems stem largely from past allocation policy and existing uses which are exempt from regulation under the Commonwealth legislation.³⁴ While the regulatory provisions of the legislation will apply to water transfers that are likely to have a significant impact on the environment,³⁵ this will have no bearing on the amount of water taken out of the system, as distinct from where it is taken out.

In addition, there are questions about how effective the Commonwealth will be as a regulator and assessor of private activities.³⁶ The historical fact of State management of natural resources has meant that the Commonwealth has limited experience as a natural resource regulator, and minimal on-the-ground infrastructure. There are in fact provisions under the Environment Protection and Biodiversity Conservation Act that allow the Commonwealth to delegate both its assessment and regulatory functions to the States. It can seek to enter into agreements that accredit State assessment and regulatory processes.³⁷ But so far, although the Commonwealth has shown a good deal of enthusiasm for developing *assessment* bilaterals (as distinct from approval bilaterals), the response of the States has been lukewarm.³⁸

³² Environment Protection and Biodiversity Conservation Act 1999, s 17B.

³³ S Chapple, "The Environment Protection and Biodiversity Conservation Act 1999: One Year Later," (2001) 18 *Environmental and Planning Law Journal* 523 at 527-528.

³⁴ Environment Protection and Biodiversity Conservation Act 1999, s 523(2).

³⁵ The definition of "activity" is clearly broad enough to cover transfers: Environment Protection and Biodiversity Conservation Act 1999, s 523(1).

³⁶ See S Chapple, "The Environment Protection and Biodiversity Conservation Act 1999: One Year Later (2001)," 18 *Environmental and Planning Law Journal* 523 at 535-537.

³⁷ Environment Protection and Biodiversity Conservation Act 1999, ss 44-65A..

³⁸ Only the State of Tasmania has entered into an assessment bilateral agreement with the Commonwealth. South Australia has indicated its intention not to enter into such an agreement: S Chapple, "The Environment Protection and Biodiversity Conservation Act 1999: One Year Later," (2001) 18 *Environmental and Planning Law Journal* 523 at 532.

The focus of the Environment Protection and Biodiversity Conservation Act is on ad hoc, reactive regulation of individual proposals rather than proactive and holistic natural resource planning and management. While there are strategic planning provisions, which allow the Commonwealth to make “bioregional plans” in relation to Commonwealth areas and to “cooperate” with the States in the preparation of bioregional plans elsewhere, including the provision of financial assistance,³⁹ there has so far been no attempt to use these to address the needs of riverine ecosystems.

Special Commonwealth/State natural resource management arrangements have been put in place for the Murray-Darling Basin. Management here has long been carried out on the basis of a Commonwealth-State partnership, and increasingly over recent years the community has been encouraged to take an active role. This is currently reflected in the Murray-Darling Basin Agreement of 1992, to which the Commonwealth and the States with areas in the Basin are parties.⁴⁰ Although the Murray-Darling Basin Agreement had its origins in the River Murray Waters Agreement of 1915,⁴¹ providing for the regulation of the river and the sharing of water between the States concerned, it has over the years taken on a broader focus. The current functions of the Murray-Darling Basin Ministerial Council, set up in 1985, now include the determination of major policy issues of common interest to the parties "concerning effective planning and management for the equitable efficient and sustainable use of the water, land and other environmental resources" of the Basin as a whole.⁴² Resolutions of the Council must, however, be unanimous,⁴³ and implementation remains firmly in the hands of individual States. This is reflected in a complex mass of State legislation relating to resource and environmental management, and, in particular for present purposes, water sharing.

In mid-1995, for example, the Murray-Darling Basin Ministerial Council reached one of its few unanimous decisions - to "cap" water diversions between July 1995 and June 1997 by holding them at the 1993/4 level of development to prevent further deterioration, as a first step towards establishing sustainable levels of extraction.⁴⁴ But the implementation of what has become known as the Murray-Darling Basin Cap has

³⁹ Environment Protection and Biodiversity Conservation Act 1999, s 176.

⁴⁰ The new Murray-Darling Basin Agreement was signed by the Commonwealth, NSW, Victoria and SA in 1992, replacing the River Murray Waters Agreement. Queensland became a party in 1996, and the ACT in 1998. The Agreement has been ratified by each jurisdiction through mirror legislation: Murray-Darling Basin Commission, “The Murray-Darling Basin Agreement,” available at <http://www.mdbc.gov.au>

⁴¹ S D Clark, “Intergovernmental Quangos: The River Murray Commission,” (1983) *Australian Journal of Public Administration*, 154-172.

⁴² Murray-Darling Basin Agreement, cl 9(a).

⁴³ Ibid, cl 12(3).

⁴⁴ *Australia State of the Environment 2001*, Independent Report to the Commonwealth Minister for the Environment and Heritage (Commonwealth of Australia 2001), Thematic Findings. Available at <http://www.ea.gov.au/soe/2001/water.html>

been dogged by controversy because of the differing approaches taken by the various States.⁴⁵

Recent Commonwealth policy settings in relation to water resource management more generally, show no inclination to move away from a position which, while striving for agreement at the level of principle, sees each State administering its own legislation. Examples of current State legislation are discussed in later sections of this paper.

Historical Underpinnings of Water Resource Management in Australia

Following the substantial rejection at the end of the nineteenth century of the doctrine of riparianism, exported from England but found to be too inhibiting to development in a country where water was scarce, each of the Australian states adopted an administrative system for allocating water. This was based on assumption of a right of primary access by the state, with water allocated for consumptive uses through a system of licences and other authorisations granted for specified periods.⁴⁶ In theory, at least, this system allowed for considerable flexibility.⁴⁷ In practice it led to significant overcommitment of available water resources,⁴⁸ about which nothing was done until very recently.

As developed in New South Wales,⁴⁹ the main features of this system prior to recent reforms were:⁵⁰

- o Assumption by the state of the exclusive right to use and control water.⁵¹

⁴⁵ For the problems which have arisen in Queensland because of that State's position that it should be allowed to catch up with the more developed States in the Basin, see Poh-Ling Tan, "Conflict over Water Resources in Queensland: all Eyes on the Lower Balonne," (2000) 17 *Environmental and Planning Law Journal* 545-568 at 560-561.

⁴⁶ R H Bartlet, "The Development of Water Law in Western Australia" in R H Bartlet, A Gardner, and B Humphries, *Water Resources Law and Management in Western Australia* (1995), 43-116; D Fisher, "Water" in *Laws of Australia* (1995), chapter 14.9: 1-210.

⁴⁷ S D Clark and I A Renard, *The Law of Allocation of Water for Private Use* (Australian Water Resources Council Research Project 69/16, 1972).

⁴⁸ See the discussion of overallocation in Queensland in Poh-Ling Tan, "Conflict over Water Resources in Queensland: all Eyes on the Lower Balonne," (2000) 17 *Environmental and Planning Law Journal* 545-568; and in Victoria, Poh-Ling Tan, "Irrigators Come First: Conversion of Existing Allocations to Bulk Entitlements in the Goulburn and Murray Catchments, Victoria," (2001) 18 *Environmental and Planning Law Journal* 154-187 at 160-161.

⁴⁹ On the development of water law in the State of West Australia, see R H Bartlet, "The Development of Water Law in Western Australia" in R H Bartlet, A Gardner, and B Humphries, *Water Resources Law and Management in Western Australia* (1995), 43-116. On the development of water law in Victoria, see Poh-Ling Tan, "Irrigators Come First: Conversion of Existing Allocations to Bulk Entitlements in the Goulburn and Murray Catchments, Victoria," (2001) 18 *Environmental and Planning Law Journal* 154-187.

⁵⁰ D Farrier, R Lyster, L Pearson and Z Lipman, *Environmental Law Handbook: Planning and Land Use in New South Wales* (3rd edition, 1999), chapter 12.

- o The annexation of water allocations for consumptive uses to particular areas of land, such that transfer of the land involved transfer of the water allocation, and the water allocation could not be transferred independently. In combination with low water charges (see below), this led to water allocations being capitalised into land values even where they had not been used.⁵²
- o Water charges traditionally only covering part of the cost of delivering water from dams to the point of extraction ("running the rivers), with irrigators making no contribution to capital, maintenance and refurbishment costs of water storages, or to the costs of managing the resource (including planning, resource evaluation and granting permits).
- o Traditionally, indirect control of water use through restrictions on the area of land that could be irrigated rather than on the amount of water used. This approach has now been replaced on rivers regulated by head storages by volumetric water allocations schemes, and is gradually being introduced on unregulated rivers. These allow the irrigation of any area within assigned volumetric limits.
- o No automatic loss of rights for failure to use allocations. Although there was the theoretical possibility that they might be terminated or not renewed for lack of beneficial use, this did not occur in practice. This led to a considerable number of so-called "sleeper" licences, held by farmers or graziers with no history of use, and "dozer" licences, held by small scale or retired irrigators who did not have the resources to fully utilise their allocation or merely used it in times of drought.

In southern NSW and northern Victoria, large, publicly funded irrigation schemes were established by State governments on both Crown and private land to promote closer settlement, particularly of returned soldiers. Over time, more land came to be irrigated under these schemes than through private licensed diversions. In particular, in Victoria, of the 77% of water used for irrigation, 75% was distributed through public irrigation schemes.⁵³ This has had a fundamental influence on the shape of Victorian water law.

⁵¹ See A Gardner, "Water Resources Law Reform in Western Australia – Implementing the CoAG Water Reforms," (2002) 19 *Environmental and Planning Law Journal* 6-33 at 8-9.

⁵² M Bond and D Farrier, "Transferable Water Allocations - Property Rights or Shimmering Mirage" (1996) 13 *Environmental and Planning Law Journal* 213-224.

⁵³ Poh-Ling Tan, "Irrigators Come First: Conversion of Existing Allocations to Bulk Entitlements in the Goulburn and Murray Catchments, Victoria." (2001) 18 *Environmental and Planning Law Journal* 154-187; D Farrier, R Lyster, L Pearson and Z Lipman, *Environmental Law Handbook: Planning and Land Use in New South Wales* (3rd edition, 1999), 470-475.

A key feature of the administrative system as it evolved in Australia was its failure to guarantee security of supply to irrigators. The prior appropriation doctrine that governs water allocation for consumptive uses in the Western States of the USA guarantees priority of access to water based on order of historical usage, provided that beneficial use of the quantity claimed has not been abandoned. If there is not enough water to go round, junior appropriators must give way to senior appropriators.⁵⁴ By contrast, those with water allocations under Australian administrative systems generally share the pain.

In NSW, aside from the priority given to restricted riparian rights for domestic supply/stock watering, town water supplies and "high security" supplies (originally designed for permanent plantings), irrigators in particular catchments are equally vulnerable to water shortages in any particular year. This may see irrigators in some valleys receiving only an across-the-board percentage of their notional allocation. This is principally the case with certain valleys in the north of the Murray-Darling Basin where security of supply can be as low as 35% (on average, 100% of the notional allocation can be expected in only 35% of the years). While from one perspective this lack of security of supply is an inevitable feature of natural systems, it stems fundamentally from human optimism in notionally allocating a resource that is not guaranteed to be available.

Apart from this seasonal insecurity stemming from variable climatic conditions, the security of those with existing allocations was inevitably devalued by the grant of further licences in situations if embargoes on the grant of new licences were not put in place. The uncertainty generated by these factors led cotton irrigators in some valleys, encouraged in the past by the State water agency, to invest in large off-river water storages, which they have filled during declared "off-allocation" periods - flood events or natural run-off not intercepted by the dam - when the flow in the river was judged to exceed immediate requirements and irrigators were allowed to divert water above and beyond their allocation under licence. This has further interfered with instream flows.

Even though there was grudging acceptance by irrigators that the amount of water available at any particular time would vary, licences themselves came to be regarded as de facto property rights. The legislation required licences to be renewed periodically, but this was done by the water management agency as a matter of course. Although the agency could modify licences without payment of compensation, to provide for instream environmental flows for example, in practice this was not done.⁵⁵

⁵⁴ J Sax and R H Abrams, *Legal Control of Water Resources: Cases and Materials* (1986), 278-285.

⁵⁵ See, for example, Water Act 1912 (NSW), s 17A(2) and Water Resources Act 1989 (Q), s 44(1)(f),(2),(3).

Ecologically Sustainable Development

On paper at least, the key driver of natural resources policy in Australia is the objective of *ecologically sustainable development* (ESD). ESD represents Australia's response to calls for sustainable development embodied in the 1987 Report of the World Commission on Environment and Development, *Our Common Future* (Brundtland).⁵⁶ In December 1992 the Commonwealth Government released a *National Strategy for Ecologically Sustainable Development*, developed by an intergovernmental committee, and endorsed by the Council of Australian Governments.⁵⁷

The core objectives of the Strategy are:⁵⁸

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

The guiding principles include the integration of economic, environmental, social and equity considerations in decision-making processes, the precautionary principle, the need to develop a strong, growing and diversified economy, the use of cost effective and flexible policy instruments, such as improved valuation and pricing and incentive mechanisms, and community involvement. The strategy emphasises the need for a balanced approach, with no objective or principle predominating over the others.⁵⁹

The concept of ESD has now begun to appear in environmental and resource management legislation enacted by the Australian States. In NSW, the Protection of the Environment Administration Act 1991 states that ESD “requires the effective integration of economic and environmental considerations in decision-making processes”. It goes on to set out the principles which can be used to achieve ESD:

- (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.

⁵⁶ World Commission on Environment and Development, *Our Common Future* (Brundtland Report) (1990).

⁵⁷ Commonwealth of Australia, *Ecologically Sustainable Development: A Commonwealth Discussion Paper* (1992).

⁵⁸ *Ibid*, 8.

⁵⁹ *Ibid*, 9.

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,
 - (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.⁶⁰

The objects of the Water Management Act 2000 (NSW) 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 development⁶¹

⁶⁰ Protection of the Environment Administration Act 1991, s 6(2).

⁶¹ As defined in Protection of the Environment Administration Act 1991, s 6(2), above.

The purpose of the Queensland legislation is “sustainable management”, but this requires the biological diversity and health of natural ecosystems to be protected, and it must contribute to the “economic development of Queensland in accordance with the principles of ecologically sustainable development”.⁶²

Other State legislation, while talking in terms of sustainability, avoids a specific commitment to ecological sustainability. The Water Act 1989 (Vic) simply refers to “sustainable use for the benefit of present and future Victorians”, leaving this concept undefined, and omitting any reference to the precautionary principle, or the significance of biological diversity.

Similarly, the South Australian legislation makes a commitment to use and manage water resources to “sustain the physical, economic and social well being of the people of the State”. However, it balances this by also talking in terms of *protecting* ecosystems, including their biological diversity, and ensuring that water resources are able to meet the reasonably foreseeable needs of future generations.⁶³

One of the key features of the concept of ecologically sustainable development is its commitment to the conservation of biological diversity and ecological integrity regardless of the contribution this makes to the sustainability of human systems. Secondly, the precautionary principle outlaws arguments that we should delay taking action until there is overwhelming scientific evidence of adverse impact on instream biodiversity and ecosystems. This is developed more fully in a later section. Thirdly, there is a strong emphasis in ESD on ensuring that natural resources are appropriately valued, rather than simply being costless externalities in production processes. This has significant implications for arguments that the most efficient way of redistributing what are now scarce water resources is to create so-called “property rights” in allocations for consumptive uses and allow them to be traded in the market place. The market has a miserable record when it comes to factoring public costs stemming from environmental degradation into private decision-making processes. Steps must therefore be taken to put in place procedures that protect the public interest in protecting ecological values.

On the other hand, there is a strong emphasis in the *National Strategy for Ecologically Sustainable Development* not only on *inter-generational* equity, but *intra-generational* equity.⁶⁴

⁶² Water Act 2000(Q), s 10. ESD is defined in similar terms to the NSW definition, with the addition of recognition of the need to develop a strong, growing and diversified economy to enhance the capacity for environmental protection, and to allow broad community involvement in decisions and actions: Water Act 2000(Q), s 11.

⁶³ Water Resources Act 1997 (SA), s 6(1)(a).

⁶⁴ Commonwealth of Australia, *National Strategy for Ecologically Sustainable Development* (December 1992), 8.

Governments are concerned . . . that any ESD-related actions and decisions do not result in an unequal burden of adjustment on particular regions, sectors or groups in society.⁶⁵

Surprisingly, references to equity within the current generation are missing from the definitions which appear in the NSW and Queensland water management legislation discussed above, but it has a stronger presence in the Victorian⁶⁶ and South Australian legislation.

In the context of water resource management, significant intra-generational equity questions are raised by arguments examined below that, in order to provide for ecologically sustainable instream flows, water will have to be "clawed back" from existing consumptive users. As noted above, historical water allocations have been factored into land values, and some irrigators have invested heavily in infrastructure such as large off-river water storages, in the expectation that there would be no radical changes to government policy. Indeed, until recent times, government policy has been to actively encourage such investment. In these circumstances, issues relating to compensation and the payment of financial incentives (for example to enhance the efficiency of irrigation systems) will inevitably surface. This is dealt with further in a later section. In practice, the concern must be that unless water planners and managers are able to make some financial offering when making decisions about providing water for the environment, they will inevitably find the socio-economic circumstances of water users to be a more compelling consideration in the decision-making calculus than the inchoate interests of anonymous future generations in the conservation of biological diversity, or, even more so, than the notion that we should conserve biological diversity as an end in itself. Unless we are prepared to confront squarely the issue of *intragenerational* equity, we are unlikely to persuade decision-makers to take seriously issues of *intergenerational* equity and the conservation of biological diversity.

National Policy Settings Relating to Water Resource Management

Within the broad commitment to ESD, national policy settings relating specifically to quantity aspects of water resource management were established in Australia in 1994 with the development by the Council of Australian Governments (CoAG) of a strategic framework designed to achieve an "efficient and sustainable water industry".⁶⁷ This framework incorporated commitments to pricing based on full-cost recovery, clear specification of property rights in terms of ownership, volume, reliability and transferability, the separation of these rights from land title, allocations to the

⁶⁵ Ibid, 10.

⁶⁶ One of the purposes of the Victorian legislation is to "promote the orderly, equitable and efficient use of water resources": Water Act 1989 (Vic), s 1(c).

⁶⁷ CoAG, *Communique*, Hobart, 25 February 1994, Attachment A, para 2; Report of the Working Group on Water Resource Policy to the Council of Australian Governments, February 1994.

environment “as a legitimate user of water”, the establishment of water trading, and the adoption of an approach to water resource management based on integrated catchment management.⁶⁸ Progress in water reform in the States was annexed to tranche payments made by the Commonwealth to the States under the National Competition Policy.

The issue of environmental flows is intertwined with one of the other CoAG commitments - the clear specification of so-called “property rights” in water. This is in turn linked closely to the commitment to establish a water market which will enhance water use efficiency by facilitating its movement from lower to higher value uses – from irrigated pasture to cotton and vines, for example. The interrelationship between environmental flows and property rights raises a number of questions which will be explored further in this paper through analysis of State legislation enacted in response to the CoAG strategic framework.:

- o To what extent will water be clawed back from existing water users to satisfy ecological requirements where the resource has been overallocated?
- o Will existing users be compensated where allocations are reduced to satisfy ecological requirements?
- o Will the precautionary principle be applied in situations where the science relating to ecological requirements is uncertain, to allow evidence of environmental impact which may not meet traditional canons of scientific proof to be incorporated into decision-making processes?
- o Will adaptive management principles be applied where ecological requirements are unclear, and how will such principles be reconciled with water user demands for security of title?
- o Where watercourses are not yet overcommitted, will ecological requirements be given clear priority over what some may see as a public interest in the social and economic development of particular areas through the expansion of irrigation?

In 1994, CoAG took a clear position when it came to balancing the public interest in environmental flows against *future* irrigation activity: environmental requirements must be adequately met before further extraction was allowed. But it was equivocal where the public interest required water to be clawed back for the environment from existing users in overcommitted river systems. Here the CoAG commitment was only to provide a “better balance in water resource use including appropriate allocations to the

⁶⁸ Ibid, Attachment A.

environment in order to enhance/restore the health of river systems”.⁶⁹ On top of this, environmental requirements were to be determined on the basis of “the best scientific information available”.⁷⁰ There was no reference to the precautionary principle, espoused by the National Strategy on Ecologically Sustainable Development as a fundamental principle.

In a later policy position paper, *National Principles for the Provision of Water for Ecosystems*,⁷¹ now used by the National Competition Council as a basis for assessing State progress in water resources reform,⁷² there was no such equivocation about priorities:

Where environmental water requirements cannot be met due to existing uses, action (including reallocation) should be taken to meet environmental needs.

While issues related to water quantity represented the main theme in the early CoAG documents, there were also references to broader aspects of water resource management. The 1994 *Communique* agreed to adopt an integrated catchment approach to natural resource management, and committed support to work that had already begun on the development of a *National Water Quality Management Strategy* (NWQMS),⁷³ including the establishment of catchment management policies.⁷⁴ Later in the same year, a reference document was released under the NWQMS in which catchment management

⁶⁹ Ibid, Attachment A, para 4. The Working Group adverted to this issue, but failed to take a position on priorities, leaving it to each State to determine: Report of the Working Group on Water Resource Policy to the Council of Australian Governments, February 1994, para 5.9.

⁷⁰ Ibid, Attachment A, clause 4.

⁷¹ ARMCANZ (Agriculture and Resource Management Council of Australia and New Zealand) and ANZECC (Australian and New Zealand Environment and Conservation Council), *National Principles for the Provision of Water for Ecosystems*, Occasional Paper SWR No 3 (July 1996). Clause 4(c) of Attachment A of the CoAG *Communique*, Hobart, 25 February 1994, specifically instructed State governments to have regard to the work of ARMCANZ and ANZECC in allocating water to the environment.

⁷² See National Competition Council, *Background Paper on Aspects of CoAG Water Reforms* (Feb 2001), available at <http://www.ncc.gov.au/nationalcompet/assessments/water%20background%20papers/water%20background%20papers.htm>

⁷³ The objective of the *National Water Quality Management Strategy*, developed by two Commonwealth/State Ministerial Councils (ARMCANZ and ANZECC), starting in 1992, is “to achieve sustainable use of the nation’s water resources by protecting and enhancing their quality while maintaining economic and social development”: ARMCANZ and ANZECC, *Policies and Principles: a Reference Document* (National Water Quality Management Strategy, April 1994), para 3.2.

⁷⁴ CoAG, *Communique*, Hobart, 25 February 1994, Attachment A, cll 6(b), 8(b). The report on which the *Communique* was based recommended as one of its principles the “[a]doption of an integrated catchment management approach to water resource management: Report of the Working Group on Water Resource Policy to the Council of Australian Governments, February 1994, para 3.3. See A Gardner, “Water Resources Law Reform in Western Australia – Implementing the CoAG Water Reforms,” (2002) 19 *Environmental and Planning Law Journal* 6-33.

was identified as a key aspect of the process for addressing diffuse pollution.⁷⁵ Catchment management was described as “a holistic approach to natural resource management within a catchment with water quality considered in relation to land use and other natural resources; co-ordination of all the agencies, levels of government and interest groups within the catchment; extensive opportunity for community consultation and participation”. It was a “bottom-up approach which built local ownership of the environmental objectives identified”.⁷⁶ More recently, catchment management has become a more dominant theme at a federal level in the context of the *National Action Plan for Salinity and Water Quality*.⁷⁷

Even within the narrow context of river flow issues, it is now recognised that environmental requirements cannot be met simply through allocating quantities of water to the environment, so called “environmental contingency allowances”. We are also talking about seasonal flow patterns⁷⁸ and water temperature. The aim is to “mimic” natural *variations* in seasonal flow.⁷⁹ But issues relating to quantity and flow are only one aspect of the ecological needs of riverine ecosystems. In Northern NSW, dryland salinity caused by the clearing of native vegetation is having a dramatic effect on water quality.⁸⁰ Faecal coliforms attributable to cattle and on-site sewage disposal systems are a major problem in some coastal rivers. But even when we extend the agenda to include water quality issues, we do not go far enough. The NSW Healthy Rivers Commission found that expert advice to its inquiries on coastal rivers was unanimously of the view that riverine vegetation management was a *critical* determinant of river health.⁸¹

Catchment management is as much about land as water management. While it has traditionally concentrated on water quality issues flowing from land use, the link between land management and the *quantity* of water flowing down rivers has now emerged on the policy agenda, with the growing realisation that vegetation planted to

⁷⁵ ARMCANZ and ANZECC, *Policies and Principles: a Reference Document* (National Water Quality Management Strategy, April 1994), paras 8.1, 9.

⁷⁶ *Ibid*, para 9.1.

⁷⁷ *A National Action Plan for Salinity and Water Quality* (October 2000, Commonwealth Government). See also National Natural Resource Management Task Force, *Managing Natural Resources in Rural Australia for a Sustainable Future: A Discussion Paper for Developing a National Policy* (December 1999); Murray-Darling Basin Ministerial Council, *Integrated Catchment Management in the Murray-Darling Basin 2001-2010: Delivering a Sustainable Future* (June 2001); House of Representatives Standing Committee on Environment and Heritage, *Coordinating Catchment Management*, Report of the Inquiry into Catchment Management (December 2000).

⁷⁸ ARMCANZ and ANZECC, *National Principles for the Provision of Water for Ecosystems*, Occasional Paper SWR No 3 (July 1996), 4.

⁷⁹ P Knights, B Fitzgerald and R Denham, “Environmental Flow Policy Development in NSW” in *Proceedings of the National Agricultural and Resources Outlook Conference*, Australian Bureau of Agricultural and Resource Economics (1995), 252-261.

⁸⁰ Murray-Darling Basin Ministerial Council, *The Salinity Audit of the Murray-Darling Basin* (1999).

⁸¹ Healthy Rivers Commission, *Securing Healthy Coastal Rivers: A Strategic Perspective* (April 2000), 38.

remediate dryland salinity and to capture Greenhouse gas emissions will also reduce the amount of run-off into streams.⁸²

As a result of this emerging catchment perspective in Australia, the historical divide in water resource management between natural resources legislation addressing water quantity issues and more recent environmental legislation dealing with water quality, is breaking down. Associated with this is a movement away from ad hoc regulation of individual project proposals to an increasing focus on planning across the whole catchment. These trends are now reflected in a number of pieces of State water legislation, discussed below.

Institutional Structures for Water Planning

An early policy position paper from a Task Force set up to advance the CoAG water reform agenda made it clear that recognition of property rights in water should only take place against a backdrop of catchment planning based on partnerships between government, water users, other interest groups and the broader community. Principle 1 stated:

That all consumptive and non-consumptive water entitlements be allocated and managed in accordance with comprehensive planning systems and based on full basin-wide hydrologic assessment of the resource.⁸³

All of the Murray-Darling Basin States are now moving away from water allocation systems which have traditionally relied on the ad hoc grant of water licences, in the process leading to significant overcommitment of the resource in many areas. They are committed to the implementation of planning processes which will determine the overall quantity of water available for extraction by irrigators from particular water resources, and the conditions under which it will become available (timing, etc), setting the broad parameters within which licensed allocations are managed.⁸⁴ Planning initiatives are currently focused on stressed or environmentally sensitive rivers.

⁸² R A Vertessy, "The Impacts of Forestry on Streamflows: A Review," in J Croke and P Lane, eds, *Forest Management for Water Quality and Quantity*, Proceedings of the Second Forest Erosion Workshop (May 1999).

⁸³ ARMCANZ, *Water Allocations and Entitlements: A National Framework for the Implementation of Property Rights in Water*, Task Force on CoAG Water Reform Occasional Paper No 1 (October 1995), 5. A property right was defined to exist "when the community supports and protects the exclusive use and enjoyment of an entitlement and allows that entitlement to be traded or passed to others (at 1).

⁸⁴ The Victorian planning provisions relating to surface waters are still in draft form: Water (Irrigation Farm Dams) Bill 2001. For a discussion of the recently established water planning system in Western Australia, see A Gardner, "Water Resources Law Reform in Western Australia – Implementing the CoAG Water Reforms," (2002) 19 *Environmental and Planning Law Journal* 6-33 at 16-20.

In Queensland, plan-making is fully centralised. The Minister through the responsible State government agency, is responsible for preparing water resource plans.⁸⁵ Community input is through a community reference panel,⁸⁶ and public exhibition of the draft plan.⁸⁷ The community is a sounding-board rather than a partner.

NSW, on the other hand, has opted for a partnership arrangement between government and the community. Water management committees are responsible for the preparation of water management plans in their areas, assisted by officers from the Department of Land and Water Conservation.⁸⁸ However, committees must work to terms of reference fixed by the Minister,⁸⁹ and a State Water Management Outcomes Plan, with which water management plans must be consistent. The Minister makes the final decision on whether to approve a plan,⁹⁰ after it has been placed on exhibition for public comment.⁹¹

On paper, therefore, water management committees in NSW are heavily constrained in their decision-making by State government. In practice, however, the strength and, at the same time, the potential weakness of committees inheres in their consensus decision-making processes, and the specific requirement that decisions to submit draft plans to the Minister must be unanimous.⁹² Members of committees are appointed by the Minister not for their expertise in water resource management, but to *represent* a range of community interests, including water users, conservation, local government and Aboriginal people. They must also include at least two people nominated by government interests, and in practice they include broad representation across government agencies involved in resource management (National Parks, Fisheries, Environment Protection Authority, Agriculture). This broadly based membership means that consensus will be difficult to reach. But the presence of government agencies around the table, alongside resource users and conservation interests, means that if it is achieved, it will be difficult for the Minister to countermand.

The advantage of the NSW approach is that water users play an active role in the consensus decision-making process that makes the rules with which they must ultimately comply. We might therefore hypothesise greater ownership of those rules and fewer compliance problems. They do not, however, dominate the process and undermine its

⁸⁵ Water Act 2000 (Q), s 38(1).

⁸⁶ Ibid, ss 41, 47(i). The legislation simply says that the panel must include representatives of cultural, economic and environmental interests in the area.

⁸⁷ Ibid, ss 40, 47(o).

⁸⁸ There is also provision for plans to be made directly by the Minister: Water Management Act 2000 (NSW), s 50. As a matter of law the first round of planning is being carried out under these provisions, but in practice the Minister has committed himself to working through water management committees.

⁸⁹ Water Management Act 2000 (NSW), s 15(1).

⁹⁰ Ibid, s 41. The concurrence of the Minister for the Environment is required.

⁹¹ Ibid, s 38. Plans are binding to the extent that licences may not be granted unless permitted by a plan (s 63), and water use approvals may not be granted in contravention of a plan (s 95(3)).

⁹² Ibid, Schedule 6, cl 12.

credibility in terms of protecting the public interest. The proposed arrangements in Victoria also provide for committees (consultative committees) representing community interests to prepare plans for ministerial approval, but their membership is heavily weighted towards consumptive interests. If the area concerned is a “farming area” at least half of the membership must be farmers who own or occupy farming land in the area, appointed after consultation with the Victorian Farmers Federation.⁹³

South Australia has gone much further in terms of delegating responsibility to regional bodies. Here, water allocation plans are prepared by catchment water management boards, where they have been appointed,⁹⁴ or otherwise water resources planning committees.⁹⁵ Unlike the NSW committees, catchment water management boards are incorporated,⁹⁶ can employ⁹⁷ and can construct and manage infrastructure.⁹⁸ Members are appointed on the basis of their expertise rather than as representatives of particular interest groups. The presiding member of a Board must have managerial skills and experience. Other expertise required includes conservation, water use and management, local government, public or business administration and regional economic development. Only one member has to be drawn from the local community.⁹⁹ Decisions need only be by a majority.¹⁰⁰ Plans do, however, need the approval of the Minister before they come into operation,¹⁰¹ and they must be consistent with the State Water Plan.¹⁰²

The South Australian boards are responsible for plan implementation as well as preparation.¹⁰³ They can levy rates on licensed water users, subject to parliamentary veto,¹⁰⁴ making them much more independent than the NSW committees which do not have their own budgets and are dependent on agency allocations. They can provide financial assistance to anyone engaged in activities relating to water resource management,¹⁰⁵ and they can also give rebates on levies where water conservation or land

⁹³ Water (Irrigation Farm Dams) Bill 2001, cll 29, 32A.

⁹⁴ In this case, the water allocation plan forms part of the catchment water management plan: Water Resources Act 1997 (SA), s 101(3).

⁹⁵ Water Resources Act 1997 (SA), s 101. Water resource management committees more closely resemble water management committees in NSW, although unlike the NSW committees, membership is based on expertise, decisions are by a majority and committees are incorporated: Ibid, ss 82, 83. Their primary responsibility is the preparation of a water allocation plan: Ibid, s 84.

⁹⁶ Ibid, s 55.

⁹⁷ Subject to the Minister’s approval: Ibid, s 70.

⁹⁸ Ibid, ss 62, 63.

⁹⁹ Ibid, ss 58-59.

¹⁰⁰ Ibid, s 60 and Schedule 2, cl 5.

¹⁰¹ Ibid, ss 95(4), 99(1), 104(4).

¹⁰² Ibid, ss 92(6), 101(5).

¹⁰³ Ibid, s 61(a).

¹⁰⁴ Ibid, s 95(8)-(15).

¹⁰⁵ Ibid, s 64(1)(a).

management practices have been implemented.¹⁰⁶ They must carry out annual reviews of implementation programmes in plans and estimated revenue and expenditure.¹⁰⁷

Bellette has argued that a crucial feature of the South Australian arrangements is secure funding.¹⁰⁸ The levy is determined by needs identified in the plan, sourced from the local community, and invested back into that community. This allows workforce stability, and the retention of a vital knowledge base. Annual reviews, incorporating the approval of the Economic and Finance Committee of Parliament, assess Board performance against indicators contained in the plan, in determining whether to approve the proposed amount of the levy for the following year.¹⁰⁹

Setting Priorities for Water Sharing

One of the crucial issues emerging in water management legislation and planning processes is the extent to which values related to river health and ecosystem maintenance/restoration should take priority over consumptive values. In the context of water sharing, for example, must water first be set aside to satisfy ecosystem requirements before determining how much is available for extraction? We have already seen in the discussion of ecologically sustainable development that this raises significant tensions between the interests of existing users, on the one hand, and the commitment to intergenerational equity and the conservation of biological diversity on the other.

At one extreme, Victoria's Water Act 1989 does not even mention ecosystems when it comes to defining its purposes. The closest it comes to acknowledging their significance is in a general commitment "to provide formal means for the protection and enhancement of the environmental qualities of waterways and their in-stream uses,"¹¹⁰ and to provide "protection of catchment conditions".¹¹¹ On the other hand, it makes an unequivocal commitment "to continue in existence and to protect" all existing public and private rights to water.¹¹² Poh-Ling Tan's analysis of the implementation of the Victorian legislation in two catchments where there is extensive irrigation indicates that ecological

¹⁰⁶ Ibid, s 140.

¹⁰⁷ Ibid, s 97(1).

¹⁰⁸ Ibid, Part 8, Division 1.

¹⁰⁹ K Bellette, "Legislation and Policy – One Sixth of the Equation for Integrated Water Resource Management," paper given to the 3rd *Australasian Natural Resource Law and Policy Conference: Focus on Water*, Adelaide, 22-23 March, 2001.

¹¹⁰ Water Act 1989 (Vic), s 1(j).

¹¹¹ Ibid, s 1(k).

¹¹² Ibid, s 1(m). See, generally the discussion of the objectives of the Victorian legislation by Poh-Ling Tan, "Irrigators Come First: Conversion of Existing Allocations to Bulk Entitlements in the Goulburn and Murray Catchments, Victoria," (2001) 18 *Environmental and Planning Law Journal* 154-187 at 163-164.

requirements have taken a back seat in practice.¹¹³ In the Goulburn-Broken catchment, bulk entitlements initially given to water supply authorities did not involve any claw-back from irrigators. Moreover, an adjustment mechanism was not built in, so that it will be difficult to allocate water to satisfy ecosystem needs in the future without buying it on the open market or making efficiency savings. In the Murray, some water that had traditionally been available to irrigators was held back, but at the same time “sleeper” and “dozer” licences were allowed to activate, making water available through the transfer market. While a specific bulk entitlement has been issued for the Kerang wetlands, this was mainly to combat salinity, in which irrigators have a direct self-interest. Moreover, there are significant financial issues involved in actually delivering the water to the wetlands, leading to pressures to raise funds through temporary transfers of the entitlement to consumptive users.

On paper, at least, the Water Management Act 2000 (NSW) clearly gives priority to the provision of water to satisfy ecological requirements. Section 5(3) spells out water sharing principles:

- (a) sharing of water from a water source must protect the water source and its dependent ecosystems, and
- (b) sharing of water from a water source must protect the basic land holder rights of owners of land,¹¹⁴ and
- (c) sharing or extraction of water under any other right *must not prejudice the principles set out in paragraphs (a) and (b)*.¹¹⁵

It is the duty of those with functions under the legislation, including water management committees developing water management plans, to take all reasonable steps to do so in accordance with these principles, and to promote them, and to “give priority to [the water sharing principles] in the order in which they are set out” in section 5(3).¹¹⁶

Other provisions require committees to “have due regard to the socio-economic impacts” of plan proposals,¹¹⁷ and to exercise functions consistently with the principles of ecologically sustainable development.¹¹⁸ But there is nothing here which would disturb the prioritisation established by section 5(3). Any person can bring an action to restrain a

¹¹³ Poh-Ling Tan, “Irrigators Come First: Conversion of Existing Allocations to Bulk Entitlements in the Goulburn and Murray Catchments, Victoria,” (2001) 18 *Environmental and Planning Law Journal* 154-187 at 168-182.

¹¹⁴ This refers principally to riparian rights to take water for stock and domestic purposes, and the right of landholders to take a percentage of run-off from their land.

¹¹⁵ Emphasis supplied.

¹¹⁶ Water Management Act 2000 (NSW), s 9.

¹¹⁷ *Ibid*, s 18.

¹¹⁸ *Ibid*, s 14(3).

breach of the Act,¹¹⁹ for example, if socio-economic considerations are allowed to override those relating to ecological flows.

The water sharing provisions of water management plans in NSW *must* establish environmental water rules relating to the identification, establishment and maintenance of each of three classes of environmental water.¹²⁰ *Environmental health water* is “water that is committed for fundamental ecosystem health at all times” and cannot be taken for other purposes. *Supplementary environmental water* is committed for environmental purposes (for example, water bird breeding), but when not needed can be used for other purposes. *Adaptive environmental water* is water that has been allocated to someone under an access licence but is committed for specified environmental purposes, which can be limited to time and circumstance.¹²¹

In preparing a water resource plan in Queensland, the Minister is required to advance the “sustainable management” of water.¹²² This is defined as management which:

- (a) allows for the allocation and use of water for the physical, economic and social well being of the people within limits that can be sustained indefinitely; and
- (b) protects the biological diversity and health of natural ecosystems; as well as “contributing” to a number of other objectives, including “the economic development of Queensland in accordance with the principles of ecologically sustainable development”.¹²³

There is perhaps an argument here that the reference to allocation and use of an undefined quantity of water for consumptive purposes is trumped by the unqualified commitment, not simply to conserve but to *protect* ecosystems. In addition, one of the principles of ecologically sustainable development is that “the conservation of biological diversity and ecological integrity should be a *fundamental* consideration in decision-making”.¹²⁴ On the other hand, section 47 of the Act simply spells out a long list of factors to be “considered” when preparing a plan, and water flows to support ecosystems is simply one of many.¹²⁵ Water resource plans must establish not only environmental flow objectives, but also water allocation security objectives.¹²⁶

¹¹⁹ Ibid, s 336.

¹²⁰ Ibid, s 20.

¹²¹ Ibid, s 8.

¹²² Water Act 2000 (Q), ss 12, 10(1), 38.

¹²³ Ibid, s 10(2).

¹²⁴ Ibid, s 11(f), emphasis supplied.

¹²⁵ Ibid, s 47(c).

¹²⁶ Ibid, s 46(3).

At first sight, a similar argument to that made in relation to the Queensland legislation can be made in relation to the South Australian Water Resources Act 1997.¹²⁷ Those operating under the legislation must act consistently with and seek to further its objects.¹²⁸ Again there is a reference to “protecting” ecosystems which could be interpreted as a condition precedent to sustaining the physical, economic and social well being of the people of the State and facilitating economic development.¹²⁹ On the other hand, while water allocation plans must assess the water needs of dependent ecosystems, including the timing of those needs, and must make sure that the rate of use is sustainable, they must provide for water allocation and use, so that “an equitable balance is achieved between social, economic and environmental needs for the water”.¹³⁰ The language of “equitable balance” does not suggest that any priority is to be given to satisfying ecosystem needs even where scientifically proven. Nor does the legislation even appear to restrict socio-economic claims to water to those who already hold water allocations, as distinct from those who may seek to secure them in the future.

Whatever the formal position under the Queensland legislation, Coffey’s detailed analysis of two of the first water management plans to be made in Australia,¹³¹ suggests that it is developmental imperatives rather than ecosystem needs that are setting the agenda. She discusses the concept of “environmental flow limits” (efl), used in the Queensland water planning process in an attempt to identify the maximum acceptable level of departure from the natural flow regime. Beyond this there is considered to be an increased risk of unacceptable environmental change. She found that the environmental flow objectives set in the Burnett Basin water resource plan on a number of occasions exceeded the environmental flow limit even though existing allocations were within the

¹²⁷ See also Rights in Water and Irrigation Act 1914 (WA), s 4, following recent amendments in 2000, discussed by A Gardner, “Water Resources Law Reform in Western Australia – Implementing the CoAG Water Reforms,” (2002) 19 *Environmental and Planning Law Journal* 6-33 at 14-15.

¹²⁸ Water Resources Act 1997 (SA), s 6(2).

¹²⁹ In full, section 6(1) provides:

The object of this Act is to establish a system for the use and management of the water resources of the State-

(a) that ensures that the use and management of those resources sustain the physical, economic and social well being of the people of the State and facilitate the economic development of the State while-

(i) ensuring that those resources are able to meet the reasonably foreseeable needs of future generations; and

(ii) protecting the ecosystems (including their biological diversity) that depend on those resources; and

(b) that, by requiring the use of caution and other safeguards, reduces to a minimum the detrimental effects of that use and management.

¹³⁰ Water Resources Act 1997 (SA), s 101(4).

¹³¹ F C Coffey, “Assessment of Water Resource Plans under the Water Act 2000 (Qld): Ecological Outcomes and Environmental Flow Objectives in the Context of the Precautionary Principle and Sustainable Management,” (2001) 18 *Environmental and Planning Law Journal* 410-436.

flow limit. In other words, intra-generational equity arguments were not founded on the interests of existing water users but on the broad public interest in enhancing development through future allocations to consumptive use. Yet an environmental flow objective is defined in the Act as a “flow objective for the protection of the health of natural ecosystems for the achievement of ecological outcomes”.¹³² She argues that the approach taken in the Burnett Basin plan amounts to a breach of the precautionary principle, which, for her, mandates setting environmental flow objectives within the environmental flow limit or, if there is already overallocation, towards this limit.

Again, the Fitzroy Basin Plan contemplates the possibility that environmental flows may be compromised by the water demands not only of existing users but also of future development:

Where the State decides to accept certain trade-offs in relation to environmental flow requirements in order to accommodate existing *or future* development of significant economic and social importance, such decisions shall be shown in a transparent manner.¹³³

In practice, water management plans in NSW, currently in draft form, may well be in breach of the prioritisation mandated by the legislation. One of the crucial factors here has been the dearth of scientific information on which to base assessments of ecosystem requirements. But here the countervailing value is not a perceived public interest in the further allocation of water for consumptive use. It is accepted that westward flowing rivers, at least, are already overcommitted, and embargoes on the issue of new licences (other than through transfer) are ordinarily in place. Rather, the countervailing value relates to the protection of the interests of those who can show a historical use of water under licence, and even of those who are “sleepers”: those who have held licences but never put them to use. Existing users, at least, can present a much more persuasive argument from an intra-generational equity perspective than those arguing that we should be prepared to take the risk of carrying out potentially unsustainable new development. There is a compelling argument that new development should have to rely on the water transfer market, and in the process advance the public interest in moving water to more efficient uses.

Protecting Other Environmental Values

Water planning in the Australian States is not restricted to water sharing and allocation issues. In NSW, plans can contain provisions relating to water quality,¹³⁴ the

¹³² Water Act 2000 (Q), Schedule 4: Dictionary.

¹³³ Water Allocation and Management Plan (Fitzroy Basin) 1999, p 11 (emphasis supplied). Available at www.dnr.qld.gov.au/resourcenet/water/wrp/pdf/fitz/fitzroy_wamp.pdf

¹³⁴ Water Management Act 2000 (NSW), s 17(a).

prevention of adverse impacts of water use on land,¹³⁵ drainage and floodplain management,¹³⁶ and the regulation of development impacting on water sources.¹³⁷ In practice, however, one of the frustrations experienced by water management committees was that the terms of reference for the first round of plans were confined to water sharing issues, preventing trade-offs, such as more water for irrigation in return for better riparian management by landholders.

In Queensland, while the legislation is more obviously focused on water sharing issues, plans can provide frameworks for “sustainably managing water” and “reversing, where practicable, degradation that has occurred in natural ecosystems”.¹³⁸ Separate water use plans can be made,¹³⁹ and irrigators can be required to prepare land and water management plans relating to the use of water on land.¹⁴⁰ In South Australia, water allocation plans made by catchment water management boards form part of the board’s catchment water management plan,¹⁴¹ which deals broadly with issues of water quality and quantity, and ecosystem health.¹⁴²

As plans creep out of the watercourse into the catchment, they must inevitably come up against vested interests in the field of land use planning. This is most obviously true where water plans address issues relating to diffuse water pollution, but even plans concerned primarily with instream flows and water allocation can raise land use planning issues. Development in the catchment, such as afforestation, can reduce the amount of run-off into streams. New residential subdivisions abutting on river banks may result in the creation of new riparian rights to take water for stock and domestic uses, reducing the amount of water available for existing users and ecosystems.

Coordination mechanisms will have to be set up to ensure that traditional land use planning schemes, on the one hand, and catchment and water management plans on the other give a consistent message. In Australia, local councils have traditionally been responsible for developing local land use planning schemes, albeit under the supervision of State governments. Their boundaries are historical, paying no heed to the natural boundaries of catchments, and they have shown limited interest in issues of water management. Nevertheless, issues relating to the role of democratically elected local councils need to be handled with sensitivity.

The South Australian legislation proceeds cautiously. The Minister can only override a local council’s objection to having its area included in the area of a catchment

¹³⁵ *Ibid*, s 23.

¹³⁶ *Ibid*, ss 26, 29.

¹³⁷ *Ibid*, ss 32, 34.

¹³⁸ Water Act 2000(Q), s 38(3).

¹³⁹ *Ibid*, s 60.

¹⁴⁰ *Ibid*, ss 72-78.

¹⁴¹ Water Resources Act 1997 (SA), s 101(3).

¹⁴² *Ibid*, s 92.

water management board if convinced that excluding it would undermine the objects of setting up the board, and that it is “fair and reasonable” to include the council.¹⁴³ Councils are not automatically bound by catchment water management plans: they are simply required to consider whether they should implement changes in the way they do things where the plan has identified the need for change.¹⁴⁴ While plan makers under the water legislation can submit proposals for the amendment of land use planning schemes to local councils and the responsible Minister, the process for amendment is complex, and ultimately, the Minister responsible for land use planning has the power to veto proposals.¹⁴⁵ In practice, there have been no attempts to use the formal procedure, and Boards are more likely to seek to use their powers of persuasion with local government than to rely on the formal procedures.¹⁴⁶

In NSW, unlike in South Australia, the Minister responsible for land use planning only has to be consulted,¹⁴⁷ with no power to veto land use regulatory initiatives emanating from water management plans.¹⁴⁸ Water management plans can incorporate “environmental protection provisions” relating to any aspect of water management. These provisions can regulate development. They can identify zones in which development is to be controlled “in order to minimise any harm to water sources in the area”.¹⁴⁹ This would, for example, allow water management committees to make enforceable provisions regulating new rural subdivisions in the interests of preserving river health.

Environmental protection provisions must ultimately be incorporated into land use plans, and local councils have to apply them. But the sensitivities involved in initiatives that threaten to undermine well-established traditions, dividing land and water management into separate fiefdoms, are clearly illustrated by a commitment by the agencies involved not to incorporate any environmental protection provisions into the first round of plans.

¹⁴³ Ibid, s 54(2).

¹⁴⁴ Ibid, 86(3).

¹⁴⁵ Ibid, ss 93(6), 94(3), 96(3), 102(6), 103(3), 105(2), 109(6), 110(3).

¹⁴⁶ K Bellette, “Legislation and Policy – One Sixth of the Equation for Integrated Water Resource Management,” paper given to the 3rd *Australasian Natural Resource Law and Policy Conference: Focus on Water*, Adelaide, 22-23 March 2001; S Moseley and G Mavrinac, “Linking Land Use Planning and Water Resources Management: The South Australian Experience,” paper given to the 3rd *Australasian Natural Resource Law and Policy Conference: Focus on Water*, Adelaide, 22-23 March, 2001.

¹⁴⁷ Water Management Act 2000 (NSW), s 38(3).

¹⁴⁸ See also Water Act 2000(Q), ss 258-259 which allow land use to be regulated in declared catchment areas so as to override the provisions of local land use planning schemes. For the position in WA, see A Gardner, “Water Resources Law Reform in Western Australia – Implementing the CoAG Water Reforms,” (2002) 19 *Environmental and Planning Law Journal* 6-33 at 20.

¹⁴⁹ Water Management Act 2000 (NSW), s 34.

Dealing With Scientific Uncertainty

Scientific uncertainty frequently means that environmental impact is given less weight in decision-making processes than the more easily talked up socio-economic benefits of development. Application of the precautionary principle represents one possible approach to scientific uncertainty, while adaptive management is another.

The precautionary principle has been consistently identified in both policy documents and legislation in Australia as one of the core principles of ecologically sustainable development.¹⁵⁰ It is especially relevant in the context of water resource management because of the particularly poor state of scientific knowledge about the water requirements of freshwater ecosystems.¹⁵¹ In this context, the environmental impact that we are particularly concerned with relates to the effects on ecosystems of inadequate or inappropriate flow regimes.

Both the Queensland and NSW legislation specifically embrace the precautionary principle, defined in identical terms in both pieces of legislation:

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.¹⁵²

Defined in this way, the precautionary principle is a decision-making tool, which attempts to address the problem of scientific uncertainty by lowering the scientific burden of proof, so that environmental impact can command greater weight in decision-making processes rather than being dismissed for lack of scientific certainty. In the context of river flows, it would mean that we cannot use the lack of incontrovertible scientific proof as a reason for delaying action to put in place ameliorative measures if we are satisfied that there is a “threat” of serious or irreversible damage to ecosystems from existing flow regimes.

The South Australian legislation does not specifically refer to the precautionary principle but, in its objects section, talks in terms of reducing detrimental effects of water use and management “by requiring the use of caution and other safeguards”.¹⁵³ One of the objects of the Water Management Act 2000 (NSW) is to “apply the principles of

¹⁵⁰ For a general discussion of the precautionary principle, see P Sands, *Principles of International Law*, Vol 1 (1995) at 208-213; C Burton, “The Status of the Precautionary Principle in Australia: Its Emergence in Legislation and as a Common Law Doctrine,” (1998) 22 *Harvard Environmental Law Review* 509; D Farrier, “Factoring Biodiversity Conservation into Decision-Making Processes: The Role of the Precautionary Principle,” in R Harding and E Fisher, *Perspectives on the Precautionary Principle* (1999).

¹⁵¹ See, for example, ARMCANZ and ANZECC, *National Principles for the Provision of Water for Ecosystems*, Occasional Paper SWR No 3 (July 1996), Principle 8.

¹⁵² Water Management Act 2000 (NSW), s 4 and Dictionary (“principles of ecologically sustainable development”); Water Act 2000 (Q), s 11(b).

¹⁵³ Water Resources Act 1997 (SA), s 6(1)(b).

ecologically sustainable development”.¹⁵⁴ But the precautionary principle is not made clearly operational as one of the water management principles which decision-makers must “take all reasonable steps” to comply with and to “promote”.

If the precautionary principle is to have any impact in practice, it must go beyond pure symbolism and do its work in the specific contexts of planning and licensing decisions. For the principle is a *methodology* for determining what the impact on the environment is likely to be in a context where science is unable to offer any ready answers. Only the Queensland legislation makes this specific connection between the precautionary principle and decision-making processes. Here decision-makers are specifically required to advance “sustainable management and efficient use of water and other resources”. Sustainable management must contribute to the economic development of the State “in accordance with the principles of ecologically sustainable development”, including the precautionary principle.¹⁵⁵

The argument is that where the precautionary principle does apply, those advocating measures to prevent environmental degradation, such as changes to river flows, only have to satisfy the threshold test of showing the existence of *threats* of serious or irreversible environmental damage, falling short of “full scientific certainty”. Once they have done this, decision-makers must assume that this impact is a reality, unless it can be shown that the threat does not in fact exist.

The function, then, of the precautionary principle is to require the decision-maker, once the threshold test has been passed, to assume, in the absence of evidence to the contrary, that there is, or will be, serious or irreversible environmental damage (such as significant reduction or loss of biological diversity) and to take this into account along with the full range of other factors which it must consider, even though there is a degree of scientific uncertainty about the extent of the impact.¹⁵⁶

The burden of proof effectively reverts to those advocating the status quo in relation to river flows, *but only in relation to the nature and extent of environmental impact*. For there is nothing in this version of the precautionary principle which requires decision-makers to give overriding, primary, or even substantial weight to ecosystem requirements, as compared with other factors, when deciding how to proceed. The

¹⁵⁴ Water Management Act 2000 (NSW), s 3(a). But note that there is no specific requirement in this legislation as there is in the Queensland and South Australian legislation (Water Resources Act 1997 (SA), s 6(2)(a); Water Act 2000 (Q), s 12) for decision-makers to strive to achieve the objects of the Act.

¹⁵⁵ Water Act 2000 (Q), ss 10-12.

¹⁵⁶ See *Tuna Boat Owners' Association of SA Inc v Development Assessment Commission* [2000] SASR 369 at 373, per Doyle CJ: “The precautionary principle means that measures to prevent or to forestall damage to the environment should not be postponed merely because of the lack of full scientific certainty as to the need for such measures. That is, when assessing a development proposal as to which a relevant authority has an incomplete understanding of the risks to the environment, it is appropriate to have regard to such risk, and especially long-term risks, when assessing the proposal even though it is not known that they will eventuate.”

principle only addresses the narrow issue of scientific uncertainty. The question of what weight should be given in decision-making processes to the assumed impact on the environment as against socio-economic considerations or the interests of existing consumptive users of water is a quite separate one. It has been suggested above that under the NSW legislation, at least, ecosystem requirements for water must be given priority in planning processes relating to water sharing as against the interests of consumptive users. This has nothing directly to do with the precautionary principle, although application of the principle may lead us to reach certain conclusions about what we should take those ecosystem requirements to be.

In practice, the precautionary principle is likely to be seen as a radical doctrine, particularly where it is combined with prioritisation in favour of ecosystem requirements, as may be the case in NSW. For many, the idea that we should act to reallocate water from consumptive use, with all of its socio-economic implications for particular water users and the broader public interest, without a clear scientific case being made for this will be counter-intuitive. Another difficulty with the precautionary principle is that it fails to address situations of scientific *ignorance* about environmental impact. It assumes the existence of *some* evidence of environmental impact. An evidentiary burden or threshold test must be satisfied by proof that there exist *threats* of serious or irreversible environmental damage before the burden of proof in relation to environmental impact is reversed.

There are tensions in the Queensland legislation when it comes to these issues. The incorporation of the precautionary principle in the definition of the purposes of water resource planning and licensing sits uneasily with later references to “best scientific information available” when detailing planning processes.¹⁵⁷ In particular, the Minister is instructed when preparing a draft water resource plan to consider, among other things, “the duration, frequency, size and timing of water flows necessary to support natural ecosystems as assessed using the best scientific information available”.

References to decision-making on the “best scientific information available” are also found scattered throughout documents associated with the CoAG strategic framework, including the original *Communique*.¹⁵⁸ The precautionary principle, on the other hand, barely rates a mention.

¹⁵⁷ Water Act 2000 (Q), ss 39(c), 46(1)(e), 47(c).

¹⁵⁸ CoAG *Communique*, Hobart, 25 February 1994, Attachment A, para 4. See also ARMCANZ, *Water Allocations and Entitlements: A National Framework for the Implementation of Property Rights in Water*, Task Force on CoAG Water Reform Occasional Paper No 1 (October 1995), 5; ARMCANZ and ANZECC, *National Principles for the Provision of Water for Ecosystems*, Occasional Paper SWR No 3 (July 1996), Principle 2; National Competition Council, *Background Paper on Aspects of CoAG Water Reforms* (Feb 2001), available at <http://www.ncc.gov.au/nationalcompet/assessments/water%20background%20papers/water%20background%20papers.htm>

To the extent that the concept of “best scientific information available” implies that evidence must meet accepted canons of scientific proof, it conflicts with the application of the precautionary principle, and the Queensland legislation’s demand that decision-making powers be exercised in a way which contributes to economic development in accordance with the principles of ecologically sustainable development.¹⁵⁹ The point about the precautionary principle is that it allows evidence that does not meet canons of scientific proof to be taken into account.

There is, however, another approach to precautionary decision-making in a context of scientific uncertainty. Instead of attempting to create a false sense of certainty about environmental impact from the outset, as does the precautionary principle, this approach argues for adaptive management as new scientific knowledge becomes available.

Knights, Fitzgerald and Denham¹⁶⁰ have suggested a risk management approach to the question of environmental flows “which recognises that there is no scientifically correct solution but that some of the damage caused by river regulation and water abstraction can be minimised or redressed through a process of trial and adjustment”. Decisions are not simply scientific ones, but contain a substantial value component. Consistent with the demand for intra-generational equity as one of the principles of ecologically sustainable development, social and economic considerations arising from disturbance of expectations will inevitably play a significant part in the *initial* readjustment of allocations to protect instream values. But the flexibility to make adjustments in the future through a process of adaptive management based on ongoing monitoring and adjustment, is a crucial component of any package.

The notion of adaptive management appears in a number of documents related to the CoAG strategic framework.¹⁶¹ While we have seen that the precautionary principle is not included as one of the water management principles established by the NSW legislation, adaptive management is:

the principles of adaptive management should be applied, which should be responsive to monitoring and improvement in understanding of ecological water requirements.¹⁶²

¹⁵⁹ Water Act 2000 (Q), ss 12, 10(2)(c)(ii).

¹⁶⁰ P Knights, B Fitzgerald and R Denham, “Environmental Flow Policy Development in NSW,” Proceedings of the *National Agricultural and Resources Outlook Conference*, Australian Bureau of Agricultural and Resource Economics (1995), 253.

¹⁶¹ See ARMCANZ, *Water Allocations and Entitlements: A National Framework for the Implementation of Property Rights in Water*, Task Force on CoAG Water Reform Occasional Paper No 1 (October 1995), 6: “Institutional arrangements should be sufficiently flexible to allow adaptive management and adjust for improved knowledge”. See also ARMCANZ and ANZECC, *National Principles for the Provision of Water for Ecosystems*, Occasional Paper SWR No 3 (July 1996), para 3.4 and principle 8.

¹⁶² Water Management Act 2000 (NSW), s 5(2)(h).

The Full Court of the Supreme Court of South Australian has recently approved putting in place an adaptive management regime as an appropriate approach to meeting the demands of the precautionary principle and achieving ecologically sustainable development in the context of a proposed tuna farm.¹⁶³

The National Competition Council has indicated that, in monitoring implementation of the strategic water resources framework by the States it will be looking at the extent to which water allocation plans allow for ongoing monitoring and adjustment in light of new information:¹⁶⁴

The techniques available for determining environmental water requirements cannot specify an environmental flow or regime that will conclusively ensure the protection of the environment. Rather the techniques highlight the risks to ecological values of pursuing particular flow strategies. Monitoring programs need to be established to ensure environmental water provisions are maintaining ecological values. This will enable immediate remedial action to minimise risk of permanent degradation of ecological values.

The Queensland, NSW and South Australian legislation all contain provisions for monitoring and review, but none of them contain clear commitments to finance the scientific research necessary to improve understanding of ecological flow requirements.¹⁶⁵

The use of adaptive management as a way of dealing with the issue of scientific uncertainty is an attractive one. In practice, however, it is likely to jar with commitments to provide water users with “property rights”, which are strongly associated with demands for compensation where adjustments to water allocations are made.

The Role of Compensation

A strategy based on adaptive management clearly contemplates the possibility that water will be clawed back from consumptive users in certain circumstances and

¹⁶³ *Tuna Boat Owners' Association of SA Inc v Development Assessment Commission* [2000] 77 SASR 369.

¹⁶⁴ National Competition Council, *Background Paper on Aspects of CoAG Water Reforms* (Feb 2001), 5-6. Available at <http://www.ncc.gov.au/nationalcompet/assessments/water%20background%20papers/water%20background%20papers.htm>

¹⁶⁵ Water Management Act 2000 (NSW), s 43(2), (3); Water Act 2000 (Q), ss 53-54; Water Resources Act 1997 (SA), ss 92(3)(f)(iii), 101(4)(e)

reallocated to the environment, and this is specifically contemplated by some jurisdictions.¹⁶⁶

In NSW, Queensland and South Australia the position is that consumptive users are at no stage guaranteed that their access rights¹⁶⁷ will not be interfered with by changes to the plan. They have no security when it comes to the supply of water, reinforcing the priority that the NSW legislation, at least, gives to addressing ecosystem requirements. The Minister can vary the access regime established by the plan at any time.¹⁶⁸ Water can in other words be clawed back to satisfy ecosystem needs that have become apparent as a result of further scientific research, and this will have a flow-on effect for individual water users. If this does eventuate, then it raises the issue of whether users will be compensated.

Even in the unlikely event that an argument that water licences amount to property could be sustained, there is nothing in the Constitutions of any of the States that provides compensation for “takings”. There is such a clause in the Australian Constitution, but it only applies to the activities of the Commonwealth Government, not the State governments.¹⁶⁹

A policy position paper from a Task Force set up to advance the CoAG agenda left it to individual jurisdictions to determine whether compensation should be paid, but suggested that payment would be unlikely where reductions in entitlements stemmed from a full-scale review carried out within an open and consultative planning process.¹⁷⁰ The National Competition Council has emphasised the need for water rights to be “well specified in the long-term sense”, to ensure efficient water trade, use and investment. It distinguishes arbitrary or non-transparent changes that alter the benefits provided (for example, a permanent expansion of water diversions that reduces security of supply) from transparent and consultative changes based on environmental justifications. But it ultimately leaves the issue of compensation to the individual States.¹⁷¹

¹⁶⁶ For example, Water Act 2000 (Q), s 46(2)(g), Water Management Act 2000 (NSW), s 87(1); Water Resources Act 1997 (SA), s 37.

¹⁶⁷ The “bulk access regime”: Water Management Act 2000 (NSW), s 20(1)(d).

¹⁶⁸ Water Act 2000(Q), s 55; Water Resources Act 1997 (SA), s 37. In NSW, the Minister must first consult with the water management committee where this is in the public interest: Water Management Act 2000 (NSW), s 45.

¹⁶⁹ Constitution of the Commonwealth of Australia, s 51(xxxi). See Poh-Ling Tan, “Water Licences and Property Rights: the Legal Principles for Compensation in Queensland?” (1999) 16 *Environmental and Planning Law Journal* 273.

¹⁷⁰ ARMCANZ, *Water Allocations and Entitlements: A National Framework for the Implementation of Property Rights in Water*, Task Force on CoAG Water Reform Occasional Paper No 1 (October 1995), 9.

¹⁷¹ National Competition Council, *Water Property Rights* (Background Papers on Aspects of CoAG Water Reforms, Feb 2001). Available at <http://www.ncc.gov.au/nationalcompet/assessments/water%20background%20papers/water%20background%20papers.htm>

The argument is that where we are dealing with maintaining the essential health of river systems, the costs should be borne by existing users,¹⁷² who have in the past benefited from overcommitment of the resource. Against this is the fact that water users have made investment decisions on the basis of the past practice of water management agencies. They may have purchased an allocation only very recently.

Neither NSW nor Queensland make provision for compensating water users for losses incurred as a result of the making of the first water plan for a catchment.¹⁷³ However, in both States, those licence-holders whose water allocations are reduced can claim compensation for changes which are made within the ten-year period following the making of the first plan.¹⁷⁴ In Queensland, any change which reduces the value of an allocation is compensable, but in NSW compensation is only payable where a water allocation is reduced.¹⁷⁵ This would seem to mean that compensation is not payable, for example, where changes are made to the timing of delivery.

There is one exception in NSW to this requirement to pay compensation - where a mechanism allowing change is built into the plan itself.¹⁷⁶ In practice, it is likely that such a mechanism will require a consensus decision of the water management committee before it is triggered, effectively giving water user representatives on the committee a right to veto uncompensated adjustments to water allocations during the ten year life of the plan.

When a subsequent plan is made in NSW, after the expiry of the ten year life¹⁷⁷ of the first, compensation is payable only if the Minister unilaterally departs from the final proposals of the water management committee,¹⁷⁸ which, we have seen, must be based on

¹⁷² *Report of the Expert Group on Asset Valuation Methods and Cost-Recovery Definitions for the Australian Water Industry* (February 1995), para 8.14.

¹⁷³ Water Management Act 2000 (NSW), s 87(2)(a); Water Act 2000(Q), s 986(b).

¹⁷⁴ Water Management Act 2000 (NSW), s 87(1); Water Act 2000(Q), s 986. In NSW, the plan has a duration of ten years: Water Management Act 2000 (NSW), s 43(1). The Queensland provisions do not provide for the plan to have a fixed life, but require compensation to be paid for a change made within 10 years of its approval if it reduces the value of an allocation: Water Act 2000(Q), s 986.

¹⁷⁵ For the position in WA, where compensation is widely available on variation of a water licence, see Rights in Water and Irrigation Act 1914 (WA), Schedule 1, Division 9, discussed by A Gardner, "Water Resources Law Reform in Western Australia – Implementing the CoAG Water Reforms," (2002) 19 *Environmental and Planning Law Journal* 6-33 at 27-28. In Victoria, the position seems to be that if there are at any stage to be adjustments to bulk entitlements, this will involve the State purchasing additional water on the transfer market, unless it can be obtained through efficiency savings: Poh-Ling Tan, "Irrigators Come First: Conversion of Existing Allocations to Bulk Entitlements in the Goulburn and Murray Catchments, Victoria," (2001) 18 *Environmental and Planning Law Journal* 154-187 at 174, 180, 187.

¹⁷⁶ Water Management Act 2000 (NSW), ss 87(2)(c), 42(2).

¹⁷⁷ *Ibid*, s 43.

¹⁷⁸ *Ibid*, s 87(2)(b).

a consensus decision. In Queensland there is no right to claim compensation for changes made more than ten years after approval of any particular plan.¹⁷⁹

The South Australian legislation takes a very different approach. There is no provision for compensation where the Minister reduces water allocations to prevent damage or further damage to an ecosystem.¹⁸⁰ However, a catchment water management board has a *discretion* to provide financial assistance to those who are detrimentally affected by the implementation of its plan.¹⁸¹

The approach taken in South Australia raises the question of whether financial payments by government to water users should be delivered as incentives to make adjustments to their operations to cope with the shortfall in water, rather than compensation, a crucial distinction which is often lost in debates focused on property rights. Compensation is backward looking and untargeted. It is designed to alleviate the financial pain stemming from community interference with what has been classified as a property right, and to reassure the market that investment decisions will not be compromised by changes in government policy. Financial support in the form of subsidies designed, for example, to improve water use efficiency or to enable storage of water, is both forward-looking and targeted.

Traditionally Australian governments have been reluctant to use the discourse of compensation, but they have been quite comfortable with the idea of providing financial support for rural adjustment. Where a subsidy results in improved water use efficiency, leaving more water in the stream, the community effectively gets a direct benefit from the subsidy, in the form of enhanced environmental flows. On the other hand, subsidies will only cover part of the cost, so that water users are still being expected to make a contribution to the new flow regime. Such an approach may well prove to be a satisfactory compromise between, on the one hand, leaving water users to bear the whole of the burden of a strategy of adaptive management, and, on the other, leaving the implementation of such a strategy dependent on the willingness of future governments to pay compensation.

¹⁷⁹ Water Act 2000(Q), s 986(b).

¹⁸⁰ Under Water Resources Act 1997 (SA), s 37. Cf s 146, where provision is made for compensation in other circumstances.

¹⁸¹ *Ibid*, s 64(1)(b).

A Note on Indigenous Rights to Water in Australia¹⁸²

Background

In its 1992 decision in *Mabo v Queensland (No 2)*,¹⁸³ the Australian High Court recognised the existence in Australia of native title under the common law. In doing so, it reversed the earlier decision of a first instance judge in *Milirrpum v Nabalco*, which had stood for over 20 years.¹⁸⁴

Following *Milirrpum*, a number of “land rights” statutes were enacted, covering individual States and the Northern Territory.¹⁸⁵ While these resulted in the transfer of significant areas of land to indigenous communities in western areas of Australia, it was usually land unwanted for other purposes, much of it arid desert. In the eastern states of Queensland, New South Wales (NSW) and Victoria the area involved was much smaller, by far the greater part of it in northern Queensland.

In most instances, the beneficiaries of land rights legislation were those living on reserves and on land to which communities could show a continuing traditional connection, excluding those whose land had been alienated. While in New South Wales, unlike most other jurisdictions, there were no such restrictions in the legislation, claims were nevertheless restricted to land not lawfully occupied or used, and not likely to be needed for a public purpose. Title given to indigenous communities was generally “inalienable freehold”. Apart from giving access to mining royalties, there was no real sense that the land rights initiative was part of an economic development strategy for indigenous communities to address social justice issues. There was one significant exception to this. Under the New South Wales legislation, 7.5% of land tax revenues for the years 1994-98 were allocated to the New South Wales Aboriginal Land Council, with half of this to be used for land purchases and the other half to be invested.

The general assumption seems to be that this land rights legislation has little to say about indigenous access to water.¹⁸⁶ This has only recently emerged as an issue with the recognition of native title in *Mabo*. This paper will focus on the extent to which indigenous claims to gain access to water are likely to be recognised under the emerging law relating to native title, and the extent to which this will satisfy indigenous aspirations. This law is still in its infancy. However there are already signs of a growing tension

¹⁸² Thanks to my research assistants, Elisa Arcioni and Peta Glynn,

¹⁸³ (1992) 175 CLR 1.

¹⁸⁴ (1971) 17 FLR 141.

¹⁸⁵ See, generally, on the land rights legislation, H McRae, G Nettheim and L Beacroft, *Indigenous Legal Issues: Commentary and Materials* (1997), chapter 4, which forms the basis of this discussion.

¹⁸⁶ It has recently been held that the reference to “land” in the Aboriginal Land Rights (Northern Territory) Act 1976 (Cth) does not include the sea bed of bays and gulfs: *Risk v Northern Territory* (2000) 180 ALR 705.

between indigenous people's desire to gain recognition for their traditional connections to the Australian landscape and the realisation that this will probably not allow them to participate in and benefit from the evolving water economy.

Overview of Native Title in Australia

While the Court in *Mabo (No 2)* did not disturb earlier findings that Australia was a settled rather than conquered territory, it concluded that, under the common law, native title is a "burden" on the radical title of the Crown which vested on the acquisition of sovereignty on settlement. However, the content of native title reflects the traditional laws acknowledged by and the traditional customs observed by the particular indigenous inhabitants claiming title:

The content of native title, its nature and incidents will vary from one case to another. It may comprise what are classified as personal or communal usufructuary rights involving access to the area of land in question to hunt for or gather food, or to perform traditional ceremonies. This may leave room for others to use the land either concurrently or from time to time. At the opposite extreme, the degree of attachment to the land may be such as to approximate that which would flow from a legal or equitable estate therein.¹⁸⁷

Section 223(1) of the Native Title Act 1993, legislation enacted by the Commonwealth Parliament following the decision in *Mabo*, now provides:

The expression native title or native title rights and interests means the communal, group or individual rights and interests of Aboriginal peoples or Torres Strait Islanders in relation to land or waters, where:

- (a) the rights and interests are possessed under the traditional laws acknowledged, and the traditional customs observed, by the Aboriginal peoples or Torres Strait Islanders; and
- (b) the Aboriginal peoples or Torres Strait Islanders, by those laws and customs, have a connection with the land or waters; and
- (c) the rights and interests are recognised by the common law of Australia.

Rights and interests are specifically defined to include hunting, gathering, and fishing rights and interests.¹⁸⁸

If the indigenous inhabitants lose their traditional connections to land, native title terminates.¹⁸⁹ It may also be *extinguished*, without any possibility of revival, by *valid*

¹⁸⁷ *The Wik Peoples v State of Queensland* (1996) 187 CLR 1, at 169, per Gummow J.

¹⁸⁸ Native Title Act 1993 (Cth) s 223(2).

legislation or acts of the executive. So, for example, while mere regulation of native title does not extinguish it,¹⁹⁰ the grant by a State of a freehold estate in land does.¹⁹¹ Where native title is extinguished, the consent of the holders is not an issue, and no compensation is payable at common law. Extinguishment will usually have been at the hands of State governments because they have traditionally assumed responsibility over natural resource management.¹⁹²

While the nature of native title at common law was essentially confirmed by the Native Title Act 1993 (Cth), the law relating to the termination/suspension of native title rests on a complex interplay between common law and legislation. One of the prime motivations for legislative intervention was the desire to protect existing non-indigenous interests in land, and even interests created subsequently to the decision in *Mabo*. In this context, the perceived problem arose from the enactment of the Racial Discrimination Act 1975 (Cth), which provided that State legislation and executive acts which did not afford equal treatment before the law were inoperative to the extent of any inconsistency.¹⁹³ The result was that, after 1975, legislation and acts that might have been otherwise interpreted to extinguish native title, did not have this effect because they discriminated against indigenous interests. The effect of non-compliance with the Racial Discrimination Act was the non-extinguishment and non-impairment of native title despite the inconsistent grant or legislation.¹⁹⁴

This led to Commonwealth¹⁹⁵ and State¹⁹⁶ legislation which *validated* past acts (those occurring before the end of 1993,¹⁹⁷ in the case of Crown grants, or mid-1993 in the case of legislation),¹⁹⁸ and future acts (legislation enacted on or after 1 July 1993, or

¹⁸⁹ This simple statement begs the question of when native title has effectively been abandoned, especially in circumstances where the process of settlement has led to significant barriers being placed in the way of the observance of traditional customs. See *Members of the Yorta Yorta Aboriginal Community v State of Victoria* [2001] FCA 45, in which the Full Court of the Federal Court rejected the so-called “frozen in time” approach, holding that dispossession does not inevitably lead to a community ceasing to acknowledge its traditional laws and observe its traditional customs, thereby losing its connection with the land.

¹⁹⁰ Native Title Act 1993 (Cth), s 211 in fact negates the operation of certain laws requiring permits, etc for hunting, fishing, gathering and cultural or spiritual activity insofar as they impinge on the exercise of native title rights and interests, designed to satisfy personal, domestic or non-commercial communal needs.

¹⁹¹ *Fejo v Northern Territory* (1998) 156 ALR 721.

¹⁹² See the discussion of the relationship between the theoretical position under the Australian Constitution and actual practice in D Farrier, “Protecting Environmental Values in Water Resources in Australia,” paper delivered to this Conference.

¹⁹³ Racial Discrimination Act (Cth), s 10(1). The Australian Constitution, section 109 provides that Commonwealth legislation that is within Commonwealth power overrides inconsistent State legislation. See *Mabo v Queensland* (1988) 166 CLR 186.

¹⁹⁴ R H Bartlett, *Native Title in Australia* (2000), at 309.

¹⁹⁵ Native Title Act 1993 (Cth) Part 2, Division 2 and s 228.

¹⁹⁶ In NSW, see the Native Title (New South Wales) Act 1994, ss 8, 8A.

¹⁹⁷ The Native Title Act 1993 (Cth) came into force on 1 January 1994.

¹⁹⁸ Native Title Act 1993 (Cth), s 228.

other acts taking place on or after 1 January 1994).¹⁹⁹ Although these provisions validate legislation and executive acts in spite of any failure to comply with the Racial Discrimination Act, they do not always restore their full extinguishing capacity. In some cases, native title is simply suspended for the duration of an inconsistent interest rather than extinguished. Compensation is generally provided.

Native Title in Inland waters

The definition of native title in section 223 of the Native Title Act 1993 makes it clear that native title can be claimed in both land and “waters”. The latter is defined to include “sea, a river, a lake, a tidal inlet, a bay, an estuary, a harbour or subterranean waters” as well as the bed under waters and the airspace above.²⁰⁰

Native title claims to inland waters could conceivably take a number of different forms:

- landscape claims encompassing watercourses, stemming from their significance, along with floodplains and wetlands, as sources of food and medicines, and their importance in terms of cultural learning through dreaming stories and ceremonial rites;
- claims to extract water for human consumption from traditional sources, such as rock wells, springs and soaks;
- claims to extract water for cultural and spiritual purposes;
- claims to extract water for commercial purposes (eg. irrigation);
- claims to have a particular flow left in a watercourse for subsistence purposes;
- claims to have a particular flow left in a watercourse because it contains items of Aboriginal cultural heritage or places of significance under Aboriginal laws, customs and beliefs;
- claims to have a particular flow left in a watercourse for commercial purposes (eg. fisheries).

Recent case law has confirmed native title rights to extract water for non-commercial purposes in remote areas of Western Australia and the Northern Territory. In

¹⁹⁹ Ibid, s 233. There is also a category of “intermediate period acts”, comprising acts other than legislation that took place between 1 January 1994 and 23 December 1996, the date of the High Court decision in *Wik Peoples v State of Queensland* (1996) 187 CLR 1. See Native Title Act 1993 (Cth), Part 2, Division 2A. This validation category was particularly designed to address the *Wik* decision, which held that native title had not necessarily been extinguished on pastoral leases. The justification for introducing the validation provisions was that governments might have done acts or made grants in relation to leasehold land without complying with the future act regime which then existed, on the assumption that native title had been extinguished. See Commonwealth of Australia, *Native Title: Legislation with Commentary by the Australian Government Solicitor* (2nd ed, 1998), 21.

²⁰⁰ Ibid, s 253.

Mark Anderson on behalf of the Spinifex People v State of Western Australia,²⁰¹ the Federal Court confirmed an agreement between the parties which gave native title holders a right to take water for the purposes of satisfying their personal, domestic, social, cultural, religious, spiritual or non-commercial communal needs, including the observance of traditional laws and customs. There were no rights to flowing or subterranean waters beyond this, and even the limited native title rights recognised were subject to interests granted under Western Australian water legislation.

O'Donnell has argued that the issue of whether native title to inland waters includes the right to the *exclusive* possession, occupation, use and enjoyment of waters is the primary question that remains unresolved.²⁰² In *Commonwealth v Yarmirr*, the High Court recently held that native title rights could extend to the sea and sea-bed within the territorial sea, but that they did not extend to a right to exclude others.²⁰³

Yet while the concept of exclusivity has meaning in the marine context, and could be extrapolated to a landscape claim incorporating a right to exclude others from a lake which has cultural significance, it has reduced purchase when it comes to the issue of rights to extract flowing water from rivers which traverse areas of land, only parts of which are subject to native title. In the *Spinifex People's* case, it is significant that the court restricted to *land* the right to confer possession, occupation, use and enjoyment *to the exclusion of all others*, which it recognised in relation to part of the claim.²⁰⁴

When it comes to water extraction, the relevant issue is about priority of access to flows at times of water shortage. In the *Spinifex People's* case, it was made clear that, where there was a conflict, licensed rights to access water under legislation prevailed over even the minimal native title rights to use water outlined above. This approach has been repeated in other cases. In *Ngalpil v State of Western Australia*,²⁰⁵ the Federal Court approved another agreement which proclaimed the right of the native title claimants "to possess, occupy, use and enjoy the land and waters of the Determination Area to the exclusion of all others", and to control access to and activities on both land and waters. But it then went on to make it clear that native title rights in relation to flowing and subterranean waters only extended to those which "exist at law" and, in the event of inconsistency, rights granted to others under water legislation prevail over them, without extinguishing them.²⁰⁶

²⁰¹ [2000] FCA 1717.

²⁰² M O'Donnell, "Briefing Paper for the Water Rights Project by the Lingiari Foundation and ATSIC" in *Background Briefing Papers* (February 2002), 95-105, at 97, available at www.atsic.gov.au (Issues).

²⁰³ [2001] HCA 56. The first instance finding that native title rights to fish, hunt and gather did not extend to commercial purposes went unchallenged.

²⁰⁴ Even in relation to land, there were a number of significant exceptions that would seem to make the recognition of the right to exclude largely symbolic.

²⁰⁵ [2001] FCA 1140.

²⁰⁶ See also *Hayes v Northern Territory* [2000] FCA 671; *State of Western Australia v Ward* [2000] FCA 611.

In *Wandarang, Alawa, Marra and Ngalakan Peoples v Northern Territory of Australia*, after the applicants had dropped their claim to exclusive rights to the waters of several rivers, confining it to river beds and banks, Olney J simply stated that “the common law does not recognise a claim to ownership of flowing water”.²⁰⁷ At common law, flowing water was regarded as *publici juris*, incapable of giving rise to property rights, although riparian landholders had limited rights of access, possession and use.²⁰⁸

Combine the low priority given to indigenous rights to extract water with the current assumption that historically, traditional practices of Aboriginal communities did not incorporate irrigation,²⁰⁹ and it is going to prove difficult for indigenous communities to claim access to and control over substantial quantities of water. It is true that the courts have made it clear that they will not adopt an approach to native title, which requires today’s applicants to show that they claim rights under laws acknowledged or customs observed that are either identical, or very similar, to the laws acknowledged and customs observed by their ancestors at the time that sovereignty was acquired by the Crown (characterised as the “frozen in time” approach). They will recognise the evolution of native title as relationships between indigenous communities and their land change.²¹⁰ But there are clearly limits to how far they will be prepared to go. Laws and customs lose their traditional quality “if they reflect a breaking with the past rather than the maintenance of the ways of the past in changed circumstances”.²¹¹ A majority of the Full Court of the Federal Court in *Members of the Yorta Yorta Aboriginal Community v State of Victoria* was prepared to accept that a right to enter on land to hunt would survive a change in prey from native animals to rabbits as the supply of the former diminished. But it left open the question of whether a right to enter land only during a particular season to gather a particular bush fruit could evolve into a native title right, once the bush fruit had become extinct, to enter the land at a later season to gather an alternative food source.²¹² In this context, it would be a significant leap to suggest that use of water for broadacre irrigation represents only an evolution in the nature and incidents of native title rather than a substantial break with a past which may, depending on the evidence, have seen water extracted only for subsistence, cultural and spiritual purposes.

²⁰⁷ (2000) 177 ALR 512; [2000] FCA 923, at paras 26, 126. The reference here may be to s 223(1)(c) of the Native Title Act 1993, which requires that the rights and interests claimed, must be “recognised by the common law of Australia”.

²⁰⁸ *Embrey v Owen* (1851) 6 Exch. 353; *Mason v Hill* (1833) 5 B. & Ad. 1. See G Hiley, “Recognition of native title interests in water,” 4(9) *Native Title News* 60 (July 2000); Poh-Ling Tan, “Native Title and Fresh Water Resources” in B Horrigan and S Young, eds, *Commercial Implications of Native Title* (1997), Chapter 7, p 160-166.

²⁰⁹ Jennifer McKay, “Onshore water project: briefing paper” in *Background Briefing Papers* (February 2002), 25-42, at 39, available at www.atsic.gov.au (Issues).

²¹⁰ *Members of the Yorta Yorta Aboriginal Community v State of Victoria* (2001) 180 ALR 655; [2001] FCA 45.

²¹¹ *Ibid.*, at para 122.

²¹² *Ibid.*, at paras 129-130.

Recognition that native title claims are only likely to result in access to small quantities of water for very limited purposes perhaps underlies an increasing focus by indigenous interests on mounting political rather than legal claims to commercial quantities of water based on social justice arguments.²¹³ This will be considered further below. However, a potential basis for native title rights which appears not to have been explored so far, other than in the context of broad claims to exclusive rights, deserves more attention. This rests on claims, not to extract water, but to have flows left instream. One objective would be to protect traditional practices involving the hunting and gathering of animals, fish and plants living in, or close to watercourses, not only for subsistence purposes but also because of their ceremonial and spiritual significance. Beyond this, high levels of extraction may have significant impacts on the cultural or spiritual significance of particular stretches of water to indigenous communities. The water may be significant in its own terms or because it contributes to the general health of a locality.²¹⁴ There are obvious overlaps here with demands by conservation interests for environmental flows. While acknowledging this, indigenous communities would argue that their claims have quite distinct aspects. If successful, claims to have water left instream could have a significant impact in terms of reducing the security of supply for commercial extractors, and, therefore, provide indigenous interests with a powerful bargaining tool when it comes to inducing irrigators and State governments to enter into Indigenous Land Use Agreements. In these agreements, indigenous interests can agree to extinguish native title by surrendering it to government, in return for other benefits.²¹⁵

Extinguishment of Native Title to Water

The law relating to extinguishment of native title is cloudy, and awaits the imminent decision of the High Court on appeal in the case of *Western Australia v Ward*.²¹⁶ What is at least clear is that native title can be extinguished not only by legislation, but also by executive acts carried out under legislation, such as the issue of water licences.

One possibility is that the early water legislation enacted by the States showed a “clear and manifest intention” to extinguish native title. A provision found in that

²¹³ See Submission by NSW Aboriginal Land Council on the Interim State Water Management Outcomes Plan (February 2002).

²¹⁴ See New South Wales Land Council, *Securing Our Water Future* (June 2000); Sarah Yu, *Ngapa Kunangkul: Living Water, Report on the Aboriginal Cultural Values of Groundwater in the La Grange Sub-basin*, prepared by the Centre for Anthropological Research, University of Western Australia, for the Water and Rivers Commission of Western Australia (2nd ed, May 2000).

²¹⁵ Native Title Act 1993 (Cth), Part 2, Division 3, Subdivisions B and C.

²¹⁶ M O'Donnell, “Briefing Paper for the Water Rights Project by the Lingiari Foundation and ATSIC” in *Background Briefing Papers* (February 2002), 95-105, at 97, available at www.atsic.gov.au (Issues).

legislation, in the case of NSW since before the turn of the century,²¹⁷ vested the exclusive right to the use, flow and control of waters in particular States. In *Western Australia v Ward*, the Full Court held that this provision in the Rights in Water and Irrigation Act 1914 (WA) did not show an intention to extinguish native title rights.²¹⁸ The Court went on to consider whether the Western Australian legislation extinguished native title in the course of abolishing all existing rights to take and use water, and replacing them with statutory rights (which did not recognise native title). It concluded that the legislation did not in fact replace existing rights to use water. However, the majority held that the legislation did operate to destroy any *exclusive* rights to control the use and enjoyment of water that the native title claimants could otherwise show.²¹⁹

In some other States, particularly NSW, the argument that the early water legislation replaced existing rights with statutory rights will be more difficult to resist, although there has been a vigorous debate about whether the legislation managed to destroy all riparian rights which previously existed at common law.²²⁰ Bartlett²²¹ has argued that the NSW legislation does not extinguish native title:

[P]rovision was made for special redefined rights for [riparian] owners indicating that it was not intended to expropriate rights to water without compensation or consideration. It is not expropriative legislation. Moreover, the prohibition of diversions and the taking of water without a licence are inappropriate to the restriction of native title rights to water for traditional purposes. Achievement of the objects of the legislative scheme does not necessitate the general extinguishment of native title to water.

As we will see below, the most recent NSW legislation assumes that native title rights have not been extinguished but continue to exist, at least where they are limited to “non-exclusive rights to take and use water for personal, domestic, and non-commercial communal purposes”.²²²

²¹⁷ Water Rights Act 1896 (NSW). The Irrigation Act 1886 (Vic) simply vested in the State the right to use water. See the discussion by Poh-Ling Tan, “Native Title and Fresh Water Resources” in B Horrigan and S Young, eds, *Commercial Implications of Native Title* (1997), Chapter 7, pp 186-197.

²¹⁸ See also *Hayes v Northern Territory* [1999] FCA 1248, at para 120, holding that the Northern Territory water legislation did not extinguish a native title right to *use* waters, where the evidence did not support a claim to ownership of waters.

²¹⁹ *State of Western Australia v Ward* (2000) 170 ALR 159; [2000] FCA 191, at paras 397-405. See also *Wandarang, Alawa, Marra and Ngalakan Peoples v Northern Territory of Australia* (2000) 177 ALR 512; [2000] FCA 923, at para 126, where Olney J held that the Northern Territory water legislation “has established a regime in relation to water rights which is inconsistent with the continued existence of *exclusive* native title rights to the ownership and use of water” (emphasis supplied). See also V Newell, “Property Rights in Groundwater,” 4(24) *Indigenous Law Bulletin* 4 (October 1999).

²²⁰ See Poh-Ling Tan, “Native Title and Fresh Water Resources” in B Horrigan and S Young, eds, *Commercial Implications of Native Title* (Federation Press 1997), Chapter 7, pp 189-190.

²²¹ R H Bartlett, *Native Title in Australia* (2000), para 14.89.

²²² WMA s 55, and Dictionary (“native title rights”).

If native title has not been extinguished by legislation, there remains the question of whether it has been extinguished by the issue of water licences. While it did not address the specific impact of water licensing, the 2-1 majority decision of the Full Court of the Federal Court in *Ward* is relevant, but quite unsatisfactory.²²³ The majority appears to conclude that executive acts, such as granting a water licence, which create rights in third parties inconsistent with a continued right to enjoy native title, extinguish it to the extent of the inconsistency, provided that there is a “clear and plain intention” to do so. But this intention does not have to be manifested in the authorising legislation. It can appear from the action taken by the executive.²²⁴ After reviewing the case law, Bartlett argues that while such an intention is required, the reference is not to actual intention, but to that “objectively manifested”.²²⁵

This raises the question, then, of what the requirement for proof of a “clear and plain intention” adds to the requirement for inconsistency. One answer is perhaps supplied by North J, the dissenting judge in *Ward*, who argues that not all inconsistent acts extinguish native title:

A minor or insignificant inconsistency between the rights or interests created and native title could not lead to such a far-reaching consequence as total abrogation of native title. There must be proportionality between the impact of the law or the act and the effect on native title. Only a law or act which has the effect of totally replacing native title by completely nullifying it will result in extinguishment of native title. The inconsistency with the law or act must be total, fundamental or absolute to effect extinguishment.²²⁶

In situations falling short of this, where rights under native title conflict with those exercisable under the grant, they must give way, or they are suspended.²²⁷ But in these circumstances, native title is not extinguished.

The majority in *Ward* gets around having to say that even minor inconsistencies extinguish native title by arguing that native title is a bundle of rights, and to the extent to which particular rights are inconsistent with rights conferred under an executive act, native title is partially extinguished.²²⁸

²²³ (2000) 170 ALR 159; [2000] FCA 191.

²²⁴ *Ibid* at para 111. In an earlier statement, however, the majority appears to conclude that inconsistency is sufficient, without any indication of a “clear and plain intention” to extinguish native title: para 69.

²²⁵ R H Bartlett, *Native Title in Australia* (2000), para 14.18.

²²⁶ (2000) 170 ALR 159; [2000] FCA 191 at para 689.

²²⁷ *Ibid* at paras 692, 696.

²²⁸ *Ibid* at paras 88-91, 109-110. See also *Anderson v Wilson* (2000) 171 ALR 705. In response, North J argues that native title is not simply a bundle of rights but a right to the land itself: para 784.

Yet before we get to the question of whether there is a “clear and plain intention” to extinguish native title, we must first find an inconsistency between its incidents and those stemming from the executive grant - specifically in the present context, the issue of water licences. Much here will, of course depend on the precise contents of the native title claimed. But as a general proposition, it would seem difficult to argue that water licences would extinguish native title where this involved extraction of water by Aboriginal people. Licences in the Australian States have traditionally not guaranteed access to a particular quantity of water. Nor do they follow the prior appropriation doctrine in giving priority of access to water based on historical usage. In times of shortage, the pain is generally shared, with limited exceptions. Licences had to be renewed periodically, and they could be suspended or modified for a range of reasons. While, as the majority in *Ward* concluded in relation to the Western Australian legislation, the legislation’s restrictions on access would undermine any native title argument for *exclusive* access, it hardly suggests complete extinguishment.

Native title embodying rights to have water left in the stream for fishing and cultural purposes may raise different issues. Yet while there was nothing in the early water legislation which guaranteed instream flows, there was equally nothing which guaranteed to licence holders that they would be able to drain the stream dry. The basic point is that the system of water allocation was riven with discretion. To this extent, there were no rights under water licences, in spite of the folklore that existed among irrigators. It is clear that water could be clawed back to restore instream ecosystems. Native title claims to have more water left in the stream must be viewed in this context.

Validity of Past Acts

The general position is that insofar as any “past acts”, such as water legislation or the grant of water licences, are invalid,²²⁹ they have been validated by legislation.²³⁰ The salient source of potential invalidity is the Racial Discrimination Act 1975 (Cth), with its demands for equal treatment under the law. But the legislation has been drafted broadly enough to cover any other sources of invalidity, including those occurring before 1975. The operating assumption, however, is that, at least prior to 1975, native title in many contexts was extinguished by *valid* acts which do not need any assistance from the Native Title Act 1993 (Cth). In this case no compensation is payable.

Invalid past acts attributable to the States have been validated by State legislation, at the invitation of the Native Title Act 1993 (Cth).²³¹ This would cover water resources legislation²³² enacted before mid-1993 and water licences issued before the end of 1993

²²⁹ Commonwealth of Australia, *Native Title: Legislation with Commentary by the Australian Government Solicitor* (2nd ed, 1998), 18.

²³⁰ Native Title Act 1993(Cth), Part 2, Division 2.

²³¹ Native Title (New South Wales) Act 1994, ss 8, 13.

²³² For example, the Water Act 1989 (Vic) or the Water Act (NT), enacted in 1992.

where they operated in a discriminatory manner. Out of abundant caution, the Commonwealth legislation also allowed the States to enact legislation confirming any existing right of the Crown “to use, control and regulate the flow of water”.²³³

Insofar as they need to be validated, water legislation and water licences are categorised as category D past acts.²³⁴ The result is that native title is not extinguished. Under the so-called “non-extinguishment principle”, it continues to exist, but to the extent of any inconsistency or partial inconsistency between native title rights and the act, the native title rights are suspended (for example, until a water licence terminates).²³⁵ Compensation is payable in certain circumstances, but it is unclear how this applies in a water context.²³⁶

Where water licences issued before the end of 1993 are renewed, the renewals will be treated as valid past acts, provided that they only “permit activities of a similar kind to those permitted by the earlier act”.²³⁷ However, if the licence is expanded into a “proprietary interest”, this validating provision does not operate.²³⁸ This is likely to pose a significant problem in the context of current initiatives by the States, at the instigation of the Commonwealth, to convert what have historically been water licences into some sort of “property” interest.²³⁹

Recent Initiatives in State Water Management Legislation

New South Wales, Queensland and South Australia have all enacted water management legislation in the last five years. There is nothing in the Water Resources Act 1997 (SA) which specifically adverts to indigenous interests, although there is a general reference in the objects of the Act to resource management which sustains the physical, economic and social well being of the people of the State, and the need to encourage community participation in water resource management. There is no guarantee of Aboriginal representation on the Water Resources Council, responsible for keeping the State Water Plan under review,²⁴⁰ or catchment water management boards,²⁴¹ or water resources planning committees.²⁴² The 2000 version of the State Water Plan²⁴³

²³³ Native Title Act 1993 (Cth), s 212(1). See, for example, Native Title (New South Wales) Act 1994, s 17(2). The mere act of confirming these rights did not extinguish native title: NTA s 212(3).

²³⁴ Ibid, s 232. See R H Bartlett, *Native Title in Australia* (2000), at paras 23.7-23.8.

²³⁵ Ibid, s 238.

²³⁶ Ibid, s 17(2)(c), referring to the “similar compensable interest” test. In essence, this asks whether compensation would be payable to someone with an “ordinary interest” (NTA s 240), for example, a fee simple in relation to land (NTA s 253). But the concept of “ordinary title” in relation to water is undefined.

²³⁷ Ibid, s 228(4).

²³⁸ Ibid, s 228(6), (7).

²³⁹ See, for example the Water Management Act 2000 (NSW), discussed below.

²⁴⁰ Water Resources Act 1997, ss 50-51.

²⁴¹ Ibid, ss 58-59.

²⁴² Ibid, s 83.

makes no reference to indigenous interests in water, and no special arrangements were made for consulting with Aboriginal people in the development of the Plan.²⁴⁴

In contrast to this position in South Australia,²⁴⁵ the legislation in Queensland, and particularly in NSW, contains specific references to indigenous interests in water. So far as its impact on native title is concerned, the timing of this legislation places it in the category of “future acts”, with the consequence that any failure to comply with the provisions of the Racial Discrimination Act will only be validated in accordance with the future act provisions of the Native Title Act 1993. The particular implications of this will be considered after the relevant provisions of the legislation have been analysed.

Water Management Act 2000 (NSW)

One of the fundamental changes in perspective confirmed by the Water Management Act is the separation of the historical connection between occupancy of land and access to water. This significantly disadvantaged indigenous communities when it came to gaining access to significant quantities of water under licence, insofar as they did not have rights to occupy land. This connection between occupation of land and access to water is broken by the new legislation. In theory, anybody can apply for an access licence,²⁴⁶ entitling them to a share of the available water in a water management area (“share component”), and a right to take water at specified times/rates/circumstances from specified locations (“extraction component”).²⁴⁷ But licences can only be granted where this is permitted under the applicable water management plan,²⁴⁸ and these plans will confirm existing, or impose fresh, licence embargoes on waterbodies in most areas of the State.²⁴⁹ The result is that new licences to extract water in these areas cannot be granted but will have to be purchased in the market place.²⁵⁰ Existing rights to access water will be “grandfathered”, and indigenous disadvantage perpetuated, subject to token

²⁴³ Available at www.dwr.sa.gov.au/publications/waterplan.html

²⁴⁴ Personal correspondence with Ania Karzek, Policy Officer, State Policy Branch, Department of Water Resources (SA), 14 December 2001.

²⁴⁵ Similarly, there is nothing in the much older Water Act 1989 (Vic) which specifically adverts to indigenous interests, although the purposes of the legislation include promoting “the orderly, equitable and efficient use of water resources”, and making sure that “water resources are conserved and properly managed for sustainable use for the benefit of present and future Victorians”: s1(c),(d). An *Indigenous Partnership Strategy* has been developed, but makes no commitment in relation to indigenous interests in water. The only commitment is to develop an Aboriginal Participation in Land and Resource Management (APLRM) strategy that “integrates the involvement of Indigenous communities in land, resource and cultural heritage management” (Department of Natural Resources and Environment (2001), p 14). Indigenous interests are to be reflected in indigenous contributions to management by the State rather than through rights of access to water.

²⁴⁶ Water Management Act 2000 (NSW), s 61(1).

²⁴⁷ *Ibid*, s 56(1).

²⁴⁸ *Ibid*, s 63(2)(b).

²⁴⁹ *Ibid*, ss 80-82.

²⁵⁰ *Ibid*, Chapter 3, Part 2, Division 4.

exceptions. For example, the draft Kangaroo River water management plan exempts “Aboriginal cultural licences”, subject to a volume limit of 12 megalitres in total.²⁵¹

Yet one of the proclaimed objects of the Act is to recognise and foster “benefits to the Aboriginal people in relation to their spiritual, social, customary and *economic use of land and water*” resulting from the sustainable and efficient use of water.²⁵² The significant point here is the recognition of an Aboriginal commercial interest in water. But there is nothing in the Act that requires water to be set aside to provide for this. The reference to indigenous interests in the water management principles instituted by the Act is restricted to a commitment to protect “geographical and other features of indigenous significance”.²⁵³ There is no reference here to Aboriginal commercial interests in water. This is significant. For while a general duty is placed on all those exercising functions under the Act to take all reasonable steps to do so in accordance with the *water management principles*, and to promote them,²⁵⁴ the *objects of the Act* can only be made operational through provisions in water management plans,²⁵⁵ and these are not mandatory.

In practice the issue of Aboriginal commercial interests in water has not been addressed in draft water sharing plans so far completed. While water management committees must include at least two Aboriginal representatives,²⁵⁶ there have been significant barriers to effective indigenous participation in committees stemming from fundamental cultural constraints. There is nothing else in the legislation itself that indicates how the Act’s object of fostering Aboriginal economic benefits from water use will be achieved. The rhetoric may be strong, but the legislation is weak when it comes to delivering concrete benefits.

The legislation does, however, recognise non-commercial indigenous interests in water. Water sharing plans are required to identify water requirements to satisfy “basic landholder rights”,²⁵⁷ and these include “native title rights”. Basic landholder rights are rights to take water without a licence for limited purposes.²⁵⁸ Native title rights are defined²⁵⁹ as:

non-exclusive rights to take and use water for personal, domestic, and non-commercial communal purposes (including the purposes of drinking, food preparation, washing, manufacturing traditional artefacts, watering

²⁵¹ *Draft Water Sharing Plan for the Kangaroo River Water Source* (2002), cll 37-39.

²⁵² Water Management Act 2000 (NSW), s 3(c)(iv): emphasis supplied.

²⁵³ *Ibid*, s 5(2)(e).

²⁵⁴ *Ibid*, s 9(1)(a).

²⁵⁵ *Ibid*, s 21(e).

²⁵⁶ *Ibid*, s 13(1)(e). At least two members of the Water Advisory Council, which advises the Minister, must also be Aboriginal representatives (s 369(2)(g)).

²⁵⁷ *Ibid*, s 20(1)(b).

²⁵⁸ *Ibid*, s 55. They also include riparian rights to take water for stock and domestic purposes.

²⁵⁹ *Ibid*, Dictionary.

domestic gardens, hunting, fishing and gathering and recreation, cultural and ceremonial purposes).

Apart from the fact that commercial use, such as fish farming, is excluded, there are a number of restrictions placed on native title rights. In the first place, they only allow holders to “take and use” water, which implies that they can only extract it, and not insist that it be left within the stream to facilitate instream uses such as ecosystem protection for fishing or cultural purposes. Secondly, while the provisions authorise a pump, they do not authorise the construction of a dam or water bore unless a separate approval is secured.²⁶⁰ Finally, they are only exercisable by those who have actually been granted native title rights in relation to the waters in question under the Native Title Act 1993. This undermines the provision in the legislation that requires water sharing plans to give priority to the provision of water for basic landholder rights before allocating it to other consumptive purposes.²⁶¹

In practice, draft water sharing plans currently on exhibition do contain an estimate of water required for basic landholder rights, while recognising that these rights may increase during the life of the plan. This would appear to mean that plans would have to be amended to provide for any increase, given the priority that the legislation gives to basic landholder rights. The general position is that compensation will have to be paid to those whose water allocations are reduced within the ten-year life of the plan, unless the plan itself provides for amendment in specified circumstances.²⁶²

Water Act 2000 (Queensland)

Chapter 2 of the Queensland legislation sets up systems for licensing the allocation of water and provides for the development of water resource plans. Its purpose is to “advance the sustainable management and efficient use of water and other resources by establishing a system for the planning, allocation and use of water”.²⁶³

The primary feature of sustainable management is that it is management which:

- (a) allows for the allocation and use of water for the physical, economic and social well being of the people of Queensland and Australia within limits that can be sustained indefinitely; and
- (b) protects the biological diversity and health of natural ecosystems.

²⁶⁰ Ibid, s 55(2)(a).

²⁶¹ Ibid, ss 5(3)(b), 9(1)(b).

²⁶² Ibid, ss 87, 42(2).

²⁶³ Water Act 2000 (Q), s 10(1).

A range of other factors is identified as matters to which such management “contributes”. This includes “recognising the interests of Aboriginal people and Torres Strait Islanders and their connection with the landscape in water planning”.²⁶⁴

Planning and licensing functions must be carried out in a way that advances the chapter’s purpose.²⁶⁵ It is unclear *how much of a contribution* water managers must make to recognising indigenous interests, but it is at least clear that their decisions must lead to some contribution if they are to comply with this duty. The reference is broad enough to include indigenous economic interests. This is supported by more general references. For example, other matters to which sustainable management is identified as contributing include “providing for the *fair*, orderly and efficient allocation of water to meet community needs”,²⁶⁶ and “the economic development of Queensland in accordance with the principles of ecologically sustainable development”.²⁶⁷ One of the principles of ecologically sustainable development is that “decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and *equitable* considerations”.²⁶⁸

Unlike NSW, where some attempt has been made to provide for the likely existence of native title rights in the legislation itself, in Queensland indigenous issues are addressed in water resource plans. There is no overarching policy position beyond the broad provisions of the legislation and a commitment to consultation with indigenous stakeholders.²⁶⁹

Water resource plans are prepared by the responsible government agency on behalf of the Minister.²⁷⁰ In preparing a draft, the Minister is required to consider “cultural, economic and social values”, and “the State’s future water requirements, including cultural, economic, environmental and social requirements”.²⁷¹ Community input is through a community reference panel and public exhibition of the draft plan.²⁷² There is a general provision that panels must include representatives of cultural, economic and environmental interests in the relevant area,²⁷³ but no specific reference to indigenous interests.

In practice, an Indigenous Working Group is created in consultation with the Land Council in each planning area, to facilitate consultation with indigenous

²⁶⁴ Ibid, s 10(2)(c)(v).

²⁶⁵ Ibid, s 12.

²⁶⁶ Ibid, s 10(2)(vi), emphasis supplied.

²⁶⁷ Ibid, s 10(2)(ii).

²⁶⁸ Ibid, s 11(a), emphasis supplied.

²⁶⁹ Personal correspondence, Robert Speed, Queensland Department of Natural Resources and Mines, 12 December 2001.

²⁷⁰ Water Act 2000 (Q), s 38(1).

²⁷¹ Ibid, s 47(h), (g).

²⁷² Ibid, ss 40, 41, 47, 49.

²⁷³ Ibid, s 41(2).

communities. The Department in consultation with this group produces a technical report. Two members of the group are then “usually” chosen as members of the statutory community reference panel.²⁷⁴

In water resource plans made so far, the general approach has been to see indigenous interests in cultural rather than economic terms, as managers of instream values, closely aligned with environmental interests, rather than water extractors. Indigenous interests are conceptualised as a *constraint on allocation decisions*. The Fitzroy Basin Plan has as one of its principles that “[d]ecisions shall be made with full recognition of cultural and indigenous issues”.²⁷⁵ Other assessment criteria in the plan include minimising “impacts on local indigenous cultural values associated with streamflows”.²⁷⁶ In preparing a resource operations plan or making decisions on water allocations, one of the factors to be considered is “the impacts on local indigenous cultural values associated with streamflows”.²⁷⁷

One of the significant features of the Burnett Basin WAMP Indigenous Cultural Report is that river flows are only one of a wide range of issues about which indigenous communities are concerned. Others include riparian zone protection and water pollution. Indigenous communities do not divide the environment up into segments as resource management agencies continue to strive to do.²⁷⁸

Native Title and Water Management Legislation

The Native Title Act 1993 (Cth) provides machinery to allow acts impacting on native title to be done after the decision in *Mabo*. If a future act does not fall within a category that is allowed under the future act regime, it is automatically invalid to the extent that it affects native title, regardless of whether it offends against the Racial Discrimination Act.²⁷⁹

²⁷⁴ Personal correspondence, Robert Speed, Queensland Department of Natural Resources and Mines, 12 December 2001. But the Queensland Department of Natural Resources, Burnett Basin WAMP Indigenous Cultural Report (May 2000), p 4, available at www.nrm.qld.gov.au/resourcenet/water/wrp/html/burnett.html suggests that Aboriginal representatives may have simply sat at the table of the Community Reference Panel, acting as a liaison rather than as members.

²⁷⁵ Plan Overview, Water Allocation and Management Plan (Fitzroy Basin) 1999, p 11, available at www.nrm.qld.gov.au/resourcenet/water/wrp/html/fitzroy.html

²⁷⁶ Ibid, p 15. See also Draft Water Allocation and Management (Condamine-Balonne Basin) Plan 2000, p 27, available at www.nrm.qld.gov.au/resourcenet/water/wrp/html/condamine.html

²⁷⁷ Water Allocation and Management Plan (Fitzroy Basin) 1999, cl 13, available at www.nrm.qld.gov.au/resourcenet/water/wrp/html/fitzroy.html. See also Water Resource (Burnett Basin) Plan, Queensland Subordinate Legislation 2000, No 359, cl 26(1)(e)(vii), available at www.nrm.qld.gov.au/resourcenet/water/wrp/html/burnett.html

²⁷⁸ Queensland Department of Natural Resources, Burnett Basin WAMP Indigenous Cultural Report (May 2000), pp 4-5, available at www.nrm.qld.gov.au/resourcenet/water/wrp/html/burnett.html

²⁷⁹ Native Title Act 1993 (Cth), s 24OA.

Section 24 HA of the Native Title Act deals with the situation where there is a conflict between water management legislation which is a “future act”, and native title. Both the Water Management Act 2000 (NSW), and the Water Act 2000 (Q), are categorised as “future acts” because they were enacted after 1 July 1993.

Suppose, for example, that the provision for native title basic landholder rights in the NSW legislation is eventually found not to go far enough because it fails to recognise native title rights to have water left in the stream, or, less likely, because it fails to provide for native title rights to use water commercially. The Native Title Act provides that in specified circumstances water management legislation will nevertheless be valid. Even where the legislation is valid, however, native title will not be extinguished, but suspended to the extent of the inconsistency or partial inconsistency.²⁸⁰ Compensation is payable.²⁸¹ Similarly, licences issued after 1 January 1994 under water management legislation will also be valid, with the same consequences.²⁸² Indigenous interests must first be given a chance to comment on proposed licences.²⁸³

These validating provisions, however, only cover legislation relating to the “management or regulation” of water and living aquatic resources. This includes “granting access to water, or taking water”. There is an argument that the NSW legislation goes further than this in that it significantly enhances the security of licence holders in response to their demands for “property rights”. The general position is that, during the ten-year life of a water management plan, licence holders can claim compensation for any reduction in their water allocations resulting from an adjustment in the amount of water available for extraction.²⁸⁴ The legislation also allows licences to be transferred.²⁸⁵ In these circumstances, the argument would be that the legislation goes beyond water management and regulation, by securing in the hands of historically privileged licence holders commercially exploitable rights. This would mean that the legislation would be invalid to the extent of the inconsistency with native title rights, and the latter would prevail. Similarly, the argument would be that renewals of water licences under the Water Management Act²⁸⁶ could not be treated as validated extensions

²⁸⁰ Ibid, ss 24HA(1),(3),(4), 238.

²⁸¹ Ibid, s 24HA(5).

²⁸² Ibid, s 24HA(2).

²⁸³ Ibid, s 24HA(7). See *Harris v Great Barrier Reef Marine Park Authority* (2000) 173 ALR 159 on what is envisaged by this right to comment. The licensing provisions in the NSW legislation fall short of the section 24HA requirements because they do not allow for comment on individual applications in situations where a water management plan is in place: Water Management Act (NSW) 2000, s 62(1)

²⁸⁴ Water Management Act 2000 (NSW), s 87(1).

²⁸⁵ Ibid, Chapter 3, Part 2, Division 4.

²⁸⁶ Ibid, ss 69, 403 and Schedule 9, cl 9(1),(6).

of “past acts”²⁸⁷ or renewals of future acts²⁸⁸ because they create a “proprietary interest” in relation to waters.²⁸⁹

The situation is complicated, however, by the fact that any conflicting native title rights declared by the courts could, presumably, be satisfied by clawing back water from licence holders through amendments to water management plans, and paying licence holders compensation. This would remove the inconsistency. In the end, the issue appears to be very much about whom the State government decides to compensate: native titleholders or water licensees. Given that compensation will allow either indigenous interests or water licence holders to enter the transfer market to purchase water licences, and that water available under these licences can be either extracted for commercial or cultural purposes or committed to instream environmental purposes,²⁹⁰ the issue may be largely academic. But this will not be the case where transfer rules prevent the transfer of licences into a particular water source (for example, because it is environmentally stressed) from which a particular Aboriginal group wishes to *extract* water.

Conclusion

Australian experience in dealing with the issue of indigenous interests in water would, at present, appear to offer few, if any, positive lessons to other jurisdictions. Although the issue has only come to a head very recently, with the recognition of the existence of common law native title rights in the early 1990’s, the signs are not promising when it comes to recognition of indigenous interests.

Aboriginal communities, particularly those in less remote areas, face massive difficulties in proving that they have maintained their connections with land by continuing to acknowledge their traditional laws and observe their traditional customs. Native title may simply have expired.²⁹¹ Alternatively, it may have been extinguished by legislation, or more likely, executive grant. If this occurred before 1975, as much of it certainly did, it does not attract the payment of compensation regardless of whether the legislation or acts involved discriminated against indigenous communities. Even after 1975, discriminatory acts impacting on native title have been legitimated through the legislative process, albeit they now attract compensation. Even future acts can, in certain circumstances, override native title rights.

In those circumstances where native title nevertheless continues to survive, the general approach of the courts has been to provide that rights granted to the colonising community under legislation prevail over it if there is any inconsistency. Whether we

²⁸⁷ Native Title Act 1993 (Cth), s 228.

²⁸⁸ Ibid, ss 24IC, 24ID.

²⁸⁹ Ibid, ss 228(6)(a), 24IC(1)(c)(iii). “Proprietary interest” is not defined.

²⁹⁰ This is referred to as “adaptive environmental water”: Ibid, s 8(1)(c).

²⁹¹ See, for example, *Members of the Yorta Yorta Aboriginal Community v State of Victoria* [2001] FCA 45.

refer to this as “partial extinguishment” or maintain what, in the water context, would seem to be largely a fiction that native title survives but has in part been suspended or must give way, seems to be essentially about symbolism.

Whatever the discourse, giving priority to rights granted under legislation has very significant implications for indigenous interests when it comes to the extraction of water from watercourses. It means that, in times of water shortage, licensed irrigators will even take precedence over native title rights to extract water for limited subsistence purposes, except in those States, such as South Australia, which do not limit unlicensed access to riparian occupiers, but allow anybody who has “lawful access to a watercourse” to extract water.²⁹²

In New South Wales, the Murray-Darling Basin State which, on the face of the legislation, has gone furthest in terms of recognition of indigenous interests in water, the harsh reality is very different when it comes to offering any guarantees. Opportunities for indigenous communities to apply for licences to take water have been foreclosed by the emplacement of embargoes, albeit for the very good reason that most watercourses are either fully committed or overcommitted. At the same time, while indigenous demands for “property rights” have been denied through the discourse of non-exclusive native title, the equivalent demands of irrigators have been largely met. Those who hold licences have now had their rights under these “grandfathered” and significantly expanded. They have been given greater security that the amounts of water they can access will not be diminished without compensation, and they can sell their rights in the market place. These changes have emerged from the process of water reform generated by the 1994 Council of Australian Government’s strategic framework for an “efficient and sustainable water industry”, with its commitments to clear specification of transferable property rights and provision of water for the environment.²⁹³ There was no acknowledgment of indigenous interests in water. In these circumstances, the only hope of indigenous communities is that the legislation may be declared invalid, as going beyond the limits of permissible future acts.

It is scarcely surprising that, in this climate, indigenous people, in their quest to gain access to water, are looking beyond common law rights, and the meagre offerings in legislation. Their arguments rest not on their rights under domestic law, but on broader claims related to human rights, social justice and the need for economic development, based in part on Australia’s obligations under international conventions, such as the International Covenant on Economic, Social and Cultural Rights, the International Convention on the Elimination of All Forms of Racial Discrimination , the International

²⁹² Water Resources Act 1997 (SA), s 7(1). Moreover, the water can be taken for any purpose whereas riparian rights, in New South Wales for example, are restricted to water for stock and domestic purposes: Water Management Act 2000 (NSW), s 52.

²⁹³ CoAG, Communique, Hobart, 25 February 1994, Attachment A. See the discussion by D Farrier, “Protecting Environmental Values in Water Resources in Australia,” paper delivered to this Conference.

Covenant on Civil and Political Rights and the United Nations Convention on Biological Diversity.

In New South Wales, they are on the verge of achieving a small but significant victory. The State Water Management Outcomes Plan, made under the Water Management Act 2000 is designed to “set the over-arching policy context, targets and strategic outcomes for the management of the State’s water sources”.²⁹⁴ The current draft of the Plan recognises that the significance of water to indigenous communities is not confined to cultural practices and subsistence but includes economic development. It contains a commitment, as a “long-term outcome”, that “Aboriginal traditional and contemporary dependencies on, and cultural association with water” is to be “protected and improved”. As part of this, *economic* access to water is to be *increased*. This stems from an acknowledgment that traditional forms of access to water are no longer available to communities and must be replaced with forms “appropriate to contemporary Aboriginal life”.²⁹⁵ A five year target is to put mechanisms in place to enable Aboriginal communities to gain “an increased share of the benefits of the water economy”, including developing contemporary industries.²⁹⁶ At present, details of how this is to be achieved are few. There is a reference to providing access to unallocated water but this is acknowledged to be available only in very limited areas. More significantly, however, access to the water market is also mentioned. This would, presumably, involve government in providing funds to purchase water. In this context, Aboriginal interests are currently arguing for the establishment of an Aboriginal Trust which would hold Aboriginal rights in water sources.

²⁹⁴ Water Management Act 2000 (NSW), s 6.

²⁹⁵ Draft revised State Water Management Outcomes Plan, Outcome 2.2.

²⁹⁶ *Ibid*, Target 7.