



Water Law in the Australian Federation – The Move Towards Centralism

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Abstract: The history of Australian water management has five distinct phases over the period from 1788 to 2008. The first phase was characterised by colonial power over water with development as a focus and limited community demand for sustainability in water use decisions. The second phase commenced with federation in 1901, but did little to alter the colonies' (now the States) power over water. However, the interpretation of the *Constitution* by the courts and conditional federal grants to the States by the Commonwealth (the Federal Government) pursuant to section 96 of the *Constitution* did give the Commonwealth some influence over State water policy during this period. Since the 1970s there has been community demand for sustainability in water and land use decisions. The third phase, which commenced in the early 1980s, was chiefly characterised by an extended interpretation of Commonwealth legislative power by the courts, allowing the Commonwealth to legislate in some areas of water management, and increased community activism. The fourth phase commenced with two waves of federal reforms in 1994 and 2004. The earliest reforms introduced requirements of “Ecologically Sustainable Development” (ESD). They also introduced competition into water supplies and separated land from water to create water markets. The later wave was influenced by regional delivery models and the Commonwealth provided stricter guidelines to the States reinforcing the first reforms. There have been several State level court decisions enforcing water plans and reducing water allocations to farmers in favour of the environment. The final phase, commencing in 2007, reflects a different balance. The use of political deal making (where States are required to refer power over water to the Commonwealth) and the expansion of federal constitutional powers through generous judicial interpretation have allowed the Federal Government to create the agenda over water in the States in the Murray Darling Basin. The legal architecture of the final stage is the *Water Act 2007*. This Act requires the accreditation or adoption of State “Water Plans”. Further, the 56 regional bodies in all States have been given

Commonwealth money directly and agreed to regional delivery of federal initiatives. These recent reforms appear to affirm the general drift towards centralism in water regulation in Australia. As yet the legislation is untested, but the next few years will confirm whether it has successfully created a new federal legal architecture which will amend the entire notion of Australian federalism.

Keywords: Australia, water management, allocation of power, legislative power, executive power, intergovernmental agreements, federal financial relations, constitutional conventions, section 96

I. Introduction

1. National Transversal Report on Hydrologic Data for Australia

Australia is a huge island continent of 7.79 million km² with only 23 million people concentrated in the South Eastern coastal fringes in large urban areas. The city dwellers in the large cities of Sydney, Melbourne, Brisbane, Perth and Adelaide currently use about 12% of all water. Industry uses about the same and the rest is used in agriculture and also in maintaining ecosystems in rivers and aquifers. Surface water provides most water used, groundwater providing only 14% (and this clustered mainly in Perth). Many smaller rural communities rely on groundwater for domestic supplies, with an estimated 600 communities using groundwater as their principal drinking water source (ARMCANZ/ANZECC 1995). The Darling (2740 km), Murray (2530 km) and Murrumbidgee (1690 km) Rivers are Australia's three longest rivers. The Murray Darling Basin region (Figure 1) covers more than 1,000,000 km² (14%) of Australia, unevenly spread over the five jurisdictions of Queensland (Qld), New South Wales (NSW), the Australian Capital Territory (ACT), Victoria (Vic) and South Australia (SA). The estimated number of people living in the Basin was 1,956,765 in the last census, which corresponds to around 10% of the total Australian population.

Australia has huge variability in rainfall and runoff (MCMAHON et al, 1992) with drought and flood cycles influenced by upper air events known as El Niño and La Niña. The potential evaporation exceeds the rainfall over most of the country annually. The Northern part of the country (North of the Tropic of Capricorn) has wet

summers and dry winters, with South of this line (WA, SA, Vic and Tasmania) having rainfalls concentrated in two months in winter or more even rainfall (NSW) (LETCHER and POWELL, 2008). The centre of Australia is arid with little rain; it receives 200mm per annum on average. The coastal fringes on the East coast can receive 2,400mm per annum. The runoff rate varies across the nation and is relatively low in the Murray Darling Basin but extremely high in the Northern tropics, Tasmania and the Eastern seaboard.

Using an index method to assess rainfall variability, the figure for Australia is 17%; the comparable figure for South Africa, Germany and France was 10% (LETCHER and POWELL, 2008).

These rainfall and high evaporation figures mean that surface water evaporates very quickly (from dams etc) where the runoff rate is low. This means that a larger volume of water is needed to be stored to provide water security for cities and irrigated agriculture.

Table 1: Water resources and consumption by jurisdiction in Australia for 2000–01 and 2004–05

	Australia		2004–05							
	2000–01	2004–05	ACT	NSW	NT	Qld	SA	Tas	Vic	WA
Rainfall (GL)	4,747,475	2,789,424	1,767	406,562	505,623	865,973	147,773	75,189	146,928	639,609
Total water resource (GL) *	415,096	336,117	256	45,369	55,784	112,905	4,321	47,056	21,332	49,094
Capacity of large dams (GL)	83,312	83,853	120	24,629	280	10,657	258	23,652	12,109	12,148
Volume in large dams at June 30, 2005 (GL)	n/a	39,959	82	8,200	196	5,309	116	11,191	4,729	10,135
Water extracted from environment (GL)	76,668	79,784	84	16,528	145	7,964	1,352	39,081	11,213	3,417
Water consumption (GL)	21,703	18,767	56	5,922	141	4,361	1,365	434	4,993	1,495
Water consumed as a % of water extracted	28%	24%	67%	36%	97%	55%	101%	1%	45%	44%

Source: TREWIN, Dennis (2006) “Water Account, Australia 2004-05”; “Water Account, Australia 2000-01”
 Australian Bureau of Statistics

* Total water resource for 2000-01 = mean annual run-off + sustainable groundwater yield (< 1500 mg/L TDS) as published in Water Account, Australia, 2000-01.

Comparing water use to the amount of water supplied can also provide an insight into the way that water suppliers harvest, use and return water to the environment. Table 1 shows that, in 2004-05, 76% of the water supplied for economic use is actually returned to the environment in some form. How the supplied water is used nationally is shown in Figure 2.

Total water consumption in Australia in 2004–05 was 18,767 GL, which represents 24% of the water resource actually supplied to users. Twenty eight per cent of the water resource, 21,703 GL, was consumed by users in 2000-01. While there was a 4% increase in the water supplied to users between 2000-01 and 2004-05, consumptive use decreased 14% over the same period.

For Australia, the total amount of water extracted from the environment was 79,784 GL, of which 62,455 GL was returned to the environment as regulated discharge (return flows). Most of the regulated discharge back to the environment comprised in-stream water use (60,436 GL), which was almost entirely accounted for by the use of water for electricity and gas supply.

In 1998, the total irrigated area of Australia was about 2.4 million hectares, of which about 80% lies in the Murray Darling Basin. Approximately 70% of all water abstracted in Australia is used for irrigation in the Murray Darling Basin, predominantly from surface sources (Figure 2).

Table 2: Interstate water shares of Murray and Darling Rivers

Flows and shares	
Mean annual flow	13.2 Bm ³
Mean annual diversion	10.8 Bm ³
Minimum flow to SA	1.8 Bm ³
Share to NSW	57.4%
Share to Vic	34.3%
Share to SA	5.4%
Share to Qld	2.3%

Share to ACT	0.6%
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The shares are based on flow analysis undertaken for the Murray and Darling Rivers at the beginning of the century, whereas the abstractions shown in Table 1 account for flows that are sourced from all rivers and groundwater lying in the Murray Darling Basin.

2. The Constitutional Structure of Australia in Relation to Water

The Australian federal structure arose in 1901 after 120 years of colonial government. The federal division of powers in the Constitution is effected by sections 51 and 52. Section 51 enumerates 39 powers (later amended to 40) granted to the Commonwealth Parliament (which are generally concurrent with State legislative power). Exclusive legislative powers are given in section 52 (in combination with other sections). The Constitution was an enactment of the British Parliament for the colonies of Australia (which subsequently became the States). The federal question has always been, How to relate these concurrent powers to the pre-existing powers of the colonial governments? The colonial governments had a plenary grant of power for the *peace, order and good government* of the colony. When the colonies became States they retained this plenary power, subject to the Constitution. Section 109 provided that where a law of the State is inconsistent with a federal law, the federal law prevails to the extent of the inconsistency.

None of the federal powers in sections 51 or 52 are specifically over water. The inter-State trade and commerce power (section 51(i)) is specifically extended to navigation and shipping (section 98). However, the general position is that the States have plenary legislative power over management of water resources, subject to any restrictions in the Constitution, including any inconsistent federal legislation on the matter.

Over the last 107 years, the High Court has played a major role in legitimating the enhanced powers of the Commonwealth (GALLIGAN and WRIGHT, 2002). The first case which commenced this movement was the *Engineers' Case* of 1920 (*Amalgamated Society of Engineers v Adelaide Steamship Co Ltd (Engineers' Case)* (1920) 28 CLR 129).

Engineers' threw out the old doctrine of implied mutual immunities of Commonwealth and State instrumentalities, along with the previous understanding of the “reserve powers” of the States. This debunked the doctrine that there were certain areas of legislative competence that were “reserved” to the States into which the Commonwealth was not able to intrude without specific constitutional mandate.

The next substantial development in the High Court’s interpretation of federal power (particularly in relation to regulation of water) was in 1983 in the form of the treaties implementation aspect of the external affairs power (section 51(xxix)). The Commonwealth used a combination of the inter-State trade and commerce power and external affairs power to prevent the Tasmanian Government from building a dam (*Commonwealth v Tasmania* (1983) 158 CLR 1 (“*Tasmanian Dam Case*”)).

Two more provisions of the Constitution have shaped federal water management in Australia. Section 96 of the Constitution provides that “the [federal] Parliament may grant financial assistance to any State on such terms and conditions as the Parliament thinks fit.” This provision has been interpreted widely to allow the grant of funds in areas beyond the Commonwealth legislative competence and not subject to certain constitutional restrictions, such as the prohibition on discrimination between States.

Section 100 of the Constitution is the only provision of the Constitution dealing specifically with water. It provides:

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

This provision is discussed in more depth below.

3. Judicial review of Commonwealth decisions

In Australia, federal merits review tribunals provide administrative review of primary decisions taken by an executive department or agency. Generally, review tribunals have all the powers and discretions of the original decision maker and may affirm the original decision, vary it, send it back to the original agency or substitute a new decision (AUSTRALIAN LAW REFORM COMMISSION, 1999). The Administrative Appeals Tribunal (AAT) is the Commonwealth’s generalist merits review tribunal. The AAT has statutory authority under about 303 separate enactments to review specific administrative

decisions. The AAT has been given power to judicially review decisions made under the new 2007 Commonwealth *Water Act*, discussed below.

III. Water management laws from 1788 to 2007

1. Five periods

There are five epochs of water regulation in Australia, described briefly in Table 3.

Table 3: Five Periods in Australian Water Law Regulation

Period	Brief Description
1788-1901 “Colonial Laws”	Prior to federation, “riparian rights” doctrine and colonial legislation governed water management. Colonial laws were highly introspective to the particular colony. Focus on development on water without care for sustainable management or environmental protection (MCKAY, 2002).
1901-1982 “Fiscal Federalism”	Post-federation, water management remained substantially within State legislative power. Commonwealth influence over State regulation through conditional federal grants under section 96 of the <i>Constitution</i> . The River Murray Waters Agreement (RMWA) was entered into which provided for water allocation and infrastructure construction.
1983-1993 “Treaties Power”	After the <i>Tasmanian Dam Case</i> in 1983, the Commonwealth was able to increase its intervention in water resources management through reliance on the external affairs power.
1994-2007 “CoAG”	CoAG secures federally driven water reforms through ESD principles, competition law reforms and the creation of water markets in each State. The Murray Darling Basin Agreement (1992) replaced the RMWA which created various institutions to manage the Basin. Litigation starts regarding State Water Plans. The introduction of State managed regional delivery of federal plans through NRM Regions.
2007- “Water Act”	Commonwealth (under multiple powers in section 51, including the referral of powers from the States) enacts the <i>Water Act</i> which requires Commonwealth accreditation of all State Water Plans which must aim to achieve ESD, gives a role to the Australian Competition and Consumer Commission to regulate process and enhances the Commonwealth’s power as an environmental water holder. Buy backs of land and water start.

2. Period One: Colonial Laws

A) Pre-colonisation

Prior to settlement in 1788, the indigenous inhabitants of Australia had a spiritual connection with and relied on freshwater systems for food and shelter materials. These connections are remnant in languages and water catchment boundaries reflected in tribal boundaries (although note the only evidence of this comes from Vic). On settlement, Australia was declared *terra nullius*, and indigenous rights to land or water were not recognised by the British common law system (which was directly incorporated into Australian law). Following colonisation there was an unregulated usurpation of resources from indigenous persons (LANGDON, 2002).

B) Common Law – Riparian Rights

As a product of the application of the common law as an incident of settlement, the common law riparian doctrine was applied in the Australian colonies (this was affirmed as late as 1962: *Gartner v Kidman* (1962) 108 CLR 12 at 21-23). This gave water rights to those who had surface water flowing through their land in a defined surface channel (CLARK and RENARD, 1970; ROCHFORD, 2004).

The riparian doctrine did not give ownership but a usufructory right; ownership vested in the Crown. The riparian doctrine created a right to use water and a duty to be a *reasonable user*. The obligation of *reasonable use* was framed in 1893 as “a right without sensible diminution or increase and without sensible alteration in the character or quality” (*Young v Bankier Distillery Co* [1893] AC 691).

The common law, however, treated surface water and groundwater differently. All groundwater (whether or not in defined channels) was not subject to the riparian doctrine. If the groundwater was connected to a surface water system channel then unlimited use was allowed. *Dickenson v Grand Junction Canal Company* (7 Exch 282) decided that if a person possessed a right to a stream *jure naturae* he or she has a right to its subterranean course. So, the test of validity of a party’s claim to use water in a subterranean channel was whether he or she had a legal right to use the watercourse at the surface which is fed by the underground channel (*Dunn v Collins* (1867) SALR 126 at 141, Wearing J). Moreover, if the underground water had been accessed by an artificial structure (e.g., a man-made well or bore) absolute rights vested in the proprietor who brought the water to the surface as the riparian doctrine only applied to naturally occurring water.

Hence for groundwater the common law did not impose any limits on use. The common law specifically recognised that although the overlying landholder was not the owner of the water, he or she had an unlimited right to appropriate groundwater (*Ballard v Tomlinson* [1885] LR 29 Ch D 115) and use it for whatever purposes he or she pleased, either on or off the overlying land (*Chasemore v Richards* (1859) 7 HLC 349).

C) Colonial Statutory Intervention

The colonial legislatures soon saw that riparianism was not suited to development of Australia as water needed to be spread further afield. Social and community focus was fairly uniform in promoting development through irrigation and rural enterprises funded by the taxpayer. Hence Vic, SA and NSW attempted to abolish riparian rights and created statutory water licenses which attached to land (some in large scale canal distribution systems). These were funded by the State government. This phase was characterised by extraordinary ignorance about Australian rainfall and runoff and was coupled with social pressures to develop the inland of Australia. The licenses generally allocated too much water and created unsustainable demand on surface water systems; groundwater was also often overexploited.

3. Period Two: Fiscal federalism

A) Regulation

This period was initially characterised by a perception that technological developments would solve any problems relating to water management and water management was mainly for technical experts. The environment was not an issue at this point in time. Continuing from the colonial era was the idea that water and land development was to be funded by the taxpayer. State laws vested bed and banks of watercourses and swamps in the Crown of the State to attempt to deny riparian rights. The substitution of various licensing systems and lack of groundwater regulation also continued (CLARK and MEYERS, 1969).

1915 heralded an historic agreement on the management of the Murray River. The RMWA, which established the River Murray Commission (RMC) was signed by the Commonwealth, NSW, Vic and SA in 1915. The RMC was established two years

later. The Agreement mainly managed the building of infrastructure (storage, weirs and locks) on the River.

Sandford Clark, an Australian water law expert, has argued that there is evidence that the RMWA and the RMC were originally intended to be part of a more comprehensive institutional structure than was ultimately the case. Clark argues that there is strong evidence that the RMWA and the RMC were designed to operate in combination with the “Interstate Commission”, a body intended by the designers of the Constitution to be a key part of a federal decision-making system (CLARK, 1983). The legislation establishing the Interstate Commission had broad ranging clauses describing the scope of its powers to deal with river issues. These plans were frustrated, however, by the 1915 decision in the *Wheat Case (New South Wales v Commonwealth)* (1915) 20 CLR 54) that effectively stripped the Interstate Commission of most of its powers.

B) Section 100

Over the period of the federation debates, the States (NSW, Vic and SA) were rivals over allocation of water from the Murray River. Access to the Murray has been described in a contemporary newspaper as the “most obstinate and prolonged debate in the [1898] Convention” (ANDERSON, 2003). No less than 57 speeches on the issue were presented by South Australian and Victorian delegates. The stream of oratory it was alleged, “exceeded in volume and cynics declare, in wateriness – the disputed streams of the rivers themselves!” SA was inevitably presented as a victim (as the downstream colony), at the mercy of larger and more ruthless colonies of Vic and NSW.

The parliamentary debates reveal that section 100 was inserted because NSW, Vic and SA feared that that Commonwealth laws enacted under section 51 might affect their common interest in the quantity of water for irrigation through the operation of the paramount navigation power (LANE, 1986). The contest was really between the Commonwealth power over water for navigation and the State desire to use the water for irrigation.

C) Section 96

Despite section 100, during this period, the Commonwealth did intervene in State water management through section 96 of the Constitution. The Federal Government was able to use section 96 and “fiscal federalism” to implement a number of federal reforms. The practice of the High Court has been to broadly interpret the power in section 96, allowing the Commonwealth to regulate activities within the States legislative competence are not justiciable (MCHUGH, 2007). The 1970s also saw a growing recognition of environmental water issues (SENATE OF AUSTRALIA, 1970).

4. Period Three: “Treaties Power”

A) Treaties Power

As discussed above, in the 1983 *Tasmanian Dam Case*, the High Court approved the use of the inter-State trade and commerce and external affairs powers by the Commonwealth to intervene in water and environmental regulation. More recently the external affairs power has been relied upon to pass the federal *Environmental Protection and Biodiversity Act 1999*. This Act implements the provisions of the *Ramsar Convention on Wetlands*. As in the *Tasmanian Dam Case*, this Act regulates State actions. In response to State anguish at the potential for increased invasion of their legislative jurisdiction, in June 1996, CoAG instituted a consultative process in relation to treaty adoption and implementation between the Commonwealth and States. Part of the process requires that treaties must be tabled in Parliament 15 days before being any binding action is taken (JOINT STANDING COMMITTEE ON TREATIES, 1996).

B) Native Title

There were also significant developments in the native title arena during this period. *Mabo v Qld (No 2)* (1992) 175 CLR 1 dispelled the notion that Australia was *terra nullius* on settlement, which opened the way for native title claims by Indigenous people. The Commonwealth subsequently enacted the *Native Title Act 1993* to regulate and manage these claims. The *Native Title Act* allowed freshwater claims by Indigenous people.

C) Great Artesian Basin

Slightly earlier in 1989, there was a further cooperative agreement between the States and the Commonwealth over the shared management of the Great Artesian Basin. The Great Artesian Basin is the largest artesian basin in the world and underlies about one fifth of arid and semi arid Australia. It covers an area of over 1.7 million km² and has a capacity of 8700 teralitres. The area was mined by more than 4000 flowing bores producing water for livestock. By 1990, 1000 of these had stopped flowing (STATE OF THE ENVIRONMENT ADVISORY COUNCIL, 1996). The Great Artesian Basin Rehabilitation Program started in 1989 and aims to encourage the capping of bores and piping of water. It is funded by the Commonwealth and States. The cost sharing scheme for bore capping and pipes work is funded 80% by State/Commonwealth and 20% by growers in NSW and Qld. The take up was slow (of the 1380 uncontrolled bores in 1989 only 250 were repaired in 1997) as to the landholder the cost of the works to save the water was too high.

4. Period Four: Council of Australian Governments(CoAG)

A) CoAG Reforms

a). CoAG 1 – Early Reforms

In 1994/5, CoAG, which relies heavily on section 96 as a mechanism, implemented a number of further reforms, including a “strategic framework for water reform” which included the incorporation of private sector providers into the water and other industries. For water it also included requirements to achieve ESD. Earlier in 1990, the Commonwealth had used a mechanism of nine working groups for specific industry sectors to create a set of ESD principles. Box 1 shows the national definition of ESD, which includes a definition of the “Precautionary Principle”, discussed later.

Box 1: Objectives and guiding principles of the Australian National Strategy for Ecologically Sustainable Development 1992

Core objectives:

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

The Guiding Principles:

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

This was not binding legally but persuasive and many States adopted objects clauses within their legislation that reflected most of these ideals. Sadly no State adopted them in these words so judicial decisions on these issues remain hard to reconcile. In 1992, these principles were endorsed by Commonwealth and State Governments (and also the Local Government Association) in the *Intergovernmental Agreement on the Environment*.

In 1994, CoAG implemented competition reforms in water allocation to improve efficiency. These reforms included:

- consumption based on two part tariffs, urban (1998) and rural (2001);
- full cost recovery for water supply;
- separate identification and funding of community service obligations;
- trading in rural water entitlements separating land from water;
- allocation of water for the environment;

- embracement of broader social values; and
- principle of subsidiarity i.e. management of resources at level closest to the users.

Each State passed legislation to achieve these aims, for example the 2004 NSW *Sydney Water Act* included the objective to “protect the environment”. The tenuous and vague objectives in the relevant legislation embodying the reforms made implementation difficult. In a study of the CEO’s of the largest water supply businesses, all knew of ESD but only one third felt they could achieve ESD and very few felt that they were in a mutually supportive arrangement with the State government or that they could understand ESD policy at State level (MCKAY, 2006).

The reforms required each State ensure that future water projects were based on ESD principles in conjunction with much more private sector and community involvement in water planning at a regional level. Each State had to have an independent regulator for the environment and had to create separate water markets. In relation to water trading the aim has been to promote inter-regional and inter-jurisdictional trading of water which was considered to “facilitate the efficient use of water, both through making the opportunity cost of using water transparent and providing an incentive for water to move from lower to higher value uses” (AUSTRALIAN COMPETITION AND CONSUMER COMMISSION, 2006). The right to have water delivered has been further unbundled from any water entitlement, and is recognised through a separate entitlement which specifies permissible extraction/supply rates, times, locations, circumstances and service levels. Delivery entitlements (and therefore any obligations associated with holding the delivery entitlement) are also tradable.

The reforms of 1994 have resulted in extensive changes and the restructuring of water management in each State. There are 333 water supply businesses in Australia with 14 different types of legal forms under several State Acts (MCKAY, 2006). Local governments are the dominant water provider in rural towns and big cities such as Brisbane. Some water supply business are allocated raw water from a State body and then manage this through a privately owned and maintained set of pipes and channels with sophisticated solar powered flume gates, such as in Coleambally in NSW, where the assets were transferred from Government. Others are Government owned enterprises where the assets are State owned but managed privately and are often used as cash cows by the relevant

State Government (HOWARD, 2007). Yet others work and report financial and service details in a myriad of ways.

b). Murray Darling Basin Agreement

In 1992, the Murray Darling Basin Agreement (MDBA) was signed by NSW, Vic and SA. The Agreement was based upon a power in the Constitution on inter-State agreements. This was an attempt to create an agreement to replace the old 1915 agreement (the RMWA) over the two dominant river systems in Australia. Qld and the ACT became signatories in 1996 and 1998, respectively. The Agreement covers all natural resources management and aims to reduce the salinity impacts of river water use for irrigation. The MDBA provides in clause 93 that the upstream States of NSW and Vic must provide, in equal proportions, SA's entitlement under clauses 86 or 88 from the water available to them under clauses 91 and 92. There are specific limitations on use of water in the upper Murray by NSW and Vic in clause 94.

However, this did not solve the problems of underlying State power to allocate water and, indeed, its over allocation in some places. In response to community concern about the long term impact on river health from water use, the MDBC commissioned an Audit in 1995. The Audit showed that if the increase in the volume of water diversions continued, there would be increased river health problems, reduction in security of supply, and reduced reliability during periods of long droughts. These water diversions were allowed under State law and all tended toward permissive allocations with little reference to the notion of sustainable use of the Basin (MURRAY DARLING BASIN COMMISSION, 1995).

In the light of the 1995 Audit Report, an interim Cap was imposed in June 1995 that limited the amount of water able to be diverted (by the States) for consumptive uses to that being diverted as at 30 June 1994. There was an independent review of equity issues and this Cap was made permanent for NSW, Vic and SA from 1 July 1997. The Cap has been described as "...the most monumental decision in resource management ever undertaken in Australia" (MURRAY DARLING BASIN COMMISSION, 2002). Yet environmental deterioration still continued to threaten the sustainability of the nation's most important water resource. As a result the Living Murray Plan was formed to return 500 GL of permanent "new water" to the River Murray as an environmental flow with an initial focus to improve the health of six icon sites (in all States) with important biodiversity outcomes. There was dissent in

scientific circles, many saying that this amount of water was not enough (VAN DIJK et al, 2006).

The Murray Darling Ministerial Council agreed to cap diversions to “baseline conditions” of water resources development as at 30 June 1994 at a meeting in 2000. The Cap aimed to restrain further increases in water diversions but it did not restrict new developments provided the water for them was obtained by using water more efficiently or by using water markets. The Cap was the first step toward striking the balance between irrigation and other consumptive uses and in-stream uses. Each State needed to develop a hydrological model and to ensure that diversions did not exceed that figure. States were required to monitor and report to the MDBC on diversions made, water entitlements announced, allocations, trading of water within, to, and from the State and compliance with the target. The MDBC appointed an Independent Audit Group (IAG) which annually audits and reports upon the performance of each State Government (MURRAY DARLING BASIN COMMISSION, 2004). There is also power to order special audits where diversion allocations have been exceeded.

In 1998, a final Murray Darling Cap on water diversions was imposed which limited them to 1993/94 diversion levels. This move engendered much community debate with some sectors saying this level still demanded too much of the River. Some commentators have reported anecdotally that the Cap is being exceeded in many places and that flood plan and groundwater harvesting has increased (INLAND RIVERS NETWORK, 2007).

c). National Action Plan on Salinity and Drainage

In 2000, the Federal Government also insisted on regional delivery of a National Action Plan on Salinity and Drainage (NAP) through conditional section 96 grants. The key features of the regional delivery model include:

- the development of a framework that sets out the respective Natural Resources Management (NRM) roles for Commonwealth, State/Territory and local governments and the community;
- a shift from funding of individual projects to funding outcomes determined through regional NRM strategic planning;

- devolution of decision-making to a regional level – that is, a dispersed rather than centralist approach that allows for flexible decision-making tailored to local conditions and needs;
- introduction of national standards and targets to guide and provide direction for investment in NRM;
- a comprehensive accreditation, monitoring and evaluation framework to achieve consistent and acceptable standards of program delivery; and
- encouragement of community capacity building through involvement in local NRM.

A total of 56 NRM regions have been established across Australia. The boundaries for each region were agreed to by Commonwealth, State, and Territory Governments. Within these however State laws apply and differences between them create problems. For example, in relation to water trading in the Southern Connected River Murray System (spanning Northern Vic, Southern NSW and part of SA) there was over 180 categories of irrigation water entitlements (SHI, 2005). These had and still have different levels of reliability, tenure periods, protection of the interest in the water license, and way the water entitlements are expressed as volumes of water or share of the consumptive pool.

The NAP ceased on 30 June 2008. It was replaced by “Caring for our Country”, a new Government initiative which commenced on 1 July 2008 and integrated the Commonwealth's previous natural resource management programs, the Natural Heritage Trust, the National Action Plan for Salinity and Water Quality, the National Landcare Program, the Environmental Stewardship Program and the Working on Country Indigenous land and environmental program. The Government has invested \$2.25 billion over five years in the new program (GARRETT and BURKE, 2008).

d). Implementation and Coordination of Policies within State Governments

The 1994 reforms were Commonwealth driven but the States were allowed to adopt them in their own ways. In relation to coordination between State government agencies concerned with ESD implementation, interviews were conducted in 2005 with 183 Chief Executive Officers (CEOs) of the largest water supply businesses. Most had put a huge effort into achieving the ESD principles as set out in Box 1 (above). The CEOs indicated

neutral responses to the question about the coordination in their State. They were not convinced that there were well established intergovernmental processes to ensure coordination of policies to achieve ESD. They also did not think that policy making was transparent. This reinforces the responses to the questions regarding ability to achieve ESD where only one third thought they could achieve ESD (MCKAY, 2006). Hence, on this evidence it would appear that the complex nature of federalism has created problems for those trying to adhere to ESD policies and laws.

The principal driver for the regional delivery model for NRM is to “harness the capacity of those closest to the problem on the ground”, building on local knowledge, experience and expertise and enabling flexible and responsive solutions to local NRM challenges (SENATE OF AUSTRALIA, 1970).

After 1994, the States passed laws to satisfy the 1994 CoAG competition requirements and set up regional management schemes. Some States had legislated on the latter issue much earlier.

The States developed their own legislative schemes. An examination of the legal arrangements of the groups (NRM bodies established to implement the legislation) has led the author to generate the following classification:

- **Confederation of Emergent Groups** (no skill base for board members) with no statutory duties;
- **Confederation of Emergent Groups** (no skill base for board members) with statutory duties;
- **Skill Based Board** with no statutory duties; and
- **Skill Based Board** with statutory duties.

Using this classification system, Table 4 analyses the Regional NRM bodies in each Australian State.

Table 4: Organisational structure of State created Regional NRM Bodies who draft water allocation, use and sharing plans and the number of water supply businesses (WSB) in each Australian State (as at May 2007)

STATE	TYPE OF REGIONAL NRM BODY	WSB TYPES
NSW	<i>Skill Based Board with statutory duties:</i> In 2003, 13 Catchment Management Authorities created to draft Water Plans. Locally driven with Board reporting to Minister and the primary means to deliver funding from the NSW and Federal Government and help land manager restore the environment of the State. Each Board has a chair and six members selected on a skill base with a small team of professional staff.	Nine types with 74 bodies
Vic	<i>Confederation of Emergent Groups (no skill base for board members) with statutory duties:</i> In 1994, 10 Victorian Catchment Management Councils were set up. The Victorian Civil and Administrative Tribunal (“VCAT”) is the peak advisory body and facilitates an integrated framework. It has its own Act and uses the <i>Water Act 1989</i> . VCAT prepares regional strategy guidelines for the Minister which are applied by the Catchment Management Boards (CMAs). The CMAs need to liaise with community, industry, environmental organisations state and federal agencies.	Two types with 23 bodies
Qld	<i>Confederation of Emergent Groups (no skill base for board members) with no statutory duties:</i> 15 Regional NRM Groups (RNRMG) not backed by legislation. These all differ vastly from each other in terms of corporate structure, stakeholder interests and their stage in planning and implementation of NRM activities. There is a collective of RNRMG consisting of the chairs and CEO of the 15 which coordinates a strategic approach to NRM issues across regional boundaries. The Collective sits outside Government and is funded by the regional bodies and some Commonwealth NHT/NHT funding.	Seven types with 115 bodies
SA	<i>Skill Based Board with statutory duties:</i> Eleven established in 2004 called Natural Resources Management Boards but existing from 1997 as Catchment Management Boards. These Boards have a power to collect an NRM levy which is struck on the value of the land in urban areas and the amount of water used for farmers. The Boards are skill based selections of all stakeholders in a region and need and there is the NRM Council that advises the Minister on the actions of the Boards.	One type with seven bodies
WA	<i>Skill Based Board with no statutory duties:</i> Six non-statutory Regional Catchment Councils established in 2001 and the NRM Council. The Council coordinates the delivery of NAP and NHT actions and fosters a consultative approach to ensure broad community involvement in NRM policy development. The local groups coordinate the efforts of smaller more localised community groups and so the membership rules vary but generally include community members, State agency officers and local government.	Five types with 22 bodies

Sources: McKay 2007 for columns 3. Columns 1 and 2 come from original interpretation of the legislation and policy documents for this paper. http://www.unisa.edu.au/waterpolicylaw/projects/corporate_governance.asp

The States, through the bodies above began to create Water Plans in catchments; the reductions to water allocations caused a substantial amount of litigation. The implementation of the water markets and the separation of the water use right from the land have also been implemented in different ways in each State but have not yet been subjected to legal challenge. However, the clear preference of water users has been to conduct temporary trades of water (TREWING, 2006) and anecdotal evidence from surveys suggests that many in the regional communities do not like the markets as water sold out of a district reduces that available to the community.

In SA, the State Government is unique and has actually implemented a levy on water users, both urban and rural, to fund ESD works. All sectors of the community have expressed annoyance with the manner that the levy is imposed which is based on the value of the property not the water use. A survey of urban respondents in the Adelaide Mount Lofty region (SA) revealed that over 57% would prefer it to be levied on the basis of water use (WU et al, 2008).

However, section 90 of the Constitution gives the exclusive power to impose excises to the Commonwealth. The States are unable to levy a broad based consumption of general sales tax because of the broad interpretation of this power by the High Court (GALLIGAN and WRIGHT, 2002).

e). CoAG 2 – The National Water Initiative 2004

The final outpouring of section 96 powers to persuade the States to implement federal policy was the National Water Initiative (NWI) in 2004. This is also the product of the CoAG reforms and aims to achieve national compatibility in the markets, regulatory and planning schemes to achieve sustainable management of surface and groundwater. The NWI Agreement was signed by all governments at the 29 June 2004 CoAG meeting (with the exception of Tasmania which signed the Agreement on 3 June 2005, and WA which signed in early 2006). The NWI is still encompassed in the most recent reforms (*Water Act 2007*).

The NWI Agreement specifies that consumptive use of water requires a water access entitlement to be described in legislation as a perpetual share of the consumptive pool of surface or groundwater water (paragraph 28). States have attempted to implement this.

The NWI Agreement is a comprehensive reform agreement containing objectives, outcomes and agreed actions to be undertaken by governments across eight inter-related elements of water management:

- (a) water access entitlements and planning;
- (b) water markets and trading;
- (c) best practice water pricing;
- (d) integrated management of water for environmental and other public benefit outcomes;

- (e) water resource accounting;
- (f) urban water reform;
- (g) knowledge and capacity building; and
- (h) community partnerships and adjustment.

This process will be driven by the new National Water Commission and \$2 billion over six years to be invested through the Australian Water Fund.

B) State Decisions on Reforms from 1994 to Present

There are a number of decisions of State courts during this period which influenced water management and key ones are presented here. Three factors are relevant to these decisions:

- (a) the construction of the ESD obligation in the relevant State Act;
- (b) the type of body drafting the plans also derived from the Act (see Table 4, above);
and
- (c) the type of review power in the relevant Act.

a). State Acts

Some relevant ESD provisions of the State Acts are set out in this part by way of introduction to the cases discussed below.

In Vic, the purposes of the Victorian *Water Act* are set out in section 1, which states the triple bottom line requirements but also has the object to: “maximise community involvement in the making and implementation of arrangements relating to the use, conservation or management of water resources”.

The Minister must make sure that, as far as possible, all relevant interests are fairly represented on the Committee drafting the Water Sharing Plan. At least half must be owners or occupiers in the area concerned appointed after consultation by the Minister with bodies representative of those persons, any public authority directly affected must be represented and if the planning involves a farming area, then at least half of the committee must be farmers appointed by the Victorian Farmers Federation.

The objects of the South Australian *Water Resources Act 1997* (since repealed by the *Natural Resources Management Act 2004*) are broad (section 6) and are to “ensure the physical, economic and social well being of the State and facilitate the economic development of the State while protecting the entitlements of future generations and the ecosystems dependent on those resources”. The Minister appoints Committees and approves plans created by Catchments Water Management Boards in prescribed areas only. The Catchments Water Plans give the power to impose levies. The Water Allocation Plans must be consistent with the overall State Water Plan and must provide for the allocation of water on an equitable basis and in a sustainable manner. These Plans bind the Minister. There has been some recent litigation in the Environment, Resources and Development Court (“ERD Court”), which suggests that the Minister does not have power to review or correct anomalies in the Plans.

The Qld Act gives the power to the Minister, who is advised by a Committee of locals and others in the preparation of Water Plans.

Community consultation in the evolution of Water Plans is required by the Acts in rural communities, and is an active example of participatory democracy. However, the Acts are themselves deficient in identifying appropriate mechanisms and institutional frameworks for putting these processes in place.

At present, Australia wide there are Water Plans in various stages of completion. One NRM region could have numerous plans. The water planning process was suspended in NSW as one consequence of the drought and in all places it would be fair to say that the plans have generated controversy and political pressure groups have formed. In some places there has been litigation. Each State supports the generation of the Water Plan in many ways but it has been coincidentally an era of declining public service budgets.

b). Key Decisions at State level

Meares’ Case (Murray Irrigation Ltd v ICW Pty Ltd and Meares Nominees Pty Ltd [2005] NSWLEC 304)

This case concerned the NSW *Water Management Act 2000*. The water supply business, Murray Irrigation Limited, responded to a protracted drought by reducing by 8% the amount of water available for distribution to shareholders. The object and purpose of the

Water Management Act 2000 was stated as to conserve water resources and to make them available at a level that would ensure sustainability for future generations. Murrumbidgee Irrigation Limited (MIL, a privatised water supply business) was the prosecutor in this case. The argument in the case was about the unlawful taking of water. The second defendant, Meares Nominees Pty Ltd, tried to argue that they could not be held liable for the actions of their employee who took water in excess of the amount licensed by tampering with the equipment to regulate delivery of water (a Dethridge wheel). The offences in the Act were criminal offences of strict liability. Strict liability is a severe test which means there is no requirement to prove a mental or fault element in the form of intention, recklessness or negligence. It is notable that the *Water Management Act* uses this approach. The defendant was held liable.

Murrumbidgee Groundwater Preservation Association v Minister for Natural Resources [2005] NSWCA 10

This case considered the issue of the validity of a State Water Plan. The Murrumbidgee Association brought a challenge to the Plan on many grounds under administrative law (judicial review). The grounds alleged were:

- (a) extraneous purpose of the Minister in making the Plan that was to avoid the community drafted plan;
- (b) the formula for reserving waters for the environment contained a mathematical impossibility;
- (c) uncertainty of timing of operation of the Plan; and
- (d) the imposition of uniform reductions in water allocation was irrational.

The Minister had power to draft a Groundwater Plan himself over the area involved. The plan addressed sustainable management of groundwater and identified limits on extraction; the overall aim of the Plan was to reduce actual use over 10 years to the annual average recharge less a quantity preserved for the environment. Groundwater users were subject to pro rata reductions of entitlements over a 10 year period. All users were to be entitled by year nine to only 52% of their original entitlements. There were adjustment mechanisms such as the creation of market access licenses and supplementary water access licenses.

All of the grounds for appeal were dismissed. The grounds were dealt with as follows:

(a) *Extraneous purpose*: The Appellant alleged that the Minister made the Plan to avoid the notification, public exhibition and considerations as required under a plan made by a management committee. It was held that the power to establish a management committee to draft a plan is discretionary and a plan formulated by the Minister is valid.

(b) *Impossibility*: The literal construction of the clause providing the formula for reserving waters did provide an absurd result, so the Court applied a purposive construction to identify the correct formula;

(c) *Uncertainty of timing*: The timing was considered to be capable of being certain and so valid; and

(d) *Irrationality*: The case here was based on the facts that it was irrational to treat the groundwater source as a single body of water, as aquifer recharge was site specific and that an activity in one area will result in changed conditions elsewhere. Historically, the groundwater system was managed in zones since in some areas use of entitlements would be unsustainable. The argument applied the precautionary principle to protect the resource in the absence of scientific data. The single system was argued to be irrational as it was not based on water availability. However, the Court upheld the pro rata reduction on the grounds that the Court has a confined role and it was for the Minister to balance the desired environmental outcome and the chosen method of achieving it with the beneficial and adverse social and economic consequences.

Minister for Environment and Conservation v Wylie Group Pty Ltd [2005] SASC 127;
Hedges v Minister for Environment and Conservation [2006] SAERD 43

In South Australia there have been some cases on the Water Sharing Plans drafted under the *Water Resources Act 1997* which is now part of the new *Natural Resources Management Act 2004 (NRM Act)*. Both Acts prescribe an area and then any allocations to users are through licenses. The objects of both Acts are to establish a system for the sustainable use and management of water. In the system under the *Water Resources Act* existing users were given preference to continue use even when restrictions come into force (this is called “grandfathering”). The Minister also had power to reduce allocations if the total exceeded the capacity of the resource.

Water Sharing Plans were drafted by the Catchment Management Boards under a process of legally listing and advertising a proscription of the water resource (either surface or groundwater). The Plans aimed to provide a basis for long term sustainable management and sustainable water use and all allocations of water had to comply with the Plans. The process involved considerable community consultation in determining all factors.

The Minister had no option but to refuse to grant a water allocation if it was not possible to endorse the water allocation on the license consistently with the relevant Water Allocation Plan under section 29 of *Water Resources Act* (and repeated in the *NRM Act*). It has been held in the Supreme Court of SA, that the reference to the term “*may*” in sub-section 29(3) did not identify a discretion. Rather, it obliged the Minister to refuse an application if to grant it would not be consistent with the relevant Plan.

Baker v Minister for Environment and Conservation [2006] SAERD 24

Under the SA *Irrigation Act 1994*, water allocations exist in Government Irrigation Districts. The Minister for Environment and Conservation is the irrigation authority and is bound to supply water for irrigation in the district. The Minister holds the water allocation pursuant to the *NRM Act* and allocates portions of this to each irrigator. The irrigators pay rates to the Minister. The Minister has appointed Advisory Boards to assist in the allocation. These Advisory Boards are in addition to the community members who have drafted the broader scale Regional Water Allocation Plan and any allocations to irrigators would be subject to the Regional Plan.

In times of drought it has been common place for the Minister to reduce the amount allocated to Irrigation Districts and indeed all allocations. The process used has been to take a pro-rata amount of every irrigator based on the allocation per hectare. In *Baker*, every irrigator lost 0.12 ML per hectare. The relevant Water Allocation Plan enshrined a cap amount that could be allocated (this was lower than before the Plan) and also a maximum rate per hectare. In *Baker* there was evidence that one grower had been irrigating an area in excess of that for which he had approval. The Advisory Board decided on a process of estimating the area irrigated by aerial photographs at a certain date and then discounting the acreage by 10%. This process was held to be fair and reasonable.

Lymberopoulous v Minister for Environment and Conservation [2004] SAERD 44

The plaintiffs first applied for a water licence to irrigate 40 hectares in April 1997 under the *Water Resources Act* and made many applications all of which were refused in September 2003. The licence was for a dam and a well for grapes. The application was refused as it did not comply with the relevant Water Plan. Under section 35 of the Act (which is paralleled in the *NRM Act*) the Minister's decision to grant or vary a water allocation must be consistent with the relevant Water Allocation Plan. Over the period between the applications another Water Plan was adopted by the Minister on 22 September 2002.

It was held that the application for the water entitlement gave rise to an entitlement that the administrative process will be proceeded with in a *reasonable period of time* and this is enforceable by a *writ of mandamus* (administrative review), hence the earlier Plan applied.

White v Minister for Environment and Conservation [2005] SAERD 98

This case concerned the administrative method used in the Water Allocation Plan to allocate groundwater. The plaintiffs had a water holding allocation of 5700 kilolitres and wanted to convert this to a taking allocation under the *Water Resources Act*. This was refused by the Minister as the Minister's delegate assessed this against the relevant Plan. The administrative procedure in the Plan was a 4 km² test that required that the granting of a water taking allocation shall not cause the total volume of water taking allocations within a square of water with 4 km long sides to exceed 1.25 times the amount of annual vertical recharge for the management area.

The Minister's delegate applied this test by compiling a list of properties within the 4 km² centred on the proposed point of taking. The whole of the water taking allocations were factored in to the calculation that is those unused as well as those used. This was in accord with Principle 21 of the Plan which clearly specified that the 4 km² test looks at water taking allocations not the actual water used at any given time.

It was held that the Ministers' delegate acted within the *Water Resources Act*, the *NRM Act* and Principle 21 of the Plan.

Michelmores v Minister for Environment and Conservation [2004] SASC 415

The appellants were dairy farmers in the South East of SA who applied to take water from an unconfined aquifer for the purpose of milk cooling and washing down their dairy. The

Water Plan specified a time to make such applications and the respondents were one month late. It was held that the time specification in the plan was *not a mere matter of machinery* and it could not be varied by the Minister.

Rowe v Lindner [2007] SASC 189

This case concerned sustainability of a proposal to establish a feedlot for 1,500 cattle and the impact of the taking of 25ML per annum of groundwater on the surface and groundwater. The resource was not prescribed under the *NRM Act* and hence no license was needed. The case used the *Development Act* and a Plan under this which had an objective to protect all water resources from pollution or excessive usage which would threaten the long term reliability of existing resources.

The case also gave judicial guidance on the *NRM Act* and the Precautionary Principle. The outcome in the end was to say that although the proposed development complied with many of the provisions of the *Development Act* it failed due to unsustainable use of water resources. The *Development Act* filled in where the *NRM Act* did not prescribe the area and hence a Water Plan was not required. The outcome was that that Planning Approval Authorities must seek advice from appropriate State agencies or experts to assist in the determination of impacted water courses even though this is not a specific requirement of the *NRM Act*. The SA Environment, Resources and Development Court also stated that when planning bodies are faced with a lack of data the “Precautionary Principle” should be applied. The evidence was insufficient to support a conclusion of *unsustainable* water use but it was sufficient to support a conclusion of *significant risk of serious harm* due to water overuse coupled with current scientific uncertainty about the extent of environmental harm attracting the Precautionary Principle.

Elandes Nominees Pty Ltd v Minister for Water Resources [2002] SAERD 130

In *Elandes*, under the *Water Resources Act* a Water Allocation Plan reduced aquifer withdrawals for every grower in an almond area. The reduction was upheld and the almond industry was wiped out in the area. The argument about loss of an industry (social sustainability argument) was rendered subsidiary to the environmental impact. There was no provision in the Water Allocation Plan to continue with unsustainable water allocations to businesses that could not adapt to reduced water allocations.

Ashworth v Victoria [2003] VSC 194

In Ashworth's case a farmer challenged the validity of the new laws in Vic, which for the first time vested in the State the right to control water captured as overland flow in farm dams. The *Water Act* was at the time the most comprehensive in the nation and aimed to set up a framework and management regime to ensure that upstream users did not affect downstream users in Vic (PISANIELLO and MCKAY, 2005). The Victorian Parliament in 2002 passed the *Water (Irrigation Farm Dams) Act 2002*. This Act required the plaintiff to obtain a license if he wished to continue with this practice. The statute was upheld as replacing common law rights.

Other decisions:

Other relevant decisions of State courts and tribunals include:

- The 2001 Victorian Civil and Administrative Tribunal decision indicated that caution should be adopted when data is not sufficiently reliable to ensure that the long term sustainability of the resource will be ensured (*Neibieski Zamek Pty Ltd v Southern Rural Water* [2001] VCAT 1005);
- In the 2003 Tasmanian Conservation Trust Case (Tasmanian Conservation Trust v Director of Environmental Management and Rivers and Water Supply Commission [2003] TASRMPAT 12) the Tribunal reviewed a refusal to grant a permit to conduct dam works. It stated that the Tasmanian Water Management Act 1999 "...provide no guidance ... for weighing the relative benefits of a dam ... against the adverse impacts which it would have ..." The Tribunal held "the certain and further likely environmental harm arising from construction of and the existence of the dam, clearly outweigh the less certain benefits." The refusal to grant the permit was affirmed.
- The 2004 decision of the NSW Land and Environment Court of *BGP Properties Pty Ltd v Lake Macquarie City Council* [2004] NSWLEC 399 acknowledged the spread of ESD principles to 40 or so land/ water use laws at State level.

There are many decisions at the AAT level in relation to fisheries cases that also provide guidance on the interpretation of ESD.

In summary, the aspiration of ESD is embedded in many State laws and has the defining characteristics set out in Box 1 (above). These aspirations are becoming less insubstantial, tenuous and vague through judicial consideration and application. The existing decisions demonstrate how strictly the Water Plans are interpreted.

C) Other Developments

In 2006 a plan was devised to privatise the Hydro Electricity Corporation on the Snowy River. The plan was scuttled on the basis of complaints by farmers against any change to the water flow regime would be a detriment to their operations.

Also in 2006, the Australian Competition Council made a determination requiring Sydney Water to provide third party access to the water supply pipes under the federal competition legislation.

6. Period Five: “Water Act”

In 2007 the Commonwealth enacted the *Water Act*, relying on a combination of powers in section 51 of the Constitution (including the referral of powers to the Commonwealth by the States under s 51 (xxxvii) which was underway as of September 2008, and also section 122, which gives the Commonwealth legislative power over the Territories). The *Water Act* applies only to the Murray Darling Basin area and relies on the adoption/accreditation of State Water Plans to produce a “Basin Plan”.

The Act leaves the water laws in the competence of the States but provides protocols as the content of instruments such as Water Plans created under State laws (sections 19, 20, and 22). It requires State Water Plans to have certain content (sections 22 and 55) and be accredited (section 56) or adopted (section 57) by the Commonwealth. This Act embodies a new way for the Commonwealth to achieve more power over water (a trend illustrated above) but incidentally renders these accretions justiciable on common law administrative law grounds, i.e. for reasonableness. To describe this process this paper has coined the term *justiciable protocols*.

The *Water Act 2007* aims for the new Murray Darling Basin Authority to create an overarching Basin Plan (for Murray Darling Basin waters only). It makes the Basin Plan a

legislative instrument (section 33) and impliedly allows review by courts exercising federal jurisdiction and specifically mentions the Federal Magistrates Court (section 139) and the AAT.

The *Water Act* prohibits the Murray Darling Basin Commission, an agency of a Basin State, an operating authority, an infrastructure operator or the holder of a water access right from doing any act inconsistent with the Basin Plan (section 35). Pursuant to sub-section 22(8), the Basin Plan may also include any other matters prescribed by the regulations for the purposes of the sub-section. This widens its potential ambit. Section 25 provides that the Commonwealth may specify the place at which a salinity target is to be measured and may specify a target in terms of a particular level of salinity being met for a particular percentage of time.

The objects of the Act are also broad. These are stated in a long list in section 5 which starts with the *national interest* and *relevant international agreements* and, subject to the above, to promote the use and management of basin water resources to optimise economic, social and environmental outcomes. Other objects are specified in eight subparagraphs which makes the law very difficult (if not indeterminate) to interpret. The term national interest is undefined.

It is notable that the objects clause uses the term optimising “economic, social and environmental outcomes” which is arguably narrower than ESD (See Box 1, above) in that the long term is not mentioned. Environmental outcomes are defined as including:

- (a) ecosystem function;
- (b) biodiversity;
- (c) water quality;
- (d) water resource health; and
- (e) to improve water security for all users of the Basin.

These outcomes are quite amorphous and will require judicial interpretation.

The Act does define ESD in section 4(2) but this is limited in its application to the Basin Plan. The relevant section provides a list of factors and this could be seen as limiting ESD

as ESD is subject to consumptive uses of the Basin. The list also includes many reviewable factors such as using best available socio-economic analysis.

The *Water Act* is based on suite of Commonwealth powers (sections 51(i), the inter-State trade and commerce power, 51(ii), the taxation power, 51(viii), astronomical and meteorological observations, 51(xi), census and statistics, 51(xv) weights and measures, 51(xx) the corporations power, 51(xxix), the external affairs power, 51(xxxvii) powers referred by the States to the Commonwealth, 51(xxxix), the incidental power and section 122, the territories power. Most notable is the use of the referral power under section 51(xxxvii) and the process of the States referring the power is still underway as of September 2008. (*The Australian*, Friday 12 September 2008, p 8) and they could prepare different types of referral statutes, complicating the operation of the new Act.

There are a number of international agreements purported to be implemented in this Act, presumably under the external affairs power. “*Relevant international agreements*” is defined in section 4, and includes the Ramsar Convention, the Biodiversity Convention, the Desertification Convention, the Bonn Convention, CAMBA, JAMBA, ROKAMBA and the Climate Change Convention (see Explanatory Memorandum). These international instruments are broad and raise the spectre of the importation of international law into domestic law with the wider term of sustainable development incorporated in these instruments (CORDONIER-SEGGER and KHALFAN, 2004). Of late, the Kyoto Protocol has also been signed.

The *Water Act* contains specific attempts in many sections to read down provisions so as not to infringe section 100 (see, for example, sections 11 and 14) and these, coupled, are likely to make the Act valid.

Under section 21, the Basin Plan must:

- a) take into account the principles of ecologically sustainable development; and
- (b) act on the basis of the best available scientific knowledge and socio-economic analysis; and
- (c) have regard to the following:
 - (i) the National Water Initiative;

- (ii) the consumptive and other economic uses of Basin water resources;
- (iii) the diversity and variability of the Basin water resources and the need to adapt management approaches to that diversity and variability;
- (iv) the management objectives of the Basin States for particular water resources;
- (v) social, cultural, Indigenous and other public benefit issues;
- (vi) broader regional natural resource management planning processes;
- (vii) the effect, or potential effect, of the Basin Plan on the use and management of water resources that are not Basin water resources;
- (viii) the effect, or the potential effect, of the use and management of water resources that are not Basin water resources on the use and management of the Basin water resources; and
- (ix) the State water sharing arrangements (see Table 2).

Once again this long list is indeterminate and will require judicial rationalisation of it the operations of the Act and the Basin Plan. In any event, there are many options here for administrative law review.

Section 22 provides a list of elements of the Basin Plan. Sub-section 22(10) provides that a provision of the Basin Plan has no effect to the extent to which the provision *directly* regulates land use, the management of other natural resources or pollution. This opens up a justiciable issue around “direct or indirect” (despite attempt at defining “direct” in the following sub-section).

The Commonwealth, through the Murray Darling Basin Authority, accredits or adopts State Water Plans. A “*water resource plans*”, for a water resource plan area, is defined to mean a plan that:

- (a) Provides for the management of the water resource plan area; and
- (b) is either:

- (i) accredited under section 63; or
- (ii) adopted under section 69;

but only to the extent to which the water resource plan:

- (c) relates to Basin water resources; and
- (d) makes provision in relation to the matters that the Basin Plan requires a water resource plan to include.

This last clause and the fact that the Basin Plans are legislative documents means that the Commonwealth is able to set a protocol for the States to adhere to and that any disputes would be justiciable. This is a huge change from the paradigms above when the Commonwealth could only fiscally influence State government water planning processes.

In addition to the above, the Commonwealth is able to regulate water charges by all water supply businesses in the States (section 91).

The *Water Act* applies a legal regime to State Water Plans and requires them to be reviewed. At the federal level, the AAT is empowered to review the legality of federal decisions under the Act.

As a side issue and not part of the *Water Act* but pursuant to an old policy recommendation to buy back water and land (PRODUCTIVITY COMMISSION, 2006), water and land has been bought back to recover water for the environment. One purchase was made in September 2008 (NEWS.COM.AU, 2008) but the process for selection of this seller has caused much community angst regarding the procedural fairness in the buy back decision.

IV. Summary and Conclusions

The history of Australian water allocation laws presents a mosaic of permissive State common law schemes overlain by State based statutory schemes which have now be overlain again by new Commonwealth water law. There are five epochs of water laws from 1788 to the present day with the Federal Government increasing its influence over

allocation either directly through accretions of power or more recently by the innovative idea of providing *justiciable protocols* over State laws. The *Water Act 2007* relies on a wide interpretation of the treaty implementation aspect of the external affairs power and the referral of powers from the States to increase federal legislative power to regulate water allocation and in particular the choices between consumptive uses and the environment. The prohibition in section 100 has also driven further complication in the legal architecture and it remains to be seen if the Act has evaded this prohibition. There are still a number of weaknesses in the constitutional framework, including that the excise power prevents the States from imposing direct water levies to fund ESD. Parallel political solutions such as the recent buy backs may also threaten the water planning and allocation process for a variety of reasons.

The potential avenues for legal and administrative review have been used by litigants in the States and these cases show a willingness of an independent judiciary to strictly uphold the ESD principles and other specific terms in the Acts in order to achieve ESD in Water Plans.

For the first time Australia is out of the realm of non justicable federal water planning under section 96, and the opportunity exists for judges to apply and interpret a national water management regime and hence make more certain the meaning of ESD and increase confidence and trust in the water planning systems.

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Reference List:

- ANDERSON, Margaret (2003) "South Australia and the River Murray: Some Cartoons from the Federation Period" *History Matters* vol 13(2) pp. 4-7.
- ARMCANZ/ANZECC (1995) "Council of Australian Governments' Communiqué" available at www.coag.gov.au/coag_meeting_outcomes/1994-02-25/docs/attachment_a.cfm (accessed 24 September 2008).
- AUSTRALIAN COMPETITION AND CONSUMER COMMISSION (2006) "A Regime for the Calculation and Implementation of Exit, Access and Termination Fees Charged by Irrigation Water Delivery Businesses in the Southern Murray-Darling Basin" available at http://www.myyoung.net.au/water/policies/ACCC_Exit_Fees.pdf (accessed 7 October 2008).
- AUSTRALIAN LAW REFORM COMMISSION (1999) "Discussion Paper 62: Review of the Federal Civil Justice System".
- CLARK, Sandford D., (1983) "The River Murray Waters Agreement: Peace in Our Time?", *Adelaide University Law Review* vol 9, p 108.
- CLARK, Sandford D., RENARD, Ian A. (1970) "The Riparian Doctrine and Australian Legislation", *Melbourne University Law Review* vol 7 p 475.
- CLARK, Sandford D., MEYERS, A.J. (1969) "Vesting and Divesting: the Victorian Groundwater Act 1969" *Melbourne University law Review* vol 7 p 238.
- CORDONIER-SEGGER, Marie-Claire, KHALFAN, Ashfaq (2004) *Sustainable Development law: Principles, Practices and Prospects*, Oxford pp 21-24.
- GALLIGAN, Brian, WRIGHT, John S. F. (2002) "Australian Federalism a Prospective Assessment" *Publius: The Journal of Federalism* vol 32(2) pp 147-166.
- GARRETT, Peter, MP and BURKE, Tony, MP (2008) "Caring for our Country – better land management, less red tape" *Press Release* available at <http://www.nrm.gov.au/> (accessed 8 October 2008).
- HOWARD, John, MP (2007) "My Bold Plan to save our Water", *Weekly Times* National newspaper Jan 31 2007 p 16. Quote from Prime Minister's speech located at www.pm.gov.au/docs/national_plan_water_security.pdf (accessed 7 October 2008).
- JOINT STANDING COMMITTEE ON TREATIES (1996) available at <http://www.aph.gov.au/house/committee/jsct/index.htm> (accessed 7 October 2008).
- INLAND RIVERS NETWORK (2007), "Recommendations that will ensure the success of the National Plan for Water Security in the Murray Darling Basin produced by consortium of non governmental organisations such as Australian Conservation foundation" available at <http://www.irnsw.org.au/pdf/WaterPlanMDB.pdf> (accessed 7 October 2008).

- LANE, P (1986) *Lanes Commentary on the Australian Constitution*, Law Book Company, Ryde.
- LANGDON, M (2002) *Briefing papers: Indigenous rights to waters*, ATSIC and Lingiari Foundation, Melbourne, p 45.
- LETCHER, R, POWELL, S (2008) “The Hydrological Setting” in CRASE, Lin (ed) *Water Policy in Australia the Impact of Change and Uncertainty Issues in Water Resources Series*, Resources for the Future, Washington.
- MCHUGH, Michael (2007) “The Impact of High Court Decisions on the Governance of Australia” Speech delivered to the University of New South Wales, available at http://www.law.unsw.edu.au/news_and_events/doc/2007/Speech_Michael_McHugh.pdf (accessed 7 October 2008).
- MCKAY, Jennifer (2006) “Issues for CEOs of Water Utilities with the implementation of Australian Water Laws” *Journal of Contemporary Water Research and Education* vol 135 pp115-130.
- MCKAY, Jennifer (2005) “Water Institutional Reform in Australia” *Water Policy* vol 7 pp 35-52.
- MCMAHON, T.A. FINLAYSON, B.L., HAINES, A.T., SRIKANTHAN, R., (1992) *Global runoff: continental comparisons of annual flows and peak discharges*, Catena Verlag, Cremlingen-Destedt.
- MURRAY DARLING BASIN COMMISSION, (2004) *IAG Reports on CAP Implementation* available at <http://www.mdbc.gov.au/nrm> (accessed 25 November 2006).
- MURRAY DARLING BASIN COMMISSION (2002) “The Living Murray Discussion Paper” at 17 available at http://xlivingmurray.mdbc.gov.au/implementing/community_consultation (accessed 7 October 2008).
- MURRAY DARLING BASIN COMMISSION, (1995) *Independent Audit Report on the CAP Implementation*.
- NATIONAL LAND AND WATER RESOURCES AUDIT (2001) “Australian Water Resource Assessment 2000 – Surface and Groundwater Availability and Quality” available at http://www.anra.gov.au/topics/water/pubs/national/water_contents.html (accessed 7 October 2008).
- NEWS.COM.AU (2008) “Toorale Water Buy Back Blog” available at http://blogs.news.com.au/news/blogocracy/index.php/news/comments/toorale_water_buy_back/ (accessed 7 October 2008).

PISANIELLO, John, MCKAY, Jennifer (2005) “Australian Community Responses to upgraded Farm Dam Laws and Cost effective Spillway Modelling” *Water Resources Research* vol 12 pp 325-340.

PRODUCTIVITY COMMISSION (2006) “Rural Water Use and the Environment: The Role of Market Mechanisms, Research Report” Melbourne.

ROCHFORD, F (2004) “Private Rights to Water in Victoria: Farm Dams and the Murray Darling Basin Commission Cap on Diversions” *The Australian Journal of Natural Resources Law and Policy* vol 9(2) pp 229-253.

SENATE OF AUSTRALIA (Select Committee on Water Pollution) (1970) “Water Pollution in Australia: Report”, Canberra, Government Printer.

SHI, Tian (2005) “Simplifying Complex Water Entitlements” *Water* vol 32(5), pp 39-41.

STATE OF THE ENVIRONMENT ADVISORY COUNCIL (1996) “Australia State of Environment Report” available at <http://www.environment.gov.au/soe/1996/index.html> (accessed 7 October 2008)

TREWIN, Dennis (2006) “Water Account, Australia, 2004–05” and “Water Account, Australia, 2000–02” Australian Bureau of Statistics

VAN DIJK, Albert, EVANS, Ray, HAIRSINE, Peter, SHAHBAZ, Khan, NATHAN, Rory, PAYDAR, Zahra, VINEY, Neil, ZHANG, Lu (2006) “Risks to the Shared Water Resources of the Murray Darling Basin” Murray Darling Basin Commission/CSIRO Publication available at <http://www.csiro.au/files/files/p7ga.pdf> (accessed 7 October 2008).

WU, Z, MCKAY, J and HEMPHILL, E (2008) “Attitudes to the Natural Resources Management Levy” *Adelaide Water* vol 44 pp 87- 92.

Acronyms for AUSTRALIA ** To be updated **

AAT	Administrative Appeals Tribunal
CEO	Chief Executive Officer
COAG	Council of Australian Governments
CMA	Catchment Management Authority
ESD	Ecologically Sustainable Development
GL	Gigalitres
NAP	National Action Plan for Salinity and Drainage
NHT	National Heritage Trust
NRM	Natural Resources Management
NWI	National Water Initiative
MDB	Murray Darling Basin
MDBA	Murray Darling Basin Agreement
ML	Megalitres Million Cubic Meters
WSB	Water Supply Business