

The Corporate Structure of Australian Water Utilities

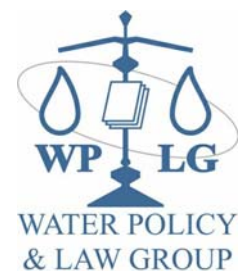
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EXECUTIVE SUMMARY

This report explores key aspects of the corporatised Australian water utilities following recent efforts to convert water management in Australia to a system of state owned enterprises. It endeavours to analyse the statutory provisions under which the water utilities operate and contrast this with the practical operation of the utilities.

The report includes a sample of both urban and rural utilities and adopts a specific focus on the States of Queensland, New South Wales, Victoria, and South Australia.

It begins with an assessment and comparison of the statutory schemes that govern the appointment of directors to the boards of each State's water utilities. In each case the power to appoint board members was effectively held by a designated Minister or Ministers. However, the power of appointment was differentiated between the States by the level of discretion or direction that the legislation afforded the Minister.

The method by which dividends are determined and paid to the relevant government shareholders was also assessed by reference to the relevant statutory schemes, contrasted with the interpretation of the schemes by the utilities as evidenced by their various annual reports. Such analysis revealed that dividends are usually determined or budgeted in advance and appear to have less correlation to the actual profitability of the utility than would be the case in standard business practice.

Annual reports from a sample of utilities were also assessed to determine the practical application by the utilities of the environmental objectives contained in the Acts. While each report made claim to attaining some level of environmental objective, it was found that the comprehensibility and consistency of these claims varied greatly.

The report also addresses the level of community consultation that the process of water planning is afforded pursuant to each State's water legislation. It does so by determining who in the community is entitled to participate or contribute to the decision making process and in what way under the statutory scheme set up to facilitate water planning. It then reviews who has been involved in the planning in a small sample of water plans.

The report addresses the availability for compensation for changes to water allocations and the mechanisms by which water prices are determined.

The findings in this analysis and research enabled Professor McKay to create an *Australian Scorecard for Water Institutional Variability* in which she was able to rank and score the variance between each of the states water legislation, and its application. This analysis constitutes appendix 2 of the report.

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APPENDICES

Appendix 1 - Abstract Enviro 04 - Stream Advances In the Management Of Water Resources

Title: *Implementing The Concepts Of Equitable Utilization And Equitable Participation In Australian Water Law Reform - Stakeholders Perspectives.*

Appendix 2 - Paper delivered at the Irrigation Association conference in Adelaide 2004 and also used for Radio National Country hour interview.

Title: *Water reform: a jurisdictional scorecard at 2004*

Appendix 3 - Summary of plenary session at Enviro 04 report as reprinted in *Water* July 2004

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Page 22. Table 2. Transparency in water pricing arrangements.

LIST OF PUBLICATION OUTPUTS

1. March 2004 Enviro 04 Conference Abstract

Title: Implementing the concepts of equitable utilization and equitable participation in Australian water law reform- stakeholders perspectives.

See Appendix 1 abstract only the powerpoint presentation acknowledged the CRC and is available on the web site www.business.unisa.edu.au/waterpolicylaw and on the Enviro 04 web site too

2. *Irrigation Association of Australia Conference: Irrigation Australia 2004 May 2004 paper in session day 1*

Title: *Water reform a jurisdictional scorecard*

This included the creation of the Index of Australian Water institutional variability. See Appendix 2 and www.irrigation.org.au

3. Summary of plenary session at Enviro 04 report as reprinted in *Water* July 2004

1.0 INTRODUCTION

Australia has been a leader in the global paradigm shift in the management of how to reduce State involvement in water, gas, electricity, postal, airport and other service provision.

Australia has experimented with several variations on different methods of transforming State Owned Enterprises including commercialization, corporatisation, and privatisation.

The questions for governments have been how to achieve the desired paradigm shift¹, and what strategies facilitate the involvement of private sector operators. Where provision of water supply throughout the world and in Australia² was once the province of technocrats in the public sector, it has now to become a joint exercise.

The reasons for the change are often cited as the need to improve flexibility of the organizations and also that the public sector had not protected the common resources from over-exploitation and hence new methods were required.

The traditional practice of public sector entities being the primary operators exploiting resources had increasingly become unacceptable to the community at large. Examples of this change in public attitude are evidenced in the *Tasmanian Dams Case*³ and - for a variety of cultural reasons - the *Mabo Case*.

So the issue of institutional reform became entangled with the privatization ethos and ill feelings about the previous structures. These factors set the scene for radical changes to water utilities and other institutions.

The challenge has been to achieve a sustainable new water management paradigm that incorporates the diverse issue of private sector, cultural, and heritage issues, ESD and TBL. Several nations have grappled with similar issues⁴ in the water sector, and many of the privatization attempts have not been successes.⁵

This work seeks to explore key aspects of the processes and resulting institutions in Australia.

Much pressure has been put on the institutions which deliver water. However, there has been little *de novo* thinking in Australia. rather, the old public sector body has been mangled and adapted and given a wide ranging new set of obligations.⁶

¹ Bridging the GAP: Modernity versus post Modernity. Which water management Paradigm. Paper presented for Kokkalis Graduate Workshop SOAS Harvard Feb 2003.

² Broughton

³ see Hawke paper on web site McKay J.M 2002 Encountering the south Australian Landscape: Early European Misconceptions and Our Present water Problems, Hawke Institute Working Paper, no 21,

www.hawkecentre.unisa.edu.au/institute/, issn 1443-9298.

⁴ for example Salej SB and Helsinki 1998 Privatization methods and their impact on Competition ; the Brazilian Experience, and Seigmund U 1997 Comment on the methods of privatization: politico Economic and Historical issues in Giersch H ed Privatization at the turn of the Century Berlin Springer.

⁵ World Bank privat

⁶ See outputs from Enviro conference and IAA papers fully referred to in results section.

It was the purpose of this research to make a start on documenting the inter and intra state variations in institutional forms for a few key bodies in the Eastern States and South Australia (who are part of the CRC IF).

In the end, the research yielded results from which Professor McKay was able to create an *Australian Scorecard for Water Institutional Variability* and present this in April 2004 as an invited paper to the IAA conference⁷.

The scoring aspects of this are summarized here as follows and the method discussed in section 3.

This is a short hand way of presenting and summarizing key attributes of water utilities and how on selected key aspects the various bodies differ.

Ranking schema-Australian Scorecard for Water Institutional Variability

Rank 5	highly different on all attributes
Rank 4	moderately different on most attributes
Rank 3	different on a minority of attributes
Rank 2	some differences
Rank 1	key attributes similar

The policy factors reviewed (during late 2003 early 2004) and ranks decided (see section 3) were;

Objects of acts	Rank 4
Processes for the appointment of directors-urban.	Rank 5
Processes for the appointment of directors-rural	Rank 5+
Payment of dividend	Rank 4
Environmental assessment	Rank 4
Community consultation generally	Rank 2+
Community consultation in water plans	Rank 5
Compensation for changes to water licenses	Rank 5
Water pricing regimes and full cost recovery	Rank 5

Appendix 2 provides a discussion of the impact of these differences and suggests ways to reform the aspects. The ways of reforming are taken from the research conducted here and pre existing research amassed by the student and supervisor, on the relevant criteria for each jurisdiction on each of these issues.

This was where the data collection aspects became difficult and required recourse to various subsidiary documents other than Acts and annual reports in order to deduce an accurate distillation of the laws in each jurisdiction.⁸

⁷ See Appendix 2 which has the whole paper and a discussion of the impact of these results.

⁸ *Infra*, section 3

1.1 Brief context of the research in Australia

In Australia, the history of the water sector has largely been of internally focused State Owned bodies that provided services within a particular State. Generally, there has been little collaboration between water sector operators.⁹

Each State had a plethora of water supply utilities and the particular nature of their history guided their corporate form.¹⁰ It should be noted that this introspective approach of each State was also not greatly troubled by environmental concerns throughout the majority of its history.

The present structures of the water authorities are, largely, a product of local interests and not until 1994 did the demands of competition reform and environmental issues add further complexity to these issues.

The demands of the *Hilmer* and *CoAG Agendas* in 1994 placed pressures to amalgamate and a smaller number of water supply businesses were created in each State. The corporate form they adopted was the result of local partisan pressures and hence the sector is highly differentiated in corporate form.

Whilst the acts in each State required corporatisation and consideration of environmentally sustainable development, the States were free to adopt these measures in any form they chose. Whilst in a mature democracy this is a mature response, the situation has arisen in Australia where the details in each Act are so different and the ways to achieve these outcomes so diverse, that some of the desires of the reforms are slow to be achieved.

1.2 Objectives

This research project involved a thorough examination of the corporate structures of a selection of Australian water utilities on the issues of governing the operations of the water businesses such as:

- the objects of the acts
- processes of appointment of directors
- skill base of directors
- payment of dividend to the government
- environmental impact assessment
- community consultation in the operations of the business in general
- community consultation in the development of water plans in particular
- compensation for changes to water allocations
- water pricing methods aiming to achieve and full cost recovery

⁹ Broughton (1999) (ed), *A century of water resources development in Australia, 1900–1999*, The Institution of Engineers Australia, Sydney, p 205.

McKay JM (2003) Marketisation in Australian Freshwater and Fisheries Management Regimes in Dovers and S Wild River eds *Managing Australia's Environment*, Federation Press, pp363- 390

¹⁰ McKay JM (2002b) Legal Issues in water planning regimes- lessons for Australia in Brennan D ed *Water policy reform; Lessons from Asia and Australia*, Australian Centre for International Agricultural Research, proceeding 106, pp 48-62 Canberra. ACIAR

2.0 METHODOLOGY

There are two methodology components ; one related to the research methods and one related to the type of appointment of the research student.

2.1 Research methodology

The research was predominantly based on the analysis of existing information and required careful comparisons of many published documents, specifically Acts of Parliament¹¹ in four States and the annual reports of SA Water (SA), Sydney Water (NSW), Melbourne Water (Vic), and SunWater (Qld)¹².

Also covered were many reports on water pricing¹³, various CoAG documents¹⁴, and other documents¹⁵.

In all cases the State statutory scheme was defined and further information sought from additional documents to supplement the information. The purpose of comparing the objects in the acts and the scheme's treatment in the various Annual reports and other information was to determine the practical application of the legislation.

The Annual reports often provided the information on how a particular obligation was interpreted. In addition, many conversations were had with officials in the various authorities in order to ask specific questions.

The method was to:

- review the varying statutory schemes employed by the states of South Australia, Victoria, New South Wales and Queensland, to govern the management of each States' water utilities.
- review the operational interpretation of the laws via the Annual Reports
- review the methods used to implement environmentally sustainable development
- look at the dividend policy (dividends to government) the process by which profits are distributed to see if that impedes the ESD operations of the corporatised entity
- determine the nature of the skill base for appointments for directorships within the water utilities and the processes of appointment

11 Water acts and other acts governing the schemes as variously named in Victoria, Queensland, South Australia and New South Wales

12 Annual reports of SA Water (SA), Sydney Water (NSW), Melbourne Water (Vic), and SunWater (Qld), Murray Irrigation Ltd ABN23 067197933 Goulburn Murray Water, Murrumbidgee Irrigation Ltd

13 Hatton MacDonald 2004 The economics of Water; Taking full account of first use, reuse and return to the Environment. CSIRO Folio s?03/1474

14 reviews of reform progress available on web site www.daff.gov.au/content/output.cfm?

15 Such as the web sites of all authorities. WASA Facts Annual reports for 2002 and 2003. Personal communications were made with the Australian Water Association to supplement these data. Integrated Catchment Management in the Murray Darling Basin 2001-2010 Delivering a sustainable future MDBasin Ministerial Council June 2001, Securing put water future Green Paper on water reform Victoria August 2003 since issued as a White Paper in mid 2004. inquiry into the Allocation of water resources Inquiry Report November 2001 Department of Natural Resources Committee Vic Government Printer, Melbourne

- review the rules for community consultation and determine how extensive that is on the operations of the utility
- review the community consultation processes in relation to the development of water plans
- review the rules for compensation for loss of water entitlements following the review of a water plan
- review the water pricing regimes

2.2 Type of appointment

Stephen Mitchell was employed on a part time basis as a research assistant over the long University vacation and for a few days per week in 1st and 2nd term 2004.

He was not an intern in meaning of that term as used by the other CRC participants. He gathered information for Professor McKay and perused a volume of material and created a state by state summary. Professor McKay then used these comments and state reports to produce the *Australian Index of Water Institutional variability*.

3.0 RESULTS

The results are presented in the Appendices especially Appendix 2. This section provides some additional data and some detailed summaries on points of interest.

3.1 Objects of the Acts¹⁶

These were found in the beginning of the Acts and they were reviewed. It was noted that all acts required all actors in water management to consider and implement:

- ecologically sustainable development,
- consider present and future generations,
- measure and evaluate social and economic benefits
- achieve integrated management with community consultation in the drawing up of water allocation and use plans.

However, some acts recited a long and full definition - such as Queensland - and others were less wordy. In addition, some States (such as NSW) made reference to indigenous interests in water allocation and cultural uses.

3.2 Appointment of Directors urban and rural

The statutory framework governing the appointment and composition of the board of directors of SA Water (SA), Sydney Water (NSW), Melbourne Water (Vic), and SunWater (Qld) where reviewed. These were found in a variety of Acts.¹⁷

In each case the power to appoint board members was effectively held by a designated Minister or Ministers. However, the power of appointment was differentiated between the States by the level of discretion or direction that the legislation afforded the Minister.

NSW was the only State that explicitly required 'protection of the environment' as an area of expertise of directors. However other States required Ministers to appoint directors with qualifications and experience "relevant to the operation" (Vic) or "required for the effective performance" (SA) of the corporations, which may be interpreted to include an implicit environmental requirement.

¹⁶ New South Wales ; *Sydney Water Act 1994*, *State Owned Corporations Act 1989* *Water Management Act 2000* (NSW), Queensland :*Government Owned Corporations Act 1993* *Government Owned Corporations (State Water projects Corporatisation regulations 2000)* and *Water Act 2000* (Qld), South Australia: *Water Resources Act 1997* (SA), and the *Public Corporations Act 1993* SA. Victoria: *Melbourne Water Corporation Act 1992* and *State Owned Enterprises Act 1992*

¹⁷ In SA Water of governed by the *Public Corporations Act 1993* and section 6 prescribes that it is subject to the control and direction of the Minister for Public Enterprises section 6. the Annual Report stated that there were no directions issued by the Minister during the financial year ended June 2002.

Table 1. Number and qualification of Directors in a sample of Australian Water Authorities in 2004

Sydney Water (NSW)	Chair and directors(9) appointed by voting shareholders who are both government (NSW Treasurer and Assistant treasurer). Directors must have expertise in business management, environmental protection, and public health. Public advertisement process. Appointment for 5 years. Directors can be removed at any time with or without reason or notice.
Melbourne Water (VIC)	Chair, Deputy chair and 6 others appointed by Minister on terms as specified in an instrument. Can be appointed and reappointed but only up to 9 years. Minister must ensure directors have qualifications relevant to the operations of the corporation. Directors may be removed at any time and the conditions of appointment changed.
SA Water (SA)	Members who together have the abilities and experience required for effective discharge of business and management obligations with maximum term of 3 years. Directors may be removed on any grounds the Minister thinks sufficient.
Murray Irrigation Ltd (NSW)	Unlisted public company board with ownership of assets transferred to irrigators. Each irrigator is a shareholder in the company and holds shares in proportion to the water entitlements held. There are 10 directors including 8 irrigator elected directors (who represent geographical regions in the area) and two directors with skills in engineering and finance
Goulburn Murray (VIC)	Skills based Board. 8 directors
Murrumbidgee Irrigation Ltd (NSW)	3000 Shareholders rural provider. 8 Directors elected
SunWater (Qld)	Directors appointed for no longer than 5 years and must be able to ... make a contribution to the Corporation's Commercial performance and if the corporation has a Statement of Intent that statement.

Sources: various Annual Reports and State laws.

3.3 Payment of Dividend

The water reform process in Australia has proceeded on the path of corporatisation which requires that the metropolitan utilities (who generally supply the raw water to the retailers) are owned by government and pay a dividend to Government.

This dividend is derived from revenue from selling the raw water to utilities who treat it and retail it to customers. Governments can take the dividend and apply it where they see fit. Hence a proposal by the Board of a utility to invest profits in environmental monitoring or research could be defeated by the demands for payments. In some water authorities (for example Melbourne Water) there is an expectation of a reasonable dividend (s37 Melbourne Water Corporation Act).

This, of course, is most unlike the procedure in Australian company law where there is no obligation to pay a dividend even if profits are being made.

This research involved a review of the Legislative provisions governing the determination and payment of dividends by four metropolitan utilities to each of the relevant governments. Three are presented here.

In Victoria the *State Owned Enterprises Act 1992* (Vic), section 13 states that:

"Each reorganising body must pay to the State such dividend, at such time and in such manner, as determined by the Treasurer after consultation with the Board and the relevant Minister" .

The *Melbourne Water Corporation Act 1992* (Vic) contains no specific outline for the manner in which dividends are to be paid, however, it requires that Melbourne Water have and act in accordance with a corporate plan. The act requires that the corporate plan will incorporate financial measures and targets. Section 37 specifically directs that the expectation of the State is that the corporation will pay a "reasonable dividend".

In Queensland, the relevant section is section 159 of the *Government Owned Corporations Act 1993* (Qld). Section 159 requires that each year between May 1 and May 16 a GOC board must recommend to the shareholding Ministers that a specified dividend or no dividend be paid. Section 159 requires that the board must consult with the shareholding Minister before making a recommendation.

Section 159 requires that the recommendation be accompanied by the Board's estimation of profits. Section 159 gives the shareholding Ministers power to approve the recommendation or direct payment of a specified dividend. Dividends are not to exceed profits.

The Annual report of Sunwater states that dividends are determined based not only on profit but also in recognition of the need to maintain cash for asset refurbishment and other future commitments.¹⁸

In New South Wales, section 20S (1) of the *State Owned Corporation Act 1989* (NSW) requires all State Owned Corporations to have a share dividend scheme. The Annual report stated that directors have recommended to shareholders an after-tax dividend of \$115 Million on the 2002-3 operating result.¹⁹ However, this figure is reported to be in line with the Statement of Corporate Intent (SCI).

¹⁸ Annual Report 2002-3 page 7

¹⁹ Annual report page 34 2003

The SCI specifies commercial performance targets agreed by Sydney Water and our voting shareholders. In the SCI Sydney Water budgeted for a profit of \$192 million and a dividend of \$115. Despite only generating a \$125 million profit, \$67 million less than the budgeted profit, Sydney Water paid the previously determined dividend of \$115 million.²⁰

In each of these examples, the process required the utilities board to make a proposal to the Treasurer in consultation with the relevant Minister. However determination of the dividends was subject to approval by the Treasurer, or relevant shareholding Minister.

The review of the Annual Reports for each of the relevant States' water utilities appeared to reflect the strong focus on approval by the Treasurer. In at least one case there appeared no room for deviation from forecasted dividend figures despite the utility returning a profit substantially less than the forecasted profit upon which the dividend figure was calculated.

3.4 Environmental Assessment

The Annual reports provided a plethora of issues considered in each body but were very short on details of the measurement procedures. There seemed to be little consistency between adjoining water utilities. Numerous calls were made and many officials provided information²¹ which supported that these requirements are still patchy.²²

3.5 Community Consultation

The State reports for NSW, Queensland and SA are presented here.

3.5.1 General New South Wales schema for community involvement & example

The legal requirements for the involvement of stakeholders in NSW Water Allocation Plans are presented below with an example.

The statutory framework for the function and composition of management committees and management plans are contained in sections 11-18 of the *Water Management Act 2000* (NSW).

Section 15 states:

The Minister may, by the order by which a management committee is established or by a subsequent order in writing:

- (a) *direct the committee to prepare a draft management plan, and review any related implementation program, on any aspect of water management*

Previously at section 13, the Act outlines the membership of a Membership Committee.

²⁰ page 35 of Annual report

²¹ on the basis of not being identified

²² Jones G Whittington, J McKay, J Arthington, A, I Lawrence, I Cartwright S and P Cullen, (2001) *Independent assessment of jurisdictional reports on the achievements of the COAG Water Reforms 2001*, Cooperative Research Centre for Freshwater Ecology, funded by NHT, Environment Australia and National Competition Council, Canberra.

The act requires that the management committee consist of at least 12 but not more than 20, members appointed by the Minister.

The Act also requires that the committee consist of members of whom;

- at least two are appointed to represent the interest of environmental protection groups
- at least two are to be persons appointed to represent interest of water user groups
- at least two are to be persons appointed to represent the interest of local councils,
- at least one is to be a person appointed to represent the interest of catchment management boards and trusts,
- at least two are to be Aboriginal persons appointed to represent the interest of Aboriginal persons,
- one is to be a member of staff of the department
- at least one is to be a person nominated by the Minister for the Environment,
- such other persons as are appointed to represent such interests as the Minister considers require representation
- one is to be a person (not a member of staff of the department) who is appointed as an independent chairperson for the committee.

Furthermore s13(3) requires that as far as practicable the members appointed should live in the water management area.

Summary

The interests with a statutory right to representation in a Management committee;

- Environmental Interests (2)
- Water Users (2)
- Local Councils (2)
- Aboriginal People (2)
- Catchment management boards (1)
- The Department of Water Land and Water Conservation. (1)
- The Minister for the Environment (1)
- Such other Interests as the Minister considers requires representation

Example of Application of Legislation²³

A water sharing plan reported that the committee included representatives of;

- Water users for grazing and irrigation purposes
- Environmental interests
- Indigenous Communities
- The Namoi Catchment Management Board; The Regional Development Board; and the Liverpool Plains Land Management Committee
- Local Councils
- Department of Land and Water Conservation
- Environmental Protection Authority
- NSW Agriculture
- NSW Fisheries

3.5.2 General Queensland Schema for community involvement & example

Section 35 of the *Water Act 2000* (Qld) states:

(a) The Minister must plan for the allocation and sustainable management of water to meet Queensland's future water requirements, including, for example for the protection of natural ecosystems and security of supply to water users;

Section 38 empowers the Minister to "prepare a water resource plan for any part of Queensland to advance the sustainable management of water."

Before giving notice of his intention to draft such a plan (as required under section 40) the Minister must prepare an information report (available for public inspection) about:

- water allocation and sustainable management issues in the proposed plan area (section 39(a)); and
- proposed arrangements for establishing a community reference panel to provide advice about matters relevant to the preparation of a draft water resource plan for the proposed plan area (section 39(b)); and
- proposed arrangements for technical assessment using best scientific information available and relevant to the preparation of a draft water resource plan for the proposed plan area, (section 39 (c)).

Under section 40, the Minister must publish a notice of the Minister's intention to prepare a draft water resource plan. It must state;

- The purpose and reasons for the plan.
- The proposed plan area
- The water in the plan area to which the plan is intended to apply
- Where copies of the information reports are available

It must invite written submissions to be made about the proposed draft plan and the establishment of a community reference panel.

²³ The Water Sharing Plan for the Phillips Creek, Mooki River Quirindi Creek and Warrah Creek Water Sources (NSW Department of Sustainable Natural Resources, May 2003)

Under section 40 (3), the deadline for submissions must not be earlier than 30 business days after the day of the notice.

The Minister must then send a copy of the notice to any council that's area is included in the proposed plan (section 49(4)) or other entity the Minister considers appropriate (section (6)).

Under section 41 the Minister must establish a community reference panel on or after the day of the notice is published (section 41(1)). The community reference panel must include representatives of cultural, economic and environmental interest in the proposed plan area (section 41(2)).

If after the submissions are received the Minister is satisfied that a further notice should be published, the Minister must publish a new notice and update the information report (section 40A)

Having given notice of his intent to prepare a draft water resource plan and having created a community reference panel the Minister may prepare a draft water resource plan.

Section 47 explicitly outlines 16 issues (a-p) that the Minister must consider when preparing the draft water resource plan. This includes section 47(o) "all properly made submissions about the proposed draft plan".

The Minister must then prepare an overview report about the proposed draft plan, (section 48(1)). It must summaries any assessments and findings about matters mentioned in the section 47 list that are available at the time the report is prepared (section 48(2)).

Having prepared the draft and the overview report, the Minister must publish a notice. The notice must state that copies of the draft plan may be inspected and that written submissions may be received. (section 49)

If after the submissions are received the Minister is satisfied that a further draft water resource plan should be prepared, the Minister must prepare a further draft plan (section 49A).

Section 50(1) states that in preparing the final water resource plan, the Minister must consider all properly made submissions about the draft plan.

The draft plan has effect once it has been approved by the governor in council.

Finally the Minister must prepare a report with in 30 business days of the water resource plan being approved which must include a summary of issues raised during the consultation process and how the issues have been dealt with. (section 51)

Summary

The Minister is empowered to create a water resources plan for any part of Queensland.

The Minister must give notice of his intention to draft such a plan and of the composition of the Community Reference Panel. In doing so he must invite submissions on these issues.

The Community Reference Panel is to be composed of "representatives of cultural, economical and environmental interests in the proposed plan area".

The Community Reference Panel is intended to "provide advice about matters relevant to the preparation of a draft water resource plan"

If after the submissions are received the Minister is satisfied that a further notice should be published the Minister must publish a new notice and update the information report.

The Minister may then prepare a draft water resource plan with reference to the list of issues in section 47, including the submissions made about the proposed draft plan.

Having prepared a draft water resource plan the Minister must then publish a notice advising where the draft can be inspected and inviting further submissions.

If after the submissions are received the Minister is satisfied that a further draft water resource plan should be prepared, the Minister must prepare a further draft plan.

Alternatively the Minister can prepare the final water resource plan, and is required to consider all properly made submission. The plan will come in to effect when it has been approved by the Governor in Council.

Example of application of the legislation²⁴

Queensland law empowers the Minister with the sole power of making of water plans subject to the requirement to solicit submissions and advice of a community reference panel.

The draft water plan for Moonie reported that “Members of a community reference panel, scientific and technical experts and government agencies have worked together” to prepare the plan.

Furthermore the plan states that “in preparing the draft WMP (water management plan) a consultation program was undertaken involving public meetings in the vicinity of the basin, the distribution of a newsletter and the facilitation of discussion workshops with a stakeholder reference group known as the Moonie Community Reference Panel (MCRP). The MCRP, which met six times, included representation from Government agencies and community representatives from both New South Wales and Queensland.

The legislation requires that this committee’s members be “representatives of cultural, economical and environmental interests in the proposed plan area”.

3.5.3 General South Australia schema for community involvement & example

Part 7 of the *Water Resources Act 1997 (SA)* deals with Water Plans.

Under the act there are two types of plans; State Water Plans and Catchment Water Plans.

State Water Plans

Section 90(1): The State water plan is the document entitled “*South Australia. Our Water Or Future*” signed by the Minister for the Environment and Natural Resources in September 1995 or such other plan as is substituted for it under this Division.

The document is capable of amendment and requires that prior to any such amendment the Minister must “by notice published in the Gazette and in a newspaper circulating generally throughout the State, invite interested persons to

²⁴ Draft Water Management Plan Moonie River Catchment May 2000

make submissions to the Minister in respect of the amendment or plan” (Section 91 (2))

Furthermore the Minister must “have regard to all submissions made in accordance with the notice” (Section 91(4))

Catchment Water Management Plans

The *Water Resources Act 1997* (SA) provides that a catchment water management plan is to be prepared by a catchment water management board in relation to the water resources of its catchment area (Section 92 (1)).

Section 53 empowers the Governor to act on the recommendation of the Minister to establish a catchment water management board by Proclamation, which must assign a name to the board (ss53(2)(a)); identify the catchment area (ss53(2)(b)); set out the functions of the board (ss53(2)(c)) and appoint the first members of the board (ss53(2)(d)).

Section 54 requires that prior to making such a recommendation to the Governor under s53 the Minister must by notice in the *Gazette* and in a newspaper invite interested persons to make written submissions to the Minister in relation to the proposed catchment area and the proposed members of the board.

Furthermore the composition of a catchment water management board is determined under sections 57-60 of the act. It provides that the board;

- Consists of at least five members but not more than nine members (section 57 (1))
- At least one be male and one be female (Section 57(2))
- Must have one ‘presiding member’ who in the opinion of the Minister has ‘managerial skills and experience’ (section 58(1)) and who must not be an employee of the crown (section 58(2))

Of the other members;

- One must be a member of a community that is wholly or partly within the catchment area and who, in the opinion of the Minister, actively participates in community affairs (Section 59(1)(a))

One or more members must collectively have in the opinion of the Minister “knowledge of and experience in”;

- the management or development of water resources or any other natural resource (section 59(1)(b)(i)); and
- the use of water resources (section 59(b)(ii)); and
- the conservation of ecosystems (section 59(b)(iii)); and
- local government or local administration gained in the catchment area of the board as a member or employee of a council or a local administrative body in an out of council area (section 59(b)(iv)).

The other members of the board (if any) must have in the opinion of the Minister, “Knowledge of or experience in”;

- public or business administration (section 59(c)(i)); or
- regional economic development; (section 59(b)(ii)); or
- any other area that is relevant in the Minister’s opinion (section 59(c)(iii)).

Furthermore in nominating the membership of the board the Minister must seek and have regard to advice from the Water Resource Council (section 59(2)) and must endeavour as far as practicable, to include persons who are aware of the interests of the persons who use the water resources and who have knowledge and experience in the use of land or water for the purposes most commonly used in the catchment area.

Summary

The minister determines the composition of the board, having regard to the advice of the Water Resource Council and submission received having given notice of the intended catchment area and members and must endeavor as far as practicable to include person who are aware of the interest of the persons who use the water resources and has knowledge and experience in the use of land or water as it is most commonly used in the cathcment area.

The 5-9 members of the board must consist of;

- One (1): Presiding member who has “managerial skills and experience”

One or more:

- (Min 1, Max 8): Members who collectively have “knowledge and experience” in the management or development of water resources or any other natural resource and the use of water resources and the conservation of ecosystems and local government or local administration gained in the catchment area of the board as a member or employee of a council or a local administrative body in an out of council area

Other Members

- (Min 0, Max 7): Members who have “Knowledge of or experience in” administration or regional economic development, or any other area relevant in the Minister’s opinion.

This results in a total minimum=5, maximum= 9

Example of application of the legislation²⁵

The plan reports that ‘the Plan was developed by the South East Catchment Water Management Board in consultation with key stakeholders and the community.’

The plan goes on to say that the Board was established on 15th May 1998 by the Governor of South Australia on recommendation from the Minister Responsible for water resources in accordance with the *Water Resources Act 1997*.

The plan also listed 16 people and their reason for association with the plan as “Catchment Planning Committee Members”. This listed 5 members as being representatives of the South East Catchment Water Management Board.

The ‘Committee’ also comprised – 2 “Community Representatives”; 2 “Department of Water Land and Biodiversity Conservation”; and 1 each from the “South Eastern Local Government Association”, the “Department of Environment and Heritage”, the “South Eastern Water Conservation and Drainage Board”, “Primary Industries and Resources SA”, “SAFF Natural Resources Committee”, and the “Border (Groundwaters Agreement) Committee.

²⁵ South East Catchment Water Management Plan 2003-2008

The Annual Report of the South East Catchment Water Management Board uncovered that the board consisted of 9 members including one Presiding member, this is the maximum allowed under South Australian Law.

Neither the Annual Report or the Water Plan offered details of the Knowledge or expertise of the board members.

Example 2 of application of the legislation²⁶

These two plans were accessed via the Department of Water, Land and Biodiversity conservation webpage and contain no reference to the board under whose authority they were created. There was a note in each report stating that they were created pursuant to Part 7 division 3 of the act. This would require that the plans were prepared by a Board with the requisite 'knowledge and experience'

3.6 Compensation for changes to water allocations

This has now been overtaken by the National Water Initiative in June 2004²⁷ which proposed a new schema to be uniform in all the States.

Some examples of the situation prior to June 2004

The Legislation providing for and the quantum of compensation for changed water allocations in Queensland and NSW differs between the states. For example, In Queensland, Section 986 provides for reasonable compensation for changes to water allocations which reduce the value of the allocation and change is made within 10 years after a Water Resources Plan approved. Compensation is paid based on the market value of the water. Five plans out of 50 or so have been completed and there have been no claims. Many environmental groups wish to limit this period to 5 years (Nature Conservation Council NSW 2002).

In New South Wales, Section 79 provides that the Minister has power to acquire licenses if in the special circumstances it is in the public interest to do so.

Compensation is to be at the market value of the license at the time of acquisition. Water Management plans are made under a series of sections and last for 10 years (section 43). The Minister may vary the plan if it is in the public interest to do so (section 45) and may vary a plan in relation to matters as specified in the plan at any time (section 42(2)).

Compensation is not paid for variations in the plan based on Section 42(2) and for other variations the Minister determines the amount by having regard to the market value of the water foregone.

3.7 Water pricing mechanisms

An ideal water pricing regime would account for infrastructure costs and the variable costs and also include a component of opportunity costs, environmental costs and society costs to sectors of the community. All this would be based on sound information about these issues

²⁶ Water Allocation Plan: Clare Valley Prescribed Water Resources Area; and the Water Allocation Plan for the Mallee Prescribed Wells Area

²⁷ National Water Initiative CoAG document. www.pmc.gov.au/docs/national_water_initiative_progress.cfm

Whilst CoAG required all States to implement the general principle of a fixed charge reflecting the cost of service provision and a variable charge based on the volume, each state has done this in a different way and imposed different costs.

It is apparent from an examination of the information available from 3 States that these three States do not give raw water an intrinsic value. The three States also said there were no acceptable methods to cost environmental externalities.

Sometimes a cost of between .05 and 1.5 cents per kilolitre is imposed as an additional charge and this is worked out on the costs of administering the various Catchment Management Boards.

Water pricing arrangements are not as transparent as Table 1 shows. There are other differences between and even within States in the asset valuation methods used. Whilst COAG has endorsed the Optimized Deprival Method as used in Queensland,²⁸ some regulators have used a Depreciated Optimized Replacement Cost Method.

The upshot is that charges to irrigators in NSW for extraction from the Murray are significantly lower than those imposed in Victoria and Queensland and slightly lower than South Australian irrigators pay.²⁹

Table 2. Transparency in water pricing arrangements.

MOST TRANSPARENT	
NSW	uses independent body to regulate IPART
Queensland	uses Queensland Competition Authority
Tasmania	uses Government pricing & oversight Commission
Aust Capital	uses IPART of NSW
Victoria*	will use new body essential services Commission
Western Australia	will use new body
South Australia	uses Essential Services Commission
LEAST TRANSPARENT	

²⁸ Queensland Competition Authority 2000. *Water Pricing principles for Gladstone*

²⁹ Independent Pricing and Regulatory Tribunal (1996) Sydney Water Corporation, Hunter Water Corporation, Gosford City Council, Wyong Shire Council Developer charges. NSW Government.

Appendix 1 - Abstract Enviro 04

Stream Advances In The Management Of Water Resources

Professor Jennifer McKay
University of South Australia

Implementing The Concepts Of Equitable Utilization And Equitable Participation In Australian Water Law Reform - Stakeholders Perspectives.

The paper will discuss the water reform process under Council of Australian Governments Agenda to date and review the achievements of the goals. Various issues have been identified such as legal indeterminacy as there are seven different legal systems and reform fatigue because of the structural changes to the institutions. The aims of all seven systems is to provide for equitable utilization between consumptive users and the environment (*broader equitable utilization*) and *equitable participation* in the processes. This is also the aim of the *UN Convention on the non navigational use of watercourses* and Australia may well be able to lead the world in showing how to achieve the institutions and the processes to achieve these aims. The paper will outline the UN Convention and describe the implementation issues of it. Clearly, to achieve *broader equitable utilization* and *equitable participation* is a multi- faceted problem with difficult implementation issues which will eventually require different institutions with different governance structures. A model of such a new institutional arrangement will be presented. This model is derived from German and Swedish governance models altered to consider Australian conditions.

The first steps have been made toward harmonising some water laws by the Council of Australian Governments Agenda in 2003. For example, regarding environmental flows, water trading the national scheme , water reuse and integrated risk management framework. These reflect the need to harmonise the laws and policies between the States to streamline processes and engage in dialogue on the water allocation issues. It would seem that in many areas of natural resources management there are now active moves toward national guidelines or protocols. Examples will be presented.

Finally the main focus of the paper will be to present the results of a study of irrigators in Victoria and Queensland and their attitudes to the water law and policy changes in relation to water allocation policies, water trading and the means used to implement the changes to the old allocation rules. The studies are able to present data to describe the characteristics of residents so as to enable lessons for policy makers. The results give specific guidance as to the preferences of the community for the style of involvement in present and future water law and policy changes.

Appendix 2 - Paper delivered at the Irrigation Association conference in Adelaide 2004 and also used for Radio National Country hour interview.

Water reform: a jurisdictional scorecard at 2004

Or;

Why we need to implement equitable and reasonable utilization.

Professor Jennifer McKay
Director Water Policy & Law Group
School of International Business
University of SA

Abstract.

The water reform process in Australia has many components, ambitious goals and created a system unparalleled in its complexity. Complex systems need clear operational protocols and access to benchmark data to be able to measure changes and extract information about the perverse or other consequences of the new policies. Some comments will be made on these issues based on research literature and some empirical data from Australia. The paper has created the *Australian Scorecard for Water Institutional Variability* and will then go on to apply this to several key issues. The scorecard is applied to:

- Appointment of directors urban and rural
- Payments of dividend to Ministers
- Objects of the Acts
- Environmental assessment
- Community consultation
- Water markets and compensation for changes to licenses and
- Water pricing regimes and full cost recovery

The 1995 goals will provide the starting point for this provocative scorecard and the recent commentary on them by the Federal Government in the National water Initiative in August 2003 indicated that ...in many areas water users and communities have made considerable progress toward efficient and sustainable management...³⁰The different progress in the water reform between regions and expanded knowledge base has created the opportunity to refresh and realign the reform agenda and to go beyond it.

Were the goals realistic and achievable are fundamental questions and what needs to be done to promote achievement?

The paper will pay particular attention to excellent examples of legislation and procedures from Australian jurisdictions and present some solutions to the

³⁰ See [www:dpmc](http://www.dpmc)

problems of multiple laws trying to achieve the same ends. The **Australian Scorecard for Water Institutional Variability** has these rankings:

Australian Scorecard for Water Institutional Variability

- 5 highly different on all attributes
- 4 moderately different on most attributes
- 3 different on a minority of attributes
- 2 some differences
- 1 key attributes similar

The paper will also then suggest some solutions such as template bodies in each State using template rules. The overarching and uniting theme of all water utilities needs to be to achieve equitable and reasonable utilization of water resources. This concept is borrowed from International water law where it has been applied between different nations. The concept requires basin wide approaches, consideration of human needs, dialogue about any works or activities all in the context of recognizing the needs of lower riparians and the environment. Some suggestions will be made as to how this could be applied in Australia using the vehicle of a new template corporate governance model. This new model has as its heart that it is a scheme to promote dialogue within and between the States and between rural and urban communities.

Introduction

The National Water Initiative Communiqué of August 2003 reaffirms the commitments of 1994 and indicates a commitment to creating clear rules for water use and looking at whole of catchments approaches. It emphasizes the goals as to:

1. Improve the security of water access entitlements, including clear assignment of risks of reductions in future water availability and by returning over allocated systems to sustainable allocation levels;
2. Ensure ecosystem health by implementing regimes to protect environmental assets at a whole of-basin, aquifer or catchment scale;
3. Ensure water is put to best use by encouraging the expansion of water markets and trading across and between districts and States (where this is physically practical), involving clear rules for trading, robust water accounting arrangements and pricing based on full cost recovery principles; and
4. Encourage water conservation in our cities, including better use of storm water and recycled water.

A template model for water authorities

Australian hydrology is highly variable and we have relatively short records from which to estimate Probable Maximum precipitation and have revised these figures a number of times. Over this complexity, Australian water management regimes have added another level of variability, which are different and complex institutions. Even within each State there is a huge variability, which reflects the part historical negotiations in the regions, economic development goals such a soldier settlers, commodity groupings and in some cases urban hegemony. In short we have two

levels of complexity and the organisation complexity has created introspective rules and lack of interstate co-ordination in water allocation policies, water markets environmental management and community consultation.

To over come institutional complexity sustainable systems in democracies develop clear protocols and rules on the key issues and make sure the decision-making processes are transparent. This becomes all the more important where there will have to be changes to existing water licence allocations as foreshadowed in many States and by the NWI above.

Australian Scorecard for Water Institutional Variability- processes for the appointment of directors urban. Rank 5

The statutory framework governing the appointment and composition of the board of directors of SA Water (SA), Sydney Water (NSW), Melbourne Water (Vic), and SunWater (Qld) where reviewed.

In each case the power to appoint board members was effectively held by the relevant Minister or Ministers. However, the power of appointment was differentiated between the states by the level of discretion or direction that the legislation afforded the Minister. NSW was the only state that explicitly required 'protection of the environment' as an area of expertise required of directors. However other states required Ministers to appoint directors with qualifications and experience "relevant to the operation" (Vic) or "required for the effective performance" (SA) of the corporations, which may included an implicit environmental requirement.

Australian Scorecard for Water Institutional Variability- processes for the appointment of directors-rural Rank 5+

The variability is even more overwhelming probably in part as there are so many such authorities. Some examples are in Murray Irrigation Limited, which is constituted as an unlisted public company in NSW. The growers elect the Board from 8 regions and two others sit as well. In Victoria, Goulburn Murray Water has a skills based board of 8 directors.

Australian Scorecard for Water Institutional Variability - Payment of Dividend. Rank 4

The Legislative provisions governing the determination and payment of dividends by the four water utilities to each of the relevant governments was assessed. In each case the process required the utilities board to make a proposal to the treasurer in consultation with the relevant Minister. However determination of the dividends was subject to approval by the Treasurer, or relevant shareholding Minister.

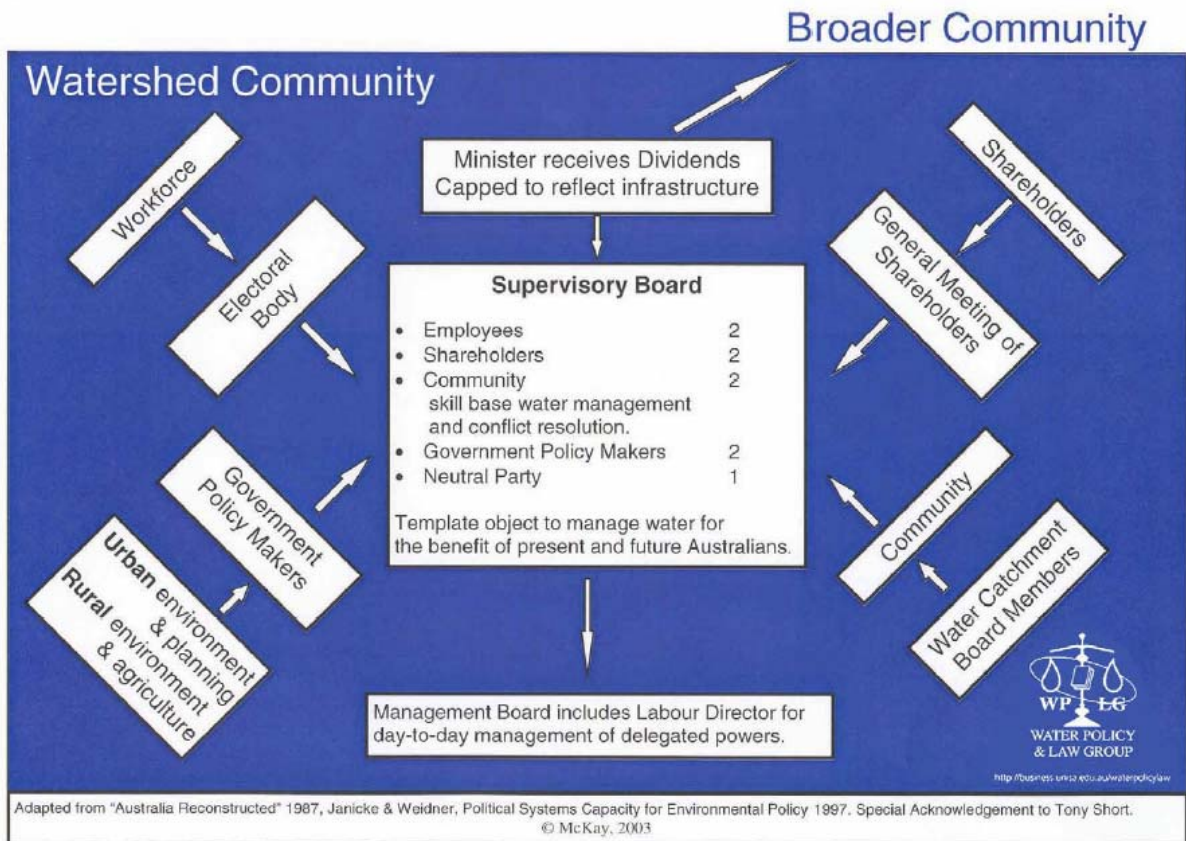
The review of the Annual Reports for each of the relevant States' water utilities appeared to reflect the strong focus on approval by the Treasurer. In at least one case there appeared no room for deviation from forecasted dividend figures despite the utility returning a profit substantially less than the forecasted profit upon which the dividend figures where calculated.

Solution Standardizing Director appointment process and also achieving community consultation and environmental representation.

The solution is to have a board of 9 persons selected with 4 from the skill base of Policy makers and community representatives who have skills in water management and some knowledge of conflict resolution measures. The other 4

representatives are selected by an election of the workforce and if shares have been issues the shareholders. This last group has the potential to exist in South Australia but no elsewhere at the moment. It is important to have an odd number and to appoint a neutral party a concept derived from Scandinavian company law. This person should have skills in conflict resolution and many comments have been made to me that the person should not be from the region.

Water Government Business Enterprises As Green Enterprises



Solution to the dividend quantum - capped dividends

This is self evident and to cap the dividends gives the new boards the finances to ensure long term strategies they may want to put in place to manage the resources in their area are not de-railed by being unable to be funded. To cap the dividends also brings this type of corporation into line with their business counterparts who have absolute discretion to never pay dividends if they wish to invest in means of production of their company.

Australian Scorecard for Water Institutional Variability - objects of acts Rank 4

All State laws require all those involved in water allocation systems to consider and implement:

- ecologically sustainable development,
- Present and future generations,
- Social and economic benefits and
- Integrated management.

These terms have no agreed meaning in the Acts with some i.e. Queensland reciting the Brundtland (1987)³¹ definition, and others taking a more conservative approach. (McKay 2003)³² Queensland offers the best model here, which is the object, is to manage water for the benefit of the people of Australia. No act provides guidance to officials who are obliged to act in accordance with these principles as to how to do that. In the Tasmanian Trust Case 2003 where this problem was recognised judicially. This case stated that the *Water Management Act TAS 1999 ...* "provides no guidance for weighting the relative benefits of the dam against adverse impacts. Broadening the functional specialisation within water administration and formulation of an effective user participation policy. An efficient functioning network of WUA at various levels is a precondition for an effective property rights arrangement both of which taken together form the crucial institutional condition for promoting many institutional aspects such as cost recovery, accountability, conflict resolution and water transfers."

Solution - uniform objects in the act

The solution is to have each State adopt the Queensland objectives verbatim.

Australian Scorecard for Water Institutional Variability- environmental assessment Rank 4

The legacy of inter State rivalries has been that the State Governments have acted introspectively and each State Government created unique systems for the allocation and use of water and indeed built different types of infrastructure such as incompatible platforms for the recording of rainfall and stream flow data. (Jones et al 2001).³³

Each State adopted the public sector model for the provision of water, gas and power and the bodies became powerful in each State but did not work together often. Each State did not look beyond its own boundaries until a crisis in a shared resource forced the formation of agreements such as Murray Darling and Border Ranges agreements. (McKay 2002).³⁴

Solution boosting of existing data sharing protocols

Australian Scorecard for Water Institutional Variability - community consultation generally Rank 2+

Australia created a hugely successful example of Community action in the National Landcare movement with over 4000 groups involved in local action planning of natural resource management. Australia has been a huge innovator in the adoption of Agenda 21 at local levels as a response to environmental problems in rural water use. The Landcare movement is part of a wide and broad based volunteerism in community self help organization such as volunteer fire brigades

³¹ Brundtland 1987 Our common future.

³² McKay JM 2003 Marketisation in Australian Freshwater and Fisheries Management Regimes in Dovers and S Wild River eds Managing Australia's Environment, Federation Press, pp363- 390

³³ Jones, G, Whittington, J, McKay, J.M, Arthington, A, Lawrence, I Cartwright, S and P, Cullen *Independent Assessment of the Environmental Achievements of the COAG Water reforms 2001*. Cooperative Research Centre for Freshwater Ecology.

³⁴ McKay J.M 2002 Encountering the south Australian Landscape: Early European Misconceptions and Our Present water Problems, Hawke Institute Working Paper, no 21,

www.hawkecentre.unisa.edu.au/institute/, issn 1443-9298.

(McKay 1983).³⁵ Australia with its well-educated rural community is best placed to implement participatory democracy in water management.

Solution develop this and apply it to water plans.

Australian Scorecard for Water Institutional Variability - community consultation in water plans Rank 5

At present there are only a few plan out but in NSW out of a potential 40 plans and commentators have described these as contentious with dissenting views noted in the drafts (*Water Crosscurrent*)³⁶ In addition it was reported that the task of finding consensus between groups unaccustomed to doing business in that way has been arduous. The most critical challenge was the assumption that local communities could negotiate new water sharing arrangements, which would improve environmental outcomes although they diminish the reliability of other water entitlements. (Martin K 2002)³⁷. It is clear that guidance must be provided to the community groups on national goals for river health, and support is given to manage the process of change.

In Victoria, the purposes of Victorian act are set out in section 1, which states the triple bottom line requirements but also has the object to:

Maximize 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 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 if farming area then at least half must be farmers appointed by Victorian farmers federation. This is much less prescriptive than NSW.

The objects of the South Australian act 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 Catchment water Management Boards in prescribed areas only. The relationship between the Catchment water plans and broader water allocation plans is weak. Community representatives are involved in both processes. The Catchment 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 which is sustainable. These plans bind the Minister. There has been some recent litigation in the *Environment, Resources and Development Court*, which suggests that the Minister does not have power to review or correct anomaly (*Strachan v Minister*) or require better information (*Elandes and Seidel v Minister*)

³⁵ McKay JM 1983 *Community Participation in Volunteer Fire fighting in the Adelaide Hills*, pp 74-89 in the *Economics of Bushfires; The South Australian Experience*, edited by Healey, D, Jarrett F and J.M.McKay, Oxford University Press.

³⁶ *Water crosscurrents* June 2002, p12

³⁷ Martin K 2002 Local water management planning- collaborating in change, *Water*, 29(4), pp28-31

Community consultation in the evolution of water plans as required by the Acts in rural communities is an active example of participatory democracy. However, the Acts are deficient in mechanisms and institutional frameworks to put this in place.

Solution- adopt Victorian approach.

Australian Scorecard for Water Institutional Variability- Compensation for changes to water licenses Rank 5

Separation of water property rights from land and trading were seen as a major plank of the reforms. However the 7 systems are so different in attributes that these have inhibited change. (Australian Financial Review 2003)³⁸ There has been a general misinterpretation of the words indeed the use of the word property rights in CoAG has fostered an acrimonious debate between the States and rendered Trading between States to be rare. The problem was that despite the old water rights never being more than a license, many farmers believed that they had a right to the water and hence a right to compensation. (See Nature Conservation Council of NSW 2002)³⁹. In South Australia water rights had been removed by the Minister on grounds of environmental stress in the 1970's. However that had never happened in the other States and hence the belief in water rights that could not be taken away. Indeed many growers were keen to be able to sell all the water they had been allocated even if they had never used it. This sleeper water in the water markets increased the volume of water used and this has negative environmental impacts in some places. (McKay 2002)⁴⁰

Of all the new water laws only the States of NSW and Queensland mention compensation and then only in a limited way as described below. The reasons prompting changes water allocations are not just environmental concerns but will also need to reflect social and indigenous perspectives. These later issues have not relay made the agenda of the public with the main focus being on the environmental needs. However, native title claims over water are likely to be made in the future.

The Legislation providing for and the quantum of compensation for changed water allocations in Queensland and NSW differs between the states. For example,

- In Queensland, Section 986 provides for reasonable compensation for changes to water allocations, which reduce the value of the allocation, and change is made within 10 years after a Water Resources Plan approved. Compensation is paid based on the market value of the water. Five plans out of 50 or so have been completed and there have been no claims. Many environmental groups wish to limit this period to 5 years (Nature Conservation Council NSW 2002)

³⁸ Australian Financial review 2003 New Salvos in Water War, Koutsoukis J 23 July 2003

³⁹ Nature Conservation Council of NSW 2002 Press Release" Peak NSW environment Group releases water property rights policy; Urges governments to keep water public!" 2

⁴⁰ McKay J.M 2002 Encountering the south Australian Landscape: Early European Misconceptions and Our Present water Problems, Hawke Institute Working Paper, no 21,

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- In New South Wales Section 79 provides that the Minister has power to acquire licenses if in the special circumstances it is in the public interest to do so. Compensation is to be at the market value of the license at the time of acquisition. Water Management plans are made under a series of sections and last for 10 years (section 43). The Minister may vary the plan if it is in the public interest to do so (section 45) and may vary a plan in relation to matters as specified in the plan at any time (section 42(2)). Compensation is not paid for a 42(2) variations in the plan and for other variations the Minister determines the amount by having regard to the market value of the water foregone

Solution - increase security of licenses for all users in the context of environmental catchment based allocations as NWI

Australian Scorecard for Water Institutional Variability - Water pricing regimes and full cost recovery Rank 5

An ideal water-pricing regime would account for infrastructure costs and the variable costs and also include a component of opportunity costs and environmental costs. The water reform process in Australia has proceeded on the path of corporatisation which requires that Utilities pay a dividend to Government. Now Board members must be commercial in orientation. These two factors mean that there can never not be a political component in water pricing. Governments can take the dividend and apply it where they see fit not necessarily to water infrastructure. This of course is most unlike the procedure in Australian company law where if a dividend is not paid then the funds are used to restore company assets i.e. applied by the directors for the benefit of the company.

Whilst CoAG required all States to implement the general principal of a fixed charge reflecting the cost of service provision and a variable charge based on the volume each state has done this in a different way and imposed different costs. It is apparent from an examination of the information available from 3 States that these three States do not give raw water an intrinsic value. The three States also said there was no acceptable methods to cost environmental externalities. Sometimes a cost of between .05 and 1.5 cents per kilolitre is imposed as an additional charge and this is worked out on the costs of administering the various Catchment Management Boards.

Water pricing arrangements are not transparent as the Table shows. There are other differences too between and even within States in the asset valuation methods used. Whilst COAG has endorsed the Optimized Deprival Method (Queensland Competition Authority 2000)⁴¹ however some regulators have used a Depreciated Optimized Replacement Cost Method. The upshot is that charges to irrigators in NSW for extraction from the Murray are significantly lower than those imposed in Victoria and Queensland and slightly lower than South Australian irrigators pay. (Independent Pricing and Regulatory Tribunal 1996)⁴²

⁴¹ Queensland Competition Authority

⁴² Independent Pricing and Regulatory Tribunal 1996

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MOST TRANSPARENT	
NSW	uses independent body to regulate IPART
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Victoria*	will use new body essential services Commission
Western Australia	will use new body
South Australia	uses Essential Services Commission
LEAST TRANSPARENT	

2. Equitable and reasonable utilization – the legal concept

The aims of all seven systems are to provide for equitable utilization between consumptive users and the environment (*broader equitable utilization*) and *equitable participation* in the processes. This is also the aim of the *UN Convention on the non-navigational use of watercourses* and Australia may well be able to lead the world in showing how to achieve the institutions and the processes to achieve these aims. This section will sketch the UN Convention and describe the implementation issues with it. Clearly, to achieve broader *equitable utilization* and *equitable participation* is a multi-faceted problem with difficult implementation issues will eventually require different institutions with different governance structures. These principles could clearly create more harmony between the seven Australian systems and move the scorecard to the lower end of the scale on all dimensions.

The three principles of customary law on internationally shared watercourses are: -

- Equitable and reasonable utilization,
- Prevention of significant harm and
- Prior notification of any proposal to engage in works, which may harm the ecology of the watercourse. This last point has been strongly endorsed by the international Court of Justice recently in the in the *Gabcikovo-Nagymaros case* 37 I.L.M 162 SEP 1997

International solutions - meaning of equitable utilization in the UN Convention

The law, which has developed over many years, includes these factors in the meaning of equitable utilization. Consideration of:

- Geographical, hydro graphic, hydrological, climatic, ecological and other factors of a natural character
- Social and economic needs of the watercourse states concerned and
- Population dependent on the watercourse in the watercourse state.

The further requirements are for each water course state to consider the effects of the use or uses in one water course state on other watercourse states, the existing and potential uses of water courses, the conservation, protection development and economy of the water resources of the watercourse and the cost of measures

taken to that effect, availability of alternatives of comparable value to a particular planned or existing use.

South Africa

In South Africa, there has been a recent revision of water law. The White paper 1997 places as first priority human use for basic drinking and sanitation are ranked first then environmental needs second then all other uses. It is made explicit that in the case of international rivers

The needs of a lower riparian nation on these dimensions has priority over local needs of the upper riparian even if to do so would reduce activity in the upper riparian. Specifically South Africa says it will suffer reduced used in order to ensure a lower riparian country has enough to supply basic human needs.

Southern African watercourse development Protocol SADC

This is a broad ranging inter-government agreement, which has these aims:

- Achieving development and economic growth, alleviating poverty, enhancing the standard and quality of life of the peoples of Southern Africa and supporting the socially disadvantaged through regional integration ... and achieving sustainable utilization of natural resources and effective protection of the environment

SADC Protocol 321.L.M 120 1993 see <http://www.sadc->

The four key issues highlighted in SADC Protocol are: -

- The human right to water for vital supplies
- Equitable and reasonable utilisation and
- The need for sustainable development to minimise environmental harm.
- Public participation in water decisions

3. The Australian scorecard - ways to achieve equitable and reasonable

The water reform process in Australia has had 10 years of operation and many achievements have resulted from the changes. There is a certain amount of reform fatigue in the community and also within the management of the utilities. The divesting of functions re- organisation and splitting of functions has taken place at a difficult time in the world economies. The softly softly approach of providing aspirational goals to the water utilities has tended to reinforce the use of existing institutional models and continued the introspective focus. It has resulted in poor ranks on the *Australian Scorecard for Water Institutional Variability* as presented here.

There are numerous ways forward to create the goal of a sustainable water utility. (Gleick 2000)⁴³. The characteristics of such utilities are that they aim to:

- meet basic human needs for water for drinking and sanitation
- meet ecosystem needs
- give higher priority to non structural alternatives

⁴³ Gleick 2000 Water International vol 25 1 127-138

- apply economic principles more frequently and reliably to water use and management
- new supply system must be flexible and efficient and
- all stakeholders involved in decision making

A model is presented in this paper to address some of the key issues of objects of such organizations, representation on the Board and the role of Government in funding works and returns on that capital. The key point is that if the institutions look more like each other it will be easier to promote dialogue between them and between the States so as create an Australian version of the implementation of equitable and reasonable utilization.

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Appendix 3 - Summary of plenary session at Enviro 04 report as reprinted in Water July 2004

Water: Planning for the Future: The Plenary

The Enviro 04 water sessions culminated in the Water Reporting Plenary .

Jennifer McKay, Professor of Business Law at the University of South Australia, in summarising her views on Advances in the Management of Water Resources, thanked the two keynote speakers and the sixteen other speakers, who included lawyers, economists, academics, and CSIRO scientists. The challenge is to allocate our finite water resources in a way which amalgamates policy with science.

Two new concepts were voiced:

“My water today is your water tomorrow” and “Allocation tolls” that is when water is reallocated under the new plans, there needs to be an assessment made by the holders of the water right and the community as to the quantum.

Maybe a transfer should incur, say 10% toll, on every allocation in areas where the resource is stressed

At the Opening Plenary, Dr. James Bartram of the World Health Organisation had introduced us to the international aspects of water quality, but Prof Joseph Delapenna, the lawyer from USA, had spoken on the urgent need to adapt the laws and policies of water management to the increasing stress on resources, stressing the necessity to maintain a holistic approach.

Patterns of use are changing, climate change, whatever its causes, is certainly with us and our historical water allocation systems are not sustainable. For the first time, serious debate has commenced on whether water is a commodity to be bought and sold, or whether it is a “public good”, to be shared equitably and reasonably.

Other speakers have emphasised that changes in laws are required to address the big issue, Achieving Multi-objectives

Environmental obligations have to be included, and there is increasing demand to incorporate all stakeholders in a transparent management process. Pricing should reflect environmental costs and community services.

Above all in Australia we need powerful intergovernmental commissions with long-term management aims to harmonise the varying regimes between the states, particularly with regard to rules for water markets and environmental assessment practices, with the ability to adapt these as new information is gathered from the community and the environment.

We have to develop better understanding of the effects of policies, laws and pricing on the behaviour of both management and consumers. We are not rational beings when it comes to use of resources and there are many examples of perverse behaviour, where the outcomes of a change in management are opposite to what was intended. An example is that when rural water property rights are unbundled, there are often third party effects, and for equity these must be dealt with.

Finally, it was agreed that “ Sustainability” is not an attractive concept for a three-year political term. We need a much longer term approach, so that policy changes

can be based on reasonable utilisation, not local or even national politics. Already we can see attempts to do this in Victoria and Queensland.

With all this we have to keep in mind our international obligations, and we can also learn from some of the examples overseas.

Program 1

Sustainable futures for irrigation communities rely equally on effective policy frameworks and on cohesive, proactive community responses to future challenges. In this context, sustainability requires integration of social, economic and environmental knowledge and responses.

CRC Irrigation Futures must work directly with policy makers and irrigation communities as partners in managing change. Consequently, this program explores the social, economic and legal policy and planning innovations and possible research investments needed to assist the transition to future sustainability from paddock to regional scale and beyond.

How We Work:

In delivering the Policy and Planning for Change program, through targeted project and case study-based research, we plan to design, model, test, review and enhance implementation of a range of innovative policy, planning and law reform suggestions to achieve a transition to sustainable irrigation communities. This research will include a focus on:

- The Policy and Planning for Change program research will involve the following working processes:
- Assessing the impact of national and regional policy and planning options (including regulatory systems) on irrigation dependant communities;
- Supporting the development of innovative software and resource management technologies that will assess policy options and facilitate change;
- Working directly with policy makers, regulators, industries and communities to assist them to manage change at the national, State, regional and property scales;
- Establishing significant policy and planning research projects within zones;
- Collaborating on significant integrated projects across CRC programs;
- Supporting the NPSI projects in ensuring appropriate policy and planning staff and actions are embedded in the project processes;
- Supporting small but strategic projects that progress program objectives;
- Short term consultancies to analyse specific policy and planning options;
- Having an identifiable education program and post graduate program that support the policy and planning for change aspects of the CRC; and
- Continuously focusing on brokering knowledge of relevance to the program.

Program Capabilities:

The Program itself aims to build the CRC's research and delivery capabilities around the following sub-program competencies:

- Social, institutional and economic analysis of high level policy options affecting irrigation, including effective and efficient regulatory mechanisms, institutions and incentive mechanisms;
- Legal and commercial skills related to understanding water law, particularly relating to national consistency;
- Planning and change management skills to assist regional irrigation communities to effectively manage change;
- Community-based planning, social analysis and decision support skills needed to underpin area-wide management/water reuse approaches; and
- Change management and extension skills related to adoption of irrigation innovations.