EXECUTIVE WATER TASK FORCE MINUTES

July 13, 2010  1:30 p.m.
Room 2000, Natural Resources Complex

Task Force Members:
Mike Styler, Department of Natural Resources
Voneene Jorgensen, Bear River Water Conservancy District
Sterling Brown, Utah Farm Bureau
Mark Stratford, Ogden City/Utah League of Cities and Towns
Dallin Jensen, Parsons, Behle & Latimer
Ed Bowler, Washington County Conservancy District
Steve Clyde, Clyde Snow and Sessions
Merril Bingham, Provo City
Tage Flint, Central Utah Water Conservancy District

Ex-Officios:
Kent Jones, Division of Water Rights
Boyd Clayton, Division of Water Rights
Mike Quealy, Utah Attorney General’s Office

Guests:
Fred Finlinson, Utah Water Coalition
Chris Bramhall, Kirton & McConkie
Rusty Vetter, Salt Lake City Corporation
Scott Martin, Snow, Christensen & Martineau
Paul Ashton, WCWID
Marlin Sundberg, Holliday Water Company
Chris Parker, Office of Legis. Research & Gen. Counsel
R. Scott Wilson, Iron County Water Conservancy Dist.
Jill Little, Utah Farm Bureau
Jay Franson, Civil Engineering
Todd Adams, Division of Water Resources
Bob Fotheringham, Cache County
Chris Finlinson, CUWCD
David Hartvigsen, Smith Hartvigsen
John Mabey, Mabey, Wright and James

I. Welcome and Introductions

- Mike Styler welcomed the group and then asked everyone to introduce themselves.
- Excused are Warren Peterson, Troy Rindlisbacher, and Randy Crozier
II. Management of Surface and Ground Water – Boyd Clayton

- In Troy’s absence, Boyd represented this work group and distributed a paper he wrote which includes thoughts on this topic from our last meeting. The group spent a few minutes reading the handout and a discussion was held.
  
  - On the topic of Water Banking, Kent Jones reported on meetings held with the Barnett’s and Cache County. The result was Water Banking may not be critical because of the effective Utah statute. Options may be the use of Irrigation Districts or Water Conservancies.
  
  - Cache County feels strongly that a County process needs to be set-up and would greatly help.
  
  - They are trying to protect older priority rights.
  
  - State Engineer’s office will meet again with Cache County Attorneys in order to progress and move ahead.
  
  - Battle is between municipalities and counties, with concern of losing priority dates.

- Over appropriation is not always bad – but means we are effectively using all of our water.
- QUESTION – Should we move to a more conjunctive type approach?
- The “exception” is variability – economics play a part of the discussion, storage in many areas.
- An example was Beaver who is not getting the water flows they used to, conservation is good, but what happens to down stream users.
- Another example was the Salinity Project, more hay/2-3 crops/metering water/depletion rising.
- Use to max development, use efficiently.

- Consensus is that the dialog is there, let’s back off and let it ride, let changes happen and see where it goes.

- Announced was the agenda for the next Water Task Force Meeting:
  
  - Lost Water Share Certificates – Fred Finlinson
  
  - Share Changes (SB99) – Steve Clyde
  
  - Change Applications – Jody Hoffman

III. Share Changes (SB99) – Steve Clyde

- Steve distributed a copy of the last version of SB99 (2nd substitute) with changes and updates. Suggested changes on lines 144,159, 177, 189, and 205, are marked in red.
- The Task Force was asked to review the document and be prepared to discuss changes at the next meeting on August 3rd.
- Kaelyn will send to all participants an electronic copy of this document, SB99, along with a previous paper on Water Code in Chili, as well as an Australian article on this same subject that should be considered.
• Dallin suggested dealing with 73-3-8 separately, and deleting it from SB99.
• This bill also needs comment from irrigators.

An additional meeting was calendared for August 25th at 1:30 PM and the meeting was adjourned until August 3rd at 1:30 PM, Room 1060 at the DNR building.
AGENDA
EXECUTIVE WATER TASK FORCE

August 3, 2010, 1:30 PM
Room 1060, Natural Resources Complex

I. Welcome and Introductions - Mike Styler

II. Lost Water Share Certificates – Fred Finlinson
   Due process and procedure draft

III. Share Changes (SB99) – Steve Clyde
    Continued discussion

IV. Change Applications – Jody Hoffman

V. Other Issues - All
Senator John L. Valentine proposes the following substitute bill:

1 WATER COMPANIES AND WATER RIGHT
2 CHANGE REQUESTS
3 2010 GENERAL SESSION
4 STATE OF UTAH
5 Chief Sponsor: John L. Valentine
6 House Sponsor: ____________

LONG TITLE

General Description:
This bill addresses the process for changing water rights.

Highlighted Provisions:
This bill:
- addresses the filing of a change application, including:
  - treatment of a change application by a shareholder in a water company; and
  - the state engineer's evaluation of a change application;
- provides restrictions on a water company's denial of a shareholder's change request;
- allows a water company to require a shareholder to pay certain water company costs in connection with the shareholder's change request;
- prohibits a water company from requiring a shareholder, as part of the share assessment process, to pay a proportionate share of the costs of an action concerning the shareholder's change request; and
- makes technical changes.

Monies Appropriated in this Bill:
None

Other Special Clauses:
None

Utah Code Sections Affected:
AMENDS:
73-3-3, as last amended by Laws of Utah 2008, Chapter 311
73-3-3.5, as last amended by Laws of Utah 2008, Chapter 3

Be it enacted by the Legislature of the state of Utah:
Section 1. Section 73-3-3 is amended to read:
73-3-3. Permanent or temporary changes in point of diversion, place of use, or purpose of use.

(1) For purposes of this section:
(a) "Permanent change" means a change for an indefinite period of time with an intent to relinquish the original point of diversion, place of use, or purpose of use.
(b) "Temporary change" means a change for a fixed period of time not exceeding one year.
(2) (a) Any person entitled to the use of water, or a shareholder of a water company with the written consent of the corporation given in accordance with Section 73-3-3.5, may make permanent or temporary changes in the:
(i) point of diversion;
(ii) place of use; or
(iii) purpose of use for which the water was originally appropriated.

(b) Except as provided by Section 73-3-30, a change may not be made if it impairs a vested water right without just compensation.

(3) A person entitled to use water, or a shareholder of a water company with the written consent of the corporation given in accordance with Section 73-3-3.5, shall change a point of diversion, place of use, or purpose of water use, including water involved in a general adjudication or other suit, in the manner provided in this section.

(4) (a) [A person entitled to use water may not make a change] A change in the use of water may not be made unless the state engineer approves the change application.

(b) A person entitled to use water, or a shareholder of a water company with the written consent of the corporation given in accordance with Section 73-3-3.5, shall submit a change application upon forms furnished by the state engineer and shall set forth:
   (i) the applicant's name;
   (ii) the water right description;
   (iii) the water quantity;
   (iv) the stream or water source;
   (v) if applicable, the point on the stream or water source where the water is diverted;
   (vi) if applicable, the point to which it is proposed to change the diversion of the water;
   (vii) the place, purpose, and extent of the present use;
   (viii) the place, purpose, and extent of the proposed use; and
   (ix) any other information that the state engineer requires.

(5) (a) The state engineer shall follow the same procedures, and the rights and duties of the applicants with respect to applications for permanent changes of point of diversion, place of use, or purpose of use shall be the same, as provided in this title for applications to appropriate water.

(b) The state engineer may waive notice for a permanent change application involving only a change in point of diversion of 660 feet or less.

(6) (a) The state engineer shall investigate all temporary change applications.

(b) If the state engineer finds that the temporary change will not impair a vested water right, the state engineer shall issue an order authorizing the change.

© If the state engineer finds that the change sought might impair a vested water right, before authorizing the change, the state engineer shall give notice of the application to any person whose right may be affected by the change.

(d) Before making an investigation or giving notice, the state engineer may require the applicant to deposit a sum of money sufficient to pay the expenses of the investigation and publication of notice.

(7) (a) Except as provided by Section 73-3-30, the state engineer may not reject a permanent or temporary change application for the sole reason that the change would impair a vested water right.

(b) If otherwise proper, the state engineer may approve a permanent or temporary change application for part of the water involved or upon the condition that the applicant acquire the conflicting water right.

(8) (a) A person holding an approved application for the appropriation of water may
change the point of diversion, place of use, or purpose of use.

(b) A change of an approved application does not:

(i) affect the priority of the original application; or

(ii) extend the time period within which the construction of work is to begin or be completed.

(9) Any person who changes or who attempts to change a point of diversion, place of use, or purpose of use, either permanently or temporarily, without first applying to the state engineer in the manner provided in this section:

(a) obtains no right;

(b) is guilty of a crime punishable under Section 73-2-27 if the change or attempted change is made knowingly or intentionally; and

© is guilty of a separately punishable offense for each day of the unlawful change.

(10) (a) This section does not apply to the replacement of an existing well by a new well drilled within a radius of 150 feet from the point of diversion of the existing well.

(b) Any replacement well must be drilled in accordance with the requirements of Section 73-3-28.

Section 2. Section 73-3-3.5 is amended to read:

73-3-3.5. Application for a change of point of diversion, place of use, or purpose of use of water in a water company made by a shareholder.

(1) As used in this section and Section 73-3-3:

(a) "Shareholder" means the owner of a share of stock, or other evidence of stock ownership, that entitles the [person] owner to a proportionate share of water in a water company.

(b) "Water company" means any company, operating for profit or not for profit, in which a shareholder has the right to receive a proportionate share, based on that shareholder's ownership interest, of water delivered by the company.

(2) A shareholder who seeks to change the point of diversion, place of use, or purpose of use of the shareholder's proportionate share of water in the water company shall submit a request for the change, in writing, to the water company. This request shall include the following information:

(a) the details of the requested change, which may include the point of diversion, period of use, place, or nature of use;

(b) the quantity of water sought to be changed;

© the certificate number of the stock affected by the change;

(d) a description of the land proposed to be retired from irrigation pursuant to Section 73-3-3, if the proposed change in place or nature of use of the water involves a situation where the water was previously used for irrigation;

(e) an agreement by the shareholder to continue to pay all applicable corporate assessments on the share affected by the change; and

(f) any other information that the water company may reasonably need to evaluate the requested change application.

(3) (a) A water company shall make a decision and provide written notice of that decision on a shareholder's request for a change application within 120 days from receipt of the request.

(b) Based on the facts and circumstances of each proposed change, a water company
may take the following action:

(i) approve the change request;
(ii) approve the change request with conditions; or
(iii) deny the change request.

If the water company fails to respond to a shareholder’s request for a change application, pursuant to Subsection (3)(a), the failure to respond shall be considered to be a denial of the request.

(d) The water company may not withhold approval if any potential damage, liability, or impairment to the water company, or its shareholders, can be reasonably mitigated without cost to the water company.

(d) The water company may reject the change request, including a change that if made would result in changing the place of use to a location outside of the historic service area of the water company, if unless the water company reasonably believes that:

(i) the proposed use would be contrary to a restriction in an exchange or other contractual agreement between the water company and:
   (A) another water company;
   (B) a political subdivision of the state; or
   the federal government;
(ii) the proposed use could adversely affect the status of a water company as a public water supplier, as defined in Section 73-1-4; or
   (iii) any potential damage, liability, or impairment to the water company or its shareholders cannot be mitigated:
   (A) by the imposition of reasonable conditions on the approval of the change request;
   and
   (B) without cost to the water company.

(e) In determining whether to consent to a change request, a water company may evaluate whether the proposed change will result in:

(i) any increased cost to the water company or its shareholders;
(ii) interference with the water company's ability to manage and distribute water for the benefit of all shareholders;
(iii) whether the proposed change represents more water than the shareholder's pro rata share of the water company's right;
(iv) impairment of either the quantity or quality of water delivered to other shareholders under the existing water rights of the water company, including rights to carrier water;
(v) whether the proposed change would cause a violation of any statute, ordinance, regulation, or order of a court or governmental agency;
(vi) whether the shareholder has or can arrange for the beneficial use of water to be retired from irrigation within the water company's service area under the proposed change; or
(vii) the cumulative effects that the approval of the change application may have on other shareholders or water company operations.

(4) The water company may require that all costs associated with the change application, including costs of submitting proof, be paid by the shareholder.
(4) (a) The water company may require the shareholder to pay all costs reasonably incurred by the water company in evaluating the requested change of use, including all the following costs incurred in the water company's review of the requested change, the state engineer's review of the change application, and judicial review of the state engineer's order:

(i) filing fees;
(ii) necessary professional fees incurred by the water company; and
(iii) other costs associated with the state engineer's consideration of the change application.

(b) The water company may require the shareholder to pay the costs of submitting proof of the change.

© The water company shall provide the shareholder with:

(i) an accounting of fees or costs under this Subsection (4); and
(ii) copies of any invoices for fees or costs under this Subsection (4).

(5) (a) The shareholder requesting the change must be current on all water company assessments and unless the shareholder and water company otherwise agree, to continue paying all applicable future assessments, except that the shareholder may choose to prepay any portion of the water company assessments attributable to an existing debt of the water company.

(b) Other than prepaid assessments, the water company may require that the shareholder continue to pay all applicable assessments.

(6) If the water company approves the requested change, with or without conditions, the change application shall be filed with the state engineer, and must:

(a) be signed on behalf of the water company; or
(b) be signed by the requesting shareholder, accompanied by written authorization from the water company assenting to the change and the filing of the application by the shareholder for the shareholder and on the water company's behalf.

(7) (a) The state engineer may evaluate a change application authorized by a water company under this section in the same manner and using the same criteria that he or she uses to evaluate any other change application.

(b) As part of an evaluation under Subsection 73-3-8(1)(a)(ii) and (iii), the state engineer may consider whether a proposed change of use will adversely affect:

(i) the local public welfare, including the affairs of the persons residing in the area where the water has historically been used;
(ii) the local public welfare in the area where the water would be transferred, including the affairs of the persons residing in the area directly affected by the proposed use; or
(iii) whether the proposed change may preclude a more beneficial use of the water that is of greater benefit to the public welfare of the citizens of this state.

© If the state engineer concludes the proposed change in a change application is detrimental to the public welfare in accordance with Subsection (7)(b), the state engineer may:

(i) reject the change application;
(ii) approve the change application for a lesser quantity of water; or
(iii) approve the change application with conditions designed to protect the public welfare.

[(b)] (d) Nothing in this section limits the authority of the state engineer in
evaluating and processing any change application.

(8) If an application authorized by a water company under this section is approved by
the state engineer, the shareholder may file requests for extensions of time to submit proof of
beneficial use under the change application without further permission of the water company.

(9) (a) Change applications approved under this section are subject to all conditions
imposed by the water company and the state engineer.

(b) If a shareholder fails to comply with all of the conditions imposed by the water
company, the water company may, after written notice to the shareholder and after allowing
reasonable time to remedy the failure, withdraw its approval of the application, and petition the
state engineer for an order canceling the change application.

© The water company may not revoke its approval of the change application or seek
an order canceling the application if the conditions are substantially satisfied.

(10) (a) The shareholder requesting the change shall have a cause of action, including
an award of actual damages incurred, against the water company if the water company
unreasonably:

(i) [unreasonably withholds] denies approval of a requested change;

(ii) imposes [unreasonable] conditions in its approval; or

(iii) withdraws approval of a change application in a manner other than as provided in
Subsection (9).

(b) The action referred to in Subsection (10)(a) shall be referred to mediation by the
court under Title 78B, Chapter 6, Part 2, Alternative Dispute Resolution Act, unless both
parties decline mediation.

© If mediation is declined, the prevailing party to the action shall be entitled to costs
and reasonable attorney fees.

(d) Notwithstanding Title 16, Chapter 4, Share Assessment Act, a shareholder who
prevails in an action under this Subsection (10) may not be assessed by the water company for
payment of a proportionate share of:

(i) the water company's attorney fees and other costs incurred in the action; or

(ii) an award of actual damages the water company is required to pay the prevailing
shareholder.
In connection with the recent reform of the 1981 Water Code in Chile, a document on the meaning and scope of the reform has been produced by Humberto Peña, Director of the General Department of Water (DGA) of Chile and member of the South American Technical Advisory Committee (SMTAC) of the Global Water Partnership (GWP).

Following 13 years of negotiations in the Chilean Congress, the amendment of the Water Code was recently approved by a wide consensus. The amendment is of great importance for Chile, given that the country’s consistent growth in terms of the economy and exports (especially water-intensive products) and the social development witnessed over the past 20 years have resulted in various user sectors increasing their demand for water resources, which were already being used to their limit. Society’s new environmental awareness has also generated increasing water demand for conservation purposes.

The reform was therefore a reflection of the need to review the legal and economic system regulating the use of water resources, with a view to promoting the efficient use of water by private individuals and society as a whole, within a framework of associated environmental protection. The reform process of the Chilean Water Code is also relevant to other countries in the region, given the interest sparked by the radical inclusion of market incentives for water management, which has no precedent in other national legislations.

1981 Water Code

The text that had been in force until now was adopted in 1981 when the authoritarian government regime attempted to adapt legislation to a neoliberal ideological and economic system. Accordingly, the new water legislation was aimed at generating “sound” water use rights, creating markets and reducing the role of the State.

Water legislation provided for the market to play a crucial role in two areas: (i) reallocation of water among private individuals; and (ii) original allocation of water rights. In terms of the first issue, the 1981 Code established that, although water would still be considered national property for public use, the rights to use water would have characteristics of property under civil law and would be the main object of rights, rights in themselves and not accessories to any other rights, and would be freely transferable. With reference to the second aspect, original water use rights would be allocated by the State free of charge, without any priorities, permanently and without any limit on the quantity demanded, to all private individuals that requested them. In addition, users do not have to justify the quantity requested, as the public authority is obliged to grant their request subject to availability (third party rights remain unaffected). In the event of two or more requests for the same water and insufficient availability to grant them all, rights must be allocated through auctions.

The legislation also established that right holders would have no obligation to use the water, on the basis that the market would function by generating an opportunity cost for rights used inadequately, which should provide sufficient incentive. The aim of these amendments was to lay the foundations for a water rights market and to generate incentives for increasing the efficiency of water use.

This method of allocating water resources did not have the expected results, however, as the auction mechanism was hardly ever used in practice, and the allocation of water rights without any limits and restrictions gave rise to various situations that were detrimental to the country, such as the accumulation of water rights for hoarding and speculation, as barriers to entry for competitors in various markets and in order to preclude allocation of water rights for those who really needed them. One example was in the area of water rights for non-consumptive use (hydroelectricity), where 50,000 m³/second were requested, an amount that is out of all proportion given that it could not possibly be put to use during the present century. Another request committed the water resources for an area of 2.5 million hectares, thereby artificially preventing the allocation of water rights for other activities.

Notwithstanding such limitations, there is widespread national consensus regarding the benefits of using the market to reallocate existing water rights and the need to maintain the guiding principle of current water legislation, namely the establishment of property rights over water use rights to provide legal certainty to water-related investments and to enable the market to reallocate water resources. In keeping with this, the draft reform proposed by the Executive was mainly aimed at resolving the obvious distortions generated by the original allocation of water rights, rather than at altering the essential characteristics of water use rights as established by the Code.

The reform process

The Water Code reform was the subject of a long and difficult debate between what were publicly presented as completely opposing views. The origin of the debate lay in the purpose of the reform, which was to strike a balance (in the light of 21st century problems) between issues that were delicate for Chilean society and on which opinions were varied. This included the need to reconcile, in practice: water as a national property for public use with the guarantees of property rights over water use rights; economic incentives and competition with protection of the public interest; and the State’s role in managing a complex resource so crucial to development with the promotion of private initiative and management transparency.

The difficulty in reaching agreement on such issues mainly resided in the production sector’s mistrust and the ideological charge surrounding the government proposals which, beyond the specific reforms, were seen as a threat to private property. Another contributing factor was the widespread lack of familiarity with the specifics of water resources among many opinion leaders, which was often replaced by simplistic attitudes based on general economic principles that do not reflect the concrete reality of water management.

After such a drawn-out process, it seems appropriate to examine the general significance of the adopted reform, particularly in its more controversial aspects, such as the new balance between the social, productive and environmental dimensions of water resources, and the roles assigned to the State and private individuals in relation to water management.

Productive, environmental and social dimensions of water resources in the new legislation

As stated above, the 1981 legislation had the merit of firmly incorporating the economic dimension and market incentives into water resources management. This was acknowledged in the text of the reform, and the Executive did therefore not propose amending the articles relating to the nature of water use rights. On many different occasions, the Government stated that free commercialization of water use rights tends to be an appropriate way of achieving more economically efficient water use and allocation.

The real challenge was therefore to reconcile these production benefits with the social and environmental aspects that were
completely absent from the 1981 Water Code. It was also vital to enhance market incentives in those areas where they were completely applicable but not always fully applied in practice.

The aim was therefore to refine the current system and, while recognizing the latter’s advantages, to ensure that the new legislation would strike a balance in terms of the following:

- Recognition by the Constitutional Court that the establishment of a water use right corresponds to the exercise of a regulated prerogative of the authorities, which may encompass all aspects of common interest associated with water as a resource; and that the rights of private individuals to access all kinds of goods under the private property system can only be enforced once the State has established the property to be appropriated (the water use right).

- Accordingly, as part of the process of establishing new water rights, the President has the authority to protect the public interest by excluding water resources from economic competition when they need to be reserved for public supply in the absence of other means of obtaining water or, in the case of non-consumptive rights, in the event of exceptional circumstances of national interest.

- Similarly, the legislation states that the DGA is obliged to consider environmental aspects in the process of establishing new water rights, especially in terms of determining ecological water flows and protecting sustainable aquifer management.

- Recognition of the social responsibility associated with private ownership of water use rights, which is understandable given that a private individual is being authorized to exclusively use economically and strategically important national public property. A licence fee must therefore be charged for unused water rights (not using water being at odds with a concession’s raison d’être), to act as a deterrent against hoarding and speculation. A licence fee is charged in cases where there are no water abstraction works and will be governed by a table of areas, given that water is scarcer and therefore more expensive in the north of the country.

- It is also obvious that granting private individuals more water than they actually need for their activities compromises the public interest (and much more if the private individual engages in speculation). Rules have therefore been established to limit requests to genuine project needs. This means that all incoming requests will have to include an explanatory note (in a simple predetermined format) for applicants to explain (from certain volumes upwards) how the water will be used. The authorities have the power to limit the amount requested if this does not correspond to the intended use (on the basis of a pre-established table of uses and demands).

- Without prejudice to environmental considerations and the reserving of water resources in accordance with the public interest, the allocation criterion for choosing between various requests will tend to be strictly economic, in practice, given that it is in the country’s interest to allocate scarce water resources to those activities with the highest productivity per cubic metre of water. The reform therefore includes the need to increase levels of competition by increasing the number of cases involving allocation through bidding and improving levels of information and raising the number of participants. Unlike in other countries, there is a general consensus in Chile that it would be unwise to give preference to the requirements of a particular user sector, on the basis that this would encourage inefficiency and fail to signal to users the relative scarcity of the resource.

**Public and private roles**

The reform also provided an opportunity to review whether the provisions of the 1981 Code governing the steps private individuals could theoretically take to protect their interests were realistic, given that experience showed they were unable to implement such measures due to limited access to information and little opportunity to study the complex issues involved. The reform remedies this and establishes various new obligations for the administration in terms of representing the common interest.

As stated earlier, one such example is limiting the water flows granted to private individuals if the amount is unjustified, on the basis that the resource is not rendered worthless by a lack of other interested parties and therefore should not be allocated in limitless quantities. In a similar vein, the administration also has new authority to: directly prevent unauthorized construction of works in water courses, impose restrictions on aquifer exploitation in the interests of sustainability and generate databases of water rights as a way of promoting the creation of an active water market. The newly approved legislation also gives the State new powers in the event of critical situations such as drought.

The legal reforms also seek to strengthen the role of users by increasing the involvement of user organizations in public decisions. One example is users’ participation in identifying water use rights for which licence fees should be charged and in creating a database of existing rights. The new legislation also broadens the scope of activity of private individuals by authorizing the creation of groundwater user organizations and granting legal personality to the country’s many water communities.

In conclusion, now, with a State vision, a sound and stable balance has been achieved between the public interest and the rights of private individuals; between social and productive demands; and between both types of demands and environmental considerations. This balance is an accurate reflection of the development of Chilean society, and specifies realistic roles for the public and private sectors that are in keeping with the functioning of the economic system. In this sense, the reform cannot fail to contribute to the institutional framework of the water sector in terms of social support and governance.

For further information on the reform of the Water Code, visit the website of the DGA at [http://www.dga.cl](http://www.dga.cl), and also that of the Library of the Chilean Congress at [http://sil.congreso.cl/cgi-bin/sil_proyectos.pl?876-09](http://sil.congreso.cl/cgi-bin/sil_proyectos.pl?876-09).

One of the main issues in national debates on reforming the legal framework of the water sector is the institutional design of the administrative system for water management. A series of analyses of water resources administration in the region has concluded that these systems are characterized by an essentially sectoral approach.

In the current conditions of growing water scarcity, rising externalities, increasingly drastic and ruthless competition between users and the resulting interest in demand management, this approach is leading to ever-more disputes and inefficient water use that are mainly a result of the following:

- a lack of objectivity and impartiality, and often absence of technical criteria in the decisions-making process related to water resources; and

- a separation of management functions that does not reflect the physical characteristics of water and its optimum use, thereby making it difficult to achieve an integrated vision of resources.

Many countries of the region are therefore interested in adapting the administrative organization of the water sector to the integrated water resources management approach. The Natural Resources and Infrastructure Division of ECLAC recently
Abstract
In recent decades, Australia has confronted climate change and prolonged drought, creating a new, drier "normal" in Australian hydrology. In response to international initiatives and its own climate change, Australia and its states have changed the laws that apply to water management, to reflect the reality of this drier climate. These changes and the court decisions upholding the changes have shown a strict consideration of achieving environmental objectives first, even if this really changes the community and its economic basis. In response, water practices, in agriculture and urban water use, have had reduced water allocated.

The history of Australian water management has five distinct epochs over the period from 1788 to 2009. These epochs will be identified and the main legal issues will be presented through the lens of several cases. All Australian systems can be called administrative allocations with the transition now to providing volume to preserve the environment. There will be a detailed analysis of the epochs from 1992 onwards, where the concept of Ecologically Sustainable Development (ESD) has been placed in the water management laws of each State and recently in a new Federal Act – the Water Act 2007. These create justiciable ESD protocols. The paper will also foreshadow future directions in the juridification of these protocols. There will be several visual presentations and illustrations of the political processes at work to achieve this quasi-centralism, as well as discussion of the potential lessons for the United States.

I. The Existing Epochs
The five “epochs” in the evolution of Australian water law began when England established the colony in 1788. 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. This created legacy of a damaged environment in many regions.\(^1\)

The second phase commenced with Australian Federation in 1901, but did little to alter the colonies' (now the States) power over water. The States did create administrative allocation systems for surface and groundwater repealing the riparian doctrine. In addition, the interpretation of the Constitution by the courts and conditional federal grants to the States by the Commonwealth (i.e., 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 expanded interpretation of Commonwealth legislative power by the Courts, allowing the Commonwealth to legislate in some areas of water management. There was also 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) and competition into water suppliers and also 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 State-level court decisions enforcing the 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 management 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” in the Murray Darling Basin. Further, the Commonwealth gave federal funding directly to 56 State-founded regional bodies, and these bodies agreed to regional delivery of federal initiatives. These recent reforms appear to affirm the general drift towards centralism in water regulation in Australia. The next few years will confirm whether the reforms have successfully created a new federal legal architecture which will amend the entire notion of Australian federalism.

The future phases will involve implementation of the Water Act, and the State-based plans will start to come up for accreditation after 2011. In the meantime, there is litigation between the States on statewide targets for not transferring water out of the regions in the State. This is under other legislation, the Trade Practices Act, and it is between the states of South Australia and Victoria. The outcomes of this will become clearer in early 2010.

II. Introduction of the Legal Concept of ESD Since 1992

There is now a history of seventeen years in the use of the term ESD in the object clause of over 100 State water and other laws.\(^2\) This was heavily influenced by the 1987 United

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\(^2\) The Intergovernmental Agreement on the Environment in 1992, where ESD was used, was a process that started in 1990. It used specific industry sectors and working groups to assess the problems and possibilities in moving toward a development path that was economically viable and environmentally sustainable. This resulted in an intergovernmental agreement. See Hamilton M and S Throsby, The ESD Process evaluating a policy experiment (Academy of social sciences and ANU, 1997). Both the Intergovernmental Agreement and the National Strategy acknowledge that while the Australian Local Government Association endorsed the ESD policy and promised that it would do all within its power to ensure compliance, the Federal Government could not bind local government authorities to observe its terms. Nevertheless, it has been held by the Land and Environment Court in NSW [en banc] that a proper exercise of the powers of local government authorities would mean that they (and the Court on a merits appeal) would apply the ESD policy unless there were cogent reasons to depart from it: BGP Properties
Nations publication of *Our Common Future*\(^3\) and its definition of sustainable development as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. This report was addressed to the international community generally, international organisations and national governments.

The Council of Australian Governments (COAG) reforms of 1994 created a framework for reform of the water industry and other government-owned enterprises. In relation to water, the framework stated its intention to play a critical role in setting the scene for broad changes in direction and approach that governments will take, so as to ensure that Australia's future development is ecologically sustainable. The COAG process agreed that the future development of all relevant policies and programs, particularly those which are national in character\(^4\), should take place within the framework of the ESD strategy and the Intergovernmental Agreement on the Environment, which came into effect on 1 May 1992. The Council encouraged business, unions and community groups to use the ESD Strategy as a basis for actions which contribute to the pursuit of Australia's national goal for ESD.\(^5\)

A. The ESD Principles

This early work in Australia at first produced a nine-point (then eventually a seven-point) definition and this was presented as a non-binding intergovernmental agreement signed by the Federal and State governments and the local government association (LGA). This was meant to guide all legislation, and the States did include aspects of these agreements in their water laws after the reform processes of 1994.\(^6\) The seven guiding principles were:

1) decision making processes should effectively integrate both long and short-term economic, environmental, social and equity considerations;

2) 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;

3) the global dimension of environmental impacts of actions and policies should be recognised and considered;

4) the need to develop a strong, growing and diversified economy which can enhance the capacity for environmental protection should be recognised;

5) the need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised;

6) cost-effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms; and

7) decisions and actions should provide for broad community involvement on issues which affect them.

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\(^3\) UN World Commission on environment and development the Brundtland Commission 1987.

\(^4\) It has been hard to achieve "the nation for a continent and continent for a nation" dream of Edmund Barton, as environmental management is a state matter. See Thomson 2002 The Founding Father: Edmund Barton and the Australian Constitution, Federal Law Review 15

\(^5\) http://www.coag.gov.au/coag_meeting_outcomes/1992-12-07/index.cfm#environment In relation to water resources policy, the Council of Australian governments reported in 1992: "The Council noted that the issue of appropriate pricing and distribution of water as a resource has been given substantial attention in recent resource policy development at both Commonwealth and State/Territory level. This reflects the intrinsic economic and environmental importance of the issues, and their national nature, which impact on and are of concern to all levels of Government."

These guiding principles and core objectives were to be considered as a package with no objective or principle predominating over the others. A balanced approach was required that took into account all these objectives and principles to pursue the goal of ESD.\(^7\)

There are several examples in the States. In New South Wales (NSW), for instance, the objects of the EPA act included encouragement of ESD and protection of the environment.\(^8\) ESD is defined and includes the precautionary principle and the intergenerational equity principle. One purpose of this Act was the assessment of the impacts of development on the environment. This is the integration principle in operational form. The environment is defined broadly and non-exhaustively to include all aspects of the surroundings of humans whether affecting any human as an individual or in his or her social surroundings.

**B. Case Study: Sustainable Development in Water Allocation**

This section outlines the background to the implementation of ESD in the context of State-based water plans and provides a recent case study from NSW, where the Minister for Water Management created a water plan which altered the way water was allocated to over 1,000 farmers in the Murrumbidgee River Basin. To achieve sustainability, the volume of water was reduced to 52% of the previous level. The plan used one method to reduce, but the Minister altered the method to achieve the reduction. The ultimate method also expressed the allocation as a share of the consumptive pool. This is a Commonwealth requirement under the 2004 reforms and one which has disrupted many practices of farmers who were accustomed to volumetric allocations or area-based allocations of water.

By way of background, the introduction of ESD has been litigated and several judges in the many Australian states have upheld the decision-making processes of Ministers who have:

- reduced water allocations under plans,\(^9\)
- made it mandatory to hold a licence to store water in a dam,
- restricted the amount held in a dam after 30 years of unimpeded use,\(^10\)
- capped water use in a region and
- strictly enforced time periods set out in water plans for making applications for water.\(^12\)

These were all done under acts which required ESD to be achieved and, in several cases, this decimated the number of growers and hence a regional industry. An example is almonds in the Willunga Basin in South Australia.\(^13\) Some of the decisions to reduce allocation under plans in the Murray Darling region are now also being influenced by the powers under the Commonwealth Water Act 2007. This new act has power to accredit or not accredit, adopt or revise water plans for regions of the States.\(^14\)

Water Plans have various names in the States, but their purpose is to bring the allocation of water in the region to sustainable levels. Several Acts create them and provide for this objective. The detail of the Acts is important but cannot be covered in this paper except for the case study on the New South Wales Water Management Act in the Harvey case.

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\(^7\) [http://jnevill.customer.netspace.net.au/Extract_NSESD_principles.htm](http://jnevill.customer.netspace.net.au/Extract_NSESD_principles.htm)

\(^8\) Minister for Planning v Walker [2008] NSWCA 224 (24 September 2008)

\(^9\) Rowe v Lindner and Ors [2007] SASC 189

\(^10\) Ashworth v Victoria [2003] VSC 194

\(^11\) Bates v Minister for Environment and Conservation 2006 SAERD 24

\(^12\) Michelmore v Minister for Environment and Conservation 2004 SASC 415

\(^13\) Elandes Nominees P/L v Minister for Water Resources No ERD-00-1291 [2002] SAERDC 130 (19 December 2002)

\(^14\) See Harvey case later

\(^15\) But see McKay and Marsden above
In Harvey & Anor v Minister Administering the Water Management Act 2000,16 there was a water allocation plan made under the Water Management Act 2000 (WMA NSW)17 which had this formulation of the ESD requirements in the objects of the Act (s 3) to “provide for the sustainable and integrated management of the water sources of the State for the benefit of both present and future generations.” Section 392 of the WMA NSW re-established the State’s rights to the control, use and flow of all waters in rivers, lakes and aquifers, conserved by any works that are under the control or management of the Minister, and occurring naturally on or below the surface of the ground.

The region was the Murrumbidgee River, which is at the heart of the most irrigated and productive land in the nation. The old Act, the Water Act 1912, had an explicit policy of over-use but this fell out of favour in the light of ESD principles in 1992. The judge described the evolution of policy in NSW in these terms:

Under the regime of the Water Act 1912 entitlements under licences within the lower Murrumbidgee area reached 512,409ML per year (according to the Murrumbidgee Groundwater Assistance Model developed by the relevant NSW Government Department). This resulted from the policy of controlled depletion of groundwater directed at addressing salinity and maximising regional economic benefits from groundwater. By the mid 1990s concerns emerged about the environmental impacts of groundwater depletion and the long-term viability of groundwater resources. In August 1997, the NSW Government released a policy document directed towards achieving sustainable use of groundwater. This led to a moratorium being placed on the grant of new licences within the area on 10 September 1997. In April 1998 the Murrumbidgee groundwater system was identified as at risk by reason of resource over-allocation. By August 1999 the moratorium imposed in 1997 became an embargo on new licence applications.18

Hence, the new scheme under the WMA19 was designed to ensure sustainability and the relevant government department decided, after much scientific work, to reduce the allocations by 52% across the board based on entitlements under the old act. The reductions were advertised to the community and initially an across the board reduction was approved by the Minister. This type of method had been used in South Australia20 and in other places. Eventually, and with considerable reference to the desires of the then-federal Minister,21 the NSW Minister made a new plan which included reference in the reduction formula to be based on historical extractions of groundwater. The case concerned complaints by Harvey and Tubbo that the amendment order completely changed the basis for the allocation of reduced entitlements to licence holders. The judge had to decide on that issue and issues of procedural fairness and the public interest. Here the two plaintiffs would lose more water if historical factors were considered rather than the across the board reduction in allocations.22

The Judge found that the breadth of the Act and the objects above and principles below did authorise such a change in the public interest and that, in such cases, to allow individuals to

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16 Harvey & Anor v Minister Administering the Water Management Act 2000; Tubbo Pty Ltd & Ors v Minister Administering the Water Management Act 2000 [2008] NSWLEC 165 (18 June 2008), New South Wales Land and Environment Court
17 commenced on 1 January 2001
18 Harvey & Anor v Minister Administering the Water Management Act 2000; Tubbo Pty Ltd & Ors v Minister Administering the Water Management Act 2000 [2008] NSWLEC 165 (18 June 2008), New South Wales Land and Environment Court, per Jagot J
19 and previous legislation
20 Flinders Nominees P/L v Minister for Water Resources No ERD-00-1291 [2002] SAERDC 130 (19 December 2002)
21 Minister Turnbull under the Howard government
22 Harvey applicants forwarded an email to the attention of the Minister protesting the unfairness of the history of extraction policy and urging a return to the across-the-board cuts policy.
be heard would create an *infinite regression* of individual cases all of which could affect water allocations:

> Every time the Minister accepted one person's submission it would be potentially adverse to every other person with an interest in the same water source because the interests are interlinked and potentially competing. This "would be unworkable, because it would lead to an infinite regression of counter-disputation." It would also be incapable of achieving the statutory objective of "the sustainable and integrated management of the water sources of the State for the benefit of both present and future generations".

The Minister was obliged to achieve the objects of the act, which is ESD, and to promote the Water Management Principles in section 5 and to give effect to the State Water Management Outcomes Plan (the SWMOP) made under section 6 (see section 9). The Water Management Principles are in section 5:

(2) Generally:

(a) water sources, floodplains and dependent ecosystems (including groundwater and wetlands) should be protected and restored and, where possible, land should not be degraded, and

(b) habitats, animals and plants that benefit from water or are potentially affected by managed activities should be protected and (in the case of habitats) restored, and

(c) the water quality of all water sources should be protected and, wherever possible, enhanced, and

(d) the cumulative impacts of water management licences and approvals and other activities on water sources and their dependent ecosystems, should be considered and minimised, and

(e) geographical and other features of indigenous significance should be protected, and

(f) geographical and other features of major cultural, heritage or spiritual significance should be protected, and

(g) the social and economic benefits to the community should be maximised, and

(h) the principles of adaptive management should be applied, which should be responsive to monitoring and improvements in understanding of ecological water requirements.

(3) In relation to water sharing:

(a) sharing of water from a water source must protect the water source and its dependent ecosystems, and

(b) sharing of water from a water source must protect basic landholder rights, and

(c) sharing or extraction of water under any other right must not prejudice the principles set out in paragraphs (a) and (b).

(4) In relation to water use:

(a) water use should avoid or minimise land degradation, including soil erosion, compaction, geomorphic instability, contamination, acidity, water logging, decline of native vegetation or, where appropriate, salinity and, where possible, land should be rehabilitated, and

(b) water use should be consistent with the maintenance of productivity of land in the long term and should maximise the social and economic benefits to the community, and

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23 Minister for Local Government v South Sydney City Council (2002) 55 NSWLR 381

24 In Harvey per J
(c) the impacts of water use on other water users should be avoided or minimised.

The main instrument for achieving all of this is the Water Management Plan which must be consistent with various instruments of policy\(^{25}\) and have due regard to the socio-economic impacts of the proposals.\(^{26}\) Such Plans which provide for water sharing must have these core provisions:\(^{27}\)

- the establishment of environmental water rules,
- the identification of requirements for water within the area or from the water source to satisfy basic landholder rights,
- the identification of requirements for water for extraction under access licences,
- the establishment of access licence-dealing rules for the area or water source, and
- the establishment of a bulk access regime for the extraction of water under access licences, having regard to these rules and requirements.

The user now gets an access licence and a share component to a specified share in a water source (the share component)\(^{28}\) and a right to take water as specified (the extraction component).

In the end, the judge found that the plan was still a plan and, despite the effect of it being altered by the change in formula for reducing the allocations, its role as plan had not been extinguished. The effect and operation of the plan had been altered by the amendment, but the alteration was not beyond the power of amendment.

The next issue addressed was the public interest as the Minister had power to amend a plan for this reason. This was noted to be a broad concept and, the judge concluded this would include consideration of the socio-economic impact of proposals (as contemplated by s 18). However, this does not, in the words of the judge:

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\text{require the Minister to have regard to submissions about the particular impact of the plan on the financial position of individuals. Consistent with the respondent's submissions, the level of generality or specificity at which the Minister approaches the socio-economic impacts of proposals in a plan, as part of the public interest, is not prescribed by the statute and thus is a matter for the Minister (Foster v Minister for Customs and Justice [2000] HCA 38; (2000) 200 CLR 442 at [23] and O'Sullivan v Farrer [1989] HCA 61; (1989) 168 CLR 210 at 216). The expression "the public interest" has been described as particularly apt to vest a decision-maker with a wide power (Deloitte Touche Tohmatsu v Australian Securities Commission (1995) 54 FCR 562 at 579), calling up the interests of the public generally rather than the interests of any individual (Director of Public Prosecutions v Smith [1991] 1 VR 63 at 76 citing Sinclair v Mining Warden at Maryborough [1975] HCA 17; (1975) 132 CLR 473 at 480).}
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Harvey said that it was in the public interest for the Minister to consider the socio economic impacts of the new regime to reduce water allocations at the level of the individual. This was not found to be so, on the facts.

\(^{25}\) SWMOP plan is the outcome of political processes at a very high level. For example, the State Water Management Outcomes Plan sets the over-arching policy context, targets and strategic outcomes for the management of the State’s water sources having regard to the broadest possible considerations of environmental, social and economic issues, as well as inter-governmental agreements and international agreements to which the government of the Commonwealth is a party (s 6(2) and (3)). Per Jagot J
\(^{26}\) Section 18 of the WMA 2000
\(^{27}\) Section s 20(1)) of the WMA 2000
\(^{28}\) Section 56 of the WMA 2000
The other issue addressed in the case is that of justiciability. There are precedents in Australia that suggest that, where a Minister has the discretion in a particular case by reference to the interests of the general public, then in such political field questions, the discretion may be exercised free of procedural constraints. There were High Court and NSW decisions in support of this proposition, although the High Court one is more likely to allow procedural fairness to revive.

The case illustrates the practical issues with implementing a water allocation plan which changes water allocation rules. The first method chosen was across the board and whilst this did achieve an allocation of water within sustainable limits, it was politically unpopular. Hence, the Minister in the public interest changed the method and this caused different winners and losers. The case means that the macro public interest will outweigh individual considerations.

In many of the cases, the issue of the process has been important and the role of the court to review the process, not the merits, of the decision has been a crucial distinction.

C. Freshwater Allocation and ESD: Water Act 2007

In the Water Act 2007, the main operating plan will be the Basin plan and the federal Minister will have power to accredit State plans in the region and these will make up a Basin plan.

The Water Act 2007 was drafted by Malcolm Turnbull based on the 2007 National Plan for Water security, outlined on 25 January 2007. With the change in government, it was amended by Minister Wong (Minister for Climate Change and Water) in 2008 and referred to a new plan called the Water for the Future Plan, which was announced on 29 April 2008. This new plan introduced the concept of critical human water needs and also gives more power to the Murray Darling Basin Authority. On 15 December 2008, the Water Amendment Act 2008 commenced.

Like the original act, the Water Amendment Act 2008 is based on a combination of Commonwealth constitutional powers and a referral of certain powers from the Basin States to the Commonwealth under Section 51(37). The Act passed through the Commonwealth Parliament following the passage of referring legislation through the Basin states - Queensland, New South Wales, Victoria and South Australia. This occurred in late 2008.

In the Water Act 2007, the ESD definition has been reduced in scope from the previous formulation above, and it is used in relation to the creation of the Basin plan. Only the first two principles are in common with the original seven, but the integration principle still applies.

Thus, the following principles are principles of ecologically sustainable development as used in the Water Act:

1) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;
2) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;
3) the principle of inter-generational equity—that the present generation should ensure that the health, biodiversity and productivity of the environment is maintained or enhanced for the benefit of future generations;

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30 Minister for Local Government v South Sydney City Council (2002) 55 NSWLR 381 at [18].
34 The Water Act 2007 defines "measures" to include also strategies, plans and programs.
4) the conservation of biodiversity and ecological integrity should be a fundamental consideration in decision-making;  
5) improved valuation, pricing and incentive mechanisms should be promoted.

The new ESD section does not emphasise community engagement nor the trade aspect of resource use nor international agreements. However the last are covered in the objects clause of the Act. The last significant change to the past is that the Water Act has the object to manage water in the “National Interest” and to implement international agreements. Both of these will create enormous changes. The national interest will obliterate the State-based introspection that has characterised water management in Australia, and will lead to decisions to not accredit State plans on the grounds that the plan does not consider the interests of users in another State.

The question still is, however, what do the set of 5 principles mean as a whole and do these create a determinate set of rules?

It will be the judiciary that will need to make these words determinate. Determinacy is a principal legal problem defined as judicial manageable from the procedural or adjudicative perspective.36 The key issue that will arise will concern the tensions inherent in reviewing the exercise of Commonwealth Ministerial discretions that are reposed in the act. There is of course the tension as discussed above in any judicial review of decisions made by Ministers.37

III. Outcomes of Legal Changes

These fundamental changes to federal, state and regional legal regimes for water have resulted in fundamental changes in water use patterns, particularly in the Murray Darling Basin. These changes have affected both farmers and city residents, and have included:

- Virtual elimination of rice cultivation
- Reductions of water allocations to 15% of average annual allocations due to drought and temporary sales of some reduced allocations these between farmers limited use of permanent water market
- Greater reliance on recycled water for agriculture and non potable uses in urban areas such as parkland watering
- The movement in South Australia to require forestry to obtain a water allocation and
- The allocation of drought risk to farmers through the share of the consumptive pool
- A national approach to water data collection and also to water allocations in the Murray Darling Basin
- The use of levies in some states to fund natural resources management in some regions under water plans. These are placed on the owner of land as a percentage of land value and cannot be placed on water used, because this would infringe the excise power.

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35 Biodiversity means the variability among living organisms from all sources (including terrestrial, marine and aquatic ecosystems and the ecological complexes of which they are a part) and includes: (a) diversity within species and between species; and (b) diversity of ecosystems
36 Orakhalsui 2008 Interpretation of Acts and Rules in Public International Law. Oxford Monographs in International Law
37 Brennan J’s statement of principle in Peko-Wallsend Minister for Aboriginal Affairs v. Peko-Wallsend Ltd. [1986] FCA 40; (1986) 162 CLR 24 F.C. 86/040 at 55 that “The Court has no jurisdiction to visit the exercise of a statutory power with invalidity for failure to have regard to a particular matter unless some statute expressly or by implication requires the repository of the power to have regard to that matter or to matters of that kind as a condition of exercising the power...” Gieson CJ and McHugh J then observed at [24] that “The level of particularity with which a matter is identified for the purpose of applying this principle may be significant. A related question arises where the failure complained of is not a complete failure to address a certain subject, but a failure to make some inquiry about facts said to be relevant to that subject.”
Farmers and city residents have largely accepted these changes in law and practice because they have had no choice. There has been some litigation by farmers as discussed above but all judges have upheld the water plan after reviewing the processes. There has been some criticism of the processes on occasions. This has resulted in more comprehensive public consultation processes. The decisions at State level will be joined by one at the federal level in 2010 and that will provide more guidance to the States in water allocation planning.

Urban residents have endured water price increases with more proposed in order to purchase new equipment such as desalination plants of up to 21% in one year. Urban residents (who as a total only use 10% of water) have been under severe water restrictions for several years which has allowed garden watering for only one or two days per week and then for limited times. This has been generally well accepted and has promoted drought tolerant native gardens.

IV. Summary and Conclusions
In relation to water, since 1994, the concept of ESD has been strictly enforced by State judges who have upheld reductions in water allocations even where this has completely changed the social structure. Since 2008, the processes and considerations judges must weigh are now the national interest and international agreements at least for the Murray darling region. In other parts of the country the State rules only apply.

The future development of the justiciability of ESD in various state water plans are likely to create calls for the national interest to indeed apply to all water management decisions under State laws and hence an extension of the operation of the Water Act. It is legally possible to apply the Water Act 2007 to the whole nation creating the “a nation for a continent and a continent for a nation” as dreamed by Edmund Barton in 1890.

V. Lessons for the United States
The water management systems in the US are complex, and one of the two types – the prior appropriation doctrine – has as no parallel in Australia. Our system is one which I have labelled “administrative allocation.” The riparian doctrine was replaced very early in the settlement, and the administrative system was also applied to groundwater by the States. This is administered by water meters on every pump and requirements to provide data on use. The present administrative system now requires ESD to be considered in regional water plans and judges have upheld huge reductions in volumes. This system is really an ESD protocol, administered in every State and for the parts of the Murray Darling Basin. The Commonwealth now has a power to review these plans in the national interest.

The water planning process is used in California to project water supply and demand but Gleick states that “the projections have never included a vision of a truly water efficient future, where California’s environmental, economic and social water needs are met with smart technology, strong management and appropriate rates and incentives.”

The Australian processes outlined above have taken a strong management approach and relied on judges to resolve the disputes. Here there are parallels to the US in the strength of reliance on the legal system to administer the conflict resolution processes. The choices in Australia have been against the individual interest in favour of broader public interest as set out in regional water plans, with huge real impact. This process seems to be understood now and accepted, although there has been an increase in water theft in all parts of Australia. There is a tension in Australia as to the scope of judicial review and justiciability of issues. The political

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38 See The Advertiser Adelaide SA Dec 4th 2009 Water Bills Soar You Use You Pay Daniel Wills
40 Gleick P, Cooley H and D Groves 2005 California Water 2020 an efficient future, Pacific Institute
questions doctrine and its resolution in the US and Australia is an interesting parallel between the two federations. The recent *Massachusetts v EPA* decision\(^{41}\) provides some interesting dicta on the EPA's refusal to comply with a clear statutory command and this landmark decision is still being evaluated for all its implications in the US. The radical approaches of Australia's High Court to such issues may be a lesson for the USA.

The ESD requirement in law has driven transitions in behaviour in all sectors of the economy, and the national interest power to review State water plans in the Water Act will drive further changes. The inclusion of the long-term future interests in current plans has driven urban Australians to reduce water consumption, and growers to change plantings and for some to leave farming altogether. Many had adopted water efficient technologies already but this has spurred others to do so. Hence, overall, the lesson for the US is that, despite huge impacts, the farming and the urban communities have accepted the need to reinstate the public interest in water allocation decisions, and this has led to radical changes to the several private interests and also to the institutions.

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\(^{41}\) 549 U.S. 497 (2007)