Chapter Two

Water Policy Initiatives

Background to water policy

2.1 Under the Constitution, the management of water resources in Australia is a state responsibility. However, the river on which south eastern Australia depends for most of its agriculture flows through three states and as early as 1915, the Commonwealth became involved as a facilitator in the negotiations and signing of the River Murray Waters Agreement between NSW, Victoria, South Australia and the Commonwealth. That agreement evolved into the Murray-Darling Basin Agreement signed by the same parties first in 1987 and again (as a new Agreement) in 1992. Queensland joined the original signatories in 1996 and the Australian Capital Territory joined in 1998.

2.2 The 1992 Agreement established the Murray-Darling Basin Ministerial Council and the Murray-Darling Basin Commission (which replaced the 1917 River Murray Commission). The Commission advises the Ministerial Council and implements its decisions which under the Agreement aim to promote and coordinate effective planning and management for the equitable, efficient and sustainable use of the water, land and other environmental resources of the Murray-Darling.

2.3 Greater environmental awareness in the 1980's led to a recognition that a national approach to environmental problems was called for. The Council of Australian Governments (COAG), comprising the Commonwealth and all states and territories became the key policy forum on natural resource issues, including the management of water. In 1992, COAG adopted the National Strategy for Ecologically Sustainable Development which established natural resource development and management on a national basis.

2.4 In 1994, COAG announced its water reform agenda which included the National Water Quality Strategy. A joint Commonwealth, states and territories initiative, the strategy consists of 21 guideline documents for managing key elements of the water cycle. By 1995, the Murray-Darling Basin Ministerial Council had become sufficiently concerned about the pace of development along the Murray, and the possible environmental impact on many areas downstream of the river, to consider capping diversions from the basin's rivers at 1994 levels. Special conditions were set for South Australia, and since Queensland had not yet signed the Agreement, a cap for Queensland was left for a later decision.

The National Water Initiative

2.5 The National Water Initiative (NWI) was signed by the Commonwealth and all states and territories (except Western Australia and Tasmania who signed

later) on 25 June 2004. It built on the previous COAG's framework for water reform that had been put in place since 1994. The NWI represents the Australian Government's and state and territory governments' shared commitment to water reform. The National Water Commission, an independent statutory body in the Prime Minister's portfolio was established to drive the national water reform agenda and to provide advice to COAG on national water issues.

2.6 The principal goals of the NWI are to increase the productivity and efficiency of Australia's water use for the benefit of urban and rural users and to ensure the health of river and groundwater systems. The signatories also agreed to work towards returning all water systems to environmentally sustainable levels of extraction[1] because it was recognised at the start of the initiative that most systems were over allocated and that it was imperative to address that problem.

2.7 The Australian Government allocated $2 billion to the *Australian Government Water Fund* to invest in water infrastructure, improved water management, and better practices in order to improve Australia's water efficiency and achieve environmental outcomes. From the *Water Fund*, a total of $200 million over five years has been allocated to the *Raising National Water Standards Programme* which aims to advance the implementation of the National Water Initiative through:

- improving the capacity to monitor, evaluate and report on water resources at the national, regional and catchment level;
- improving the knowledge, information and skills needed to better manage our water resources, and
- enhancing innovation for rural and urban water use efficiency.

2.8 The Australian Government's also allocated $1.6 billion to the *Water Smart Australia Programme* with the aim of accelerating the development and uptake of smart technologies and practices in water use across Australia. The Programme is funded over five years until 2010. Another programme, the *Community Water Grants Programme* will provide grants of up to $250 000 to communities to promote the wise use of water.

2.9 The National Water Commission website states that: "The overall objective of the NWI is to achieve a nationally compatible market, regulatory and planning based system of managing surface and groundwater resources for rural and urban use that optimises economic, social and environmental outcomes. At the highest level, implementation of the NWI aims to achieve:

- clear and nationally-compatible characteristics for secure *water access entitlements;*
- transparent, statutory-based water planning;

1 *Intergovernmental Agreement on a National Water Initiative*, 25 June 2004, p. 1.

- statutory provision *for environmental and other public benefit outcomes*, and improved environmental management practices;
- the return of all currently over-allocated or overused systems to *environmentally-sustainable levels of extraction;*
- progressive removal of barriers to trade in water and meeting other requirements to facilitate the broadening and deepening of the water market, with an open trading market to be in place;
- clarity around the assignment of risk arising from future changes in the availability of water for the *consumptive pool;*
- water accounting which is able to meet the information needs of different water systems in respect to planning, monitoring, trading, environmental management and on-farm management;
- policy settings which facilitate water use efficiency and innovation in urban and rural areas;
- an assessment of future adjustment issues that may impact on water users and communities; and
- recognition of the connectivity between surface and groundwater resources and connected systems managed as a single resource."[2]

2.10 While the committee recognises the complexity of the task facing the National Water Commission, the Murray Darling Basin Commission and the government bureaucracies involved, the committee has been concerned for some time at the slow pace of implementation of the NWI objectives.

The need for better water resources planning

2.11 The National Water Commission released its assessment of state and territory performances in the area of water reform in June 2006. The assessment found that all jurisdictions had made slower than anticipated progress in the area of water resources planning and management. The committee notes that NSW has continued to be a poor performer in the area of water planning, in spite of the Commission having identified specific concerns in the past for it to address. As the imposition of past penalties has had no effect on improving NSW's performance, it is doubtful whether the new suspended penalties will prove more effective. WA, a relative newcomer to the National Water Initiative, was also penalised for slow progress and for not completing its overarching planning framework.

2.12 The Queensland Farmers Federation (QFF) expressed frustration at the slow progress of water resource planning in Queensland and expressed the view that:

2 Website, National Water Commission, p. 2, http://www.nwc.gov.au/nwi/index.cfm#overview

> the development of water markets and trading in Queensland will be constrained for at least another 5 years by the ongoing program of reform implementation and a number of limitations on the effective functioning of trading markets in local areas.[3]

2.13 QFF called for improvements to water resource accounting systems and metering as an essential step towards better planning pointing out that because of lack of monitoring and lack of adequate data, Water Resources Plans currently being developed may not be contributing to sustainable practices on farms.[4]

2.14 The committee urges all states and territories to give higher priority to water resources planning and management. The lack of planning will hinder the development of a robust water trading market. The severity of the current drought provides a strong reason for taking into account the known risks such as drought, climate variability, changes to the management of irrigation water, afforestation, groundwater extraction and the impact of bushfires and adopting a better risk assignment framework within the NWI implementation plans as advocated by the National Water Commission.

Recommendation 1

2.15 The committee recommends that the signatories to the National Water Initiative (NWI) adopt a better risk assignment framework within the NWI implementation plans and speed up the establishment of a publicly-accessible nationally compatible register of water entitlements.

2.16 Evidence to the committee's inquiry pointed out that a major impediment to good planning was the lack of reliable data about water flows in catchment areas, rivers and their associated floodplains and about groundwater resources. The committee will return to this later in this chapter.

Water Property Titles

2.17 Australia does not have a single definition of a water property right in use across the continent in the way that the Torrens Title defines the right to land ownership. The Australian Spatial Information Business Association (ASIBA), a prime mover in getting the issue of a water property right on the national political agenda, was critical of the states' failure to develop uniform property rights:

> The states and territories have developed *ad hoc* property rights and systems that bear little resemblance to the cohesive national model that the National Water Initiative originally intended.[5]

---

3 *Submission* 34, Queensland Farmers Federation, p.2.

4 *Submission* 34, Queensland Farmers Federation, p.4.

5 *Submission* 36, The Australian Spatial Information Business Association, p. 1.

2.18 The Australian Property Institute was equally critical of what it saw as the reluctance of state agencies to adopt a nationally consistent system of defining water property titles. The Institute called for the establishment of a verifiable national database to provide the public and the banks with the level of confidence needed to ensure secure trading.[6]

2.19 Not only does each state and territory have its own system of water rights but matters are made more difficult by the fact that different terminology is used in different states to describe those rights. The CSIRO pointed to difficulties caused by the fact that across Australia, the words 'allocation' and 'entitlement' have different meanings.

2.20 In some states, the word allocation is used to define an entitlement while in others it is used to define both entitlements and allocations.[7] The National Water Initiative defines 'water access entitlement' as:

> a perpetual or ongoing entitlement to exclusive access to a share of water from a specified consumptive pool as defined in the relevant water plan.

and 'water allocation' as:

> the specific volume of water allocated to water access entitlements in a given season defined according to rules established in the relevant water plan.[8]

2.21 In its submission, the CSIRO pointed out that one of its researchers had identified no less than 438 types of regulated surface water entitlements in the three south-eastern states through which the Murray River flows.[9] The same research has pointed to the possibility of having anything between 14 and 89 types of water licences in New South Wales alone.[10]

2.22 Professor Michael Young told the Committee that "in an idealised world you need no more than two access entitlements per system":[11]

> A highly reliable entitlement that in all but the most adverse of conditions delivers the same quantity of water from year to year; and

---

6 *Submission* 37, The Australian Property Institute, p. 2.

7 *Rural Water Use and the Environment: The Role of Market Mechanisms*, Productivity Commission Research Project, CSIRO Submission, February 2006, p. 3, (Tabled Document, 7 March 2006).

8 *Intergovernmental Agreement on a National Water Initiative*, 25 June 2004, Schedule B(i), p. 30.

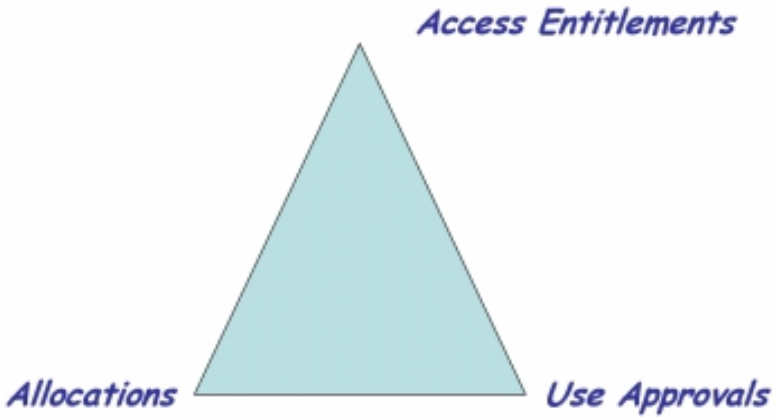
9 *Submission 40*, CSIRO, p. 8.

10 Professor Michael Young, Allocation and coordination of water resources, Towards a national water policy framework: vision to implementation, Conference Proceedings 2003, United Nations Association of Victoria, p.10.

11 Professor Michael Young, CSIRO, *Committee Hansard*, 7 March 2006, p. 44**.**

> An entitlement whose allocations vary from year to year within a risk management and predictability framework based on detailed water budgets and climate predictions.[12]

2.23 In its submission, CSIRO explained how a more efficient and equitable management of water access entitlements over time could be achieved through unbundling water titles into at least three different components as set out below:



Framework for the definition of opportunities to hold, manage and use water

2.24 CSIRO's submission stated that under the framework it was proposing, "water access entitlements would be used to manage equity issues in water allocations; associated low cost trading arrangements would be used to ensure that water is used efficiently; and use approvals would be used to manage the impacts on the environment and on adjoining land holders."[13]

2.25 There is no doubt that a simplified system of entitlements will facilitate trade, but the committee is aware that the CSIRO itself stated in its submission that the costs of rationalisation may well outweigh the potential benefits.[14]

2.26 Like the CSIRO, ABARE sounded a warning note on the issue of taking apart the existing systems before moving forward. While supportive of the 'unbundling' of water rights ("making explicit the rights that are implicit in the original entitlement"), ABARE pointed out that "managers should consider whether completely defining a property right is justified" since "the costs of establishing, administering and enforcing unbundled rights might be prohibitive".[15]The committee notes that progress is being made despite the

---

12 *Rural Water Use and the Environment: The Role of Market Mechanisms*, Productivity Commission Research Project, CSIRO Submission, February 2006, p. 5, (Tabled Document, 7 March 2006).

13 *Submission 40*, CSIRO, p. 5.

14 *Submission 40*, CSIRO, p. 8.

15 *Submission 12*, ABARE, p.4.

difficulties and the costs, with Victoria taking the lead on the matter of unbundling:

> Many states have made progress in separating the water rights from land holdings. In Victoria, for example, plans have been made to unbundle rights into water shares, delivery shares and water use licences by mid 2007.[16]

2.27 The committee's view is that consistent rules across the Murray Darling Basin in relation to water trading would greatly assist the establishment of a more robust trading system. While it may not be feasible in the short term to achieve the ideal of two types of water access entitlement, the committee urges all the agencies involved to work towards simplifying the system with a view to the eventual adoption of a national approach to water property rights.

2.28 The committee also believes that uniform terminology in relation to water property rights should be adopted across all jurisdictions as a matter of urgency. Only then will those who wish to engage in interstate water trading, and the Australian public, have the confidence that at least the key terms used in water trading negotiations and documents have a single definition, and one that is accepted nationally.

Recommendation 2

2.29 The committee recommends the adoption of standardised terminology and a simplified, nationally consistent approach to water property entitlements.

2.30 A national approach will also facilitate the setting up of compatible water registers by the states. The National Water Commission recognises the need for making water entitlements more secure by registering water entitlements on publicly-accessible and reliable water registers and told the committee that:

> The NWC for the NRM Ministerial Council NWI Committee developed a suite of shared characteristics for compatibility of registers to be implemented by states. The NWC is currently convening an Industry Contact Group to explore options for ensuring that registers of individuals entitlements within a bulk irrigation entitlement held by an irrigation entity are compatible with state-based registers.[17]

2.31 The committee welcomes this initiative as a first step towards the establishment of a national water property right database. A single, reliable source of information about water property rights will give confidence to those engaged in water trading.

---

16 As above, p.4

17 *Submission 39a*, National Water Commission, pp. 6-7.

Water Trading

2.32 The facilitation of an open trading market is one of the key objectives of the National Water Initiative. In order to do this, the National Water Commission has been working with the states and territories to remove barriers to trade. While recognising the immense task facing the Commission, the committee has been concerned at the slow pace at which those barriers to trade are being dismantled.

2.33 The National Water Commission told the committee that while all of the southern MDB states have undertaken steps that they consider to be required individual actions under the NWI to enable trade within their boundaries, they had:

> … failed to undertake the necessary collective actions to open up trade between their respective jurisdictions and to ensure competitive neutrality.[18]

2.34 Accordingly, under the 2005 National Competition Policy assessment, the Commission recommended that New South Wales, Victoria and South Australia each receive a suspended penalty of 5% of their 2005 competition payments, recoverable if adequate progress was made by 1 January 2007. Progress on this front has now been hastened through the Ministerial Summit on the Southern Murray-Darling held in Canberra on 7 November 2006. In the face of reduced river flows in the Murray-Darling Basin (MDB), exacerbated by the current drought, New South Wales, Victoria and South Australia have agreed to ensure that permanent interstate water trading will commence in the MDB on 1 January 2007.[19]

2.35 The major benefit of water trading schemes when well designed and implemented, is that they can provide an efficient and cost-effective way of reallocating limited resources to ensure highest value use. Under ideal circumstances a well-designed, robust trading system should be flexible, adaptive, transparent and equitable. It should also deliver security and economic efficiency, along with low trading and administrative costs.

2.36 The Murray-Darling Basin Commission told the committee in its submission that trade in annual allocations in the MDB is more common than trade in entitlements.[20] Trade in annual allocations is also referred to as 'temporary' trade, whereby a 'share' of a water access entitlement is sold to the farmer who is able to realise the highest return on the amount of water available. Mr Bob Douglas expanded on this in evidence, stating that a high level of temporary trade in the MDB has enabled farmers to draw the maximum benefits from their water allocations at a time when they face very low rainfalls:

---

18 *Submission 39a*, National Water Commission, p.7.

19 *Key Outcomes of the Summit on the Southern Murray-Darling Basin*, Canberra, 7 November 2006.

20 *Submission 35*, Murray-Darling Basin Commission, p. 2.

> By doing that they actually preserve their investment and see in the next year. In round figures, the temporary trade has quite a significant effect in reducing the effect of drought. It is still quite serious, but it is not as bad as it otherwise would have been. [21]

2.37 That evidence points clearly to the success of part of the goal of the National Water Initiative in establishing trading. However, the committee is conscious that the lack of permanent interstate trading to date, has led to widespread perception that there has been no permanent trade in water at all. The MDB Commission was at pains to stress that this was not an accurate perception of the situation:

> There is a perception that the amount of interstate trade is small because it is small every year, but you have to remember that it has a cumulative impact. If you move your water permanently, it is always going there. This chart actually plots the cumulative effect of water trade up to 2003-04. We find that, in round figures, about 18 per cent of the water in the southern basin has been traded. We do not distinguish between how much of that has been traded within districts and how much has been traded between districts. [22]

2.38 The committee is conscious that only a robust permanent trading market will achieve the NWI objective of maximum efficient use of our water resources. The inquiry revealed a great need for accurate information on which to base water trading decisions and for a reliable water accounting system to assist the development of the trading market.

The Need for Better Data

2.39 The majority of witnesses who gave evidence to the inquiry commented on the need for better measurement of water use and for a database that will hold as much information as possible about water resources:

> We believe that there must be a verifiable database of water resources that is accurate and current.[23]

2.40 The evidence before the committee suggests that the National Water Commission recognises the need for more and improved data. However, since it is working in an area of great complexity where data collection has not been a priority in the past, progress appears to be slow. The Commission gave evidence to the committee that:

---

21 Mr Bob Douglas, Director, Water Policy Co-ordination, Murray-Darling Basin Commission, *Committee* Hansard, 12 October 2006, p. 11.

22 As above, p.10. Note: The chart referred to in this quote is available as a tabled document.

23 Mr David Hocking, Chief Executive Officer, Australian Spatial Information Business Association, *Committee Hansard,* 7 March 2006, p. 59.

> On water accounting, metering and water data, there has been excellent cooperative work between the commission and amongst the governments that are parties to the National Water Initiative on accounting and metering standards. … The commission recently co-hosted, with representatives of the expert steering committee on Australian water resources information, a water data summit. The main intent of that summit was to ensure that there is open access to Australia's water data on the internet, and we are working towards delivering that in practice.[24]

2.41 The majority of the data is not only held by the different jurisdictions, but is also in different formats and the same concepts are often defined in different terms:

> The level 1 assessment has really borne it out that there is no nationally consistent definition of sustainable yield. The states and territories have varying degrees of how they define that. That is coming up as a gap and limitation in trying to do a national assessment. If the definitions vary, it is very difficult to get a consistent picture.[25]

2.42 Nevertheless, the NWC and all states and territories continue to work towards improving the quality of the data contributed to the national baseline assessment of water resources being compiled by the Commission. The Level 1 assessment provides the performance indicators towards which the states and territories are working in dealing with water management. This information has now been published and is available at: http://www.water.gov.au

2.43 The Level 2 assessment is due to be published in early 2007. It will provide much awaited data, including analysis that will enhance the current understanding of water availability, water use, and river and wetland health.

2.44 According to the National Water Commission, products of the Level 2 baseline assessment will include:

- integrated surface water and groundwater balances for 50-70 priority catchments, capital cities, basins and regions;
- comprehensive statistics on water use in 2004-05; and
- a new framework for a national assessment of river and wetland health, building on existing state approaches.[26]

2.45 At the Supplementary Budget Estimates hearings on 31 October 2006, Dr Chartres gave evidence that in addition to the level 2 base line assessment, the Commission is working with the Bureau of Rural Sciences, the Bureau of Meteorology, the CSIRO, Geoscience Australia and the National Land and Water

---

24 National Water Commission, *Committee* Hansard, 15 September 2006, p. 16.

25 National Water Commission, *Committee* Hansard, 15 September 2006, p. 24.

26 *Submission* 39a, National Water Commission, p. 4.

Resources Audit towards a database called the Australian Water Resources Information System (AWRIS) that will provide real time access to water resources data and, ultimately, aggregated water accounts.[27]

2.46 A key feature of AWRIS is that it is developing a process whereby in future data can be collated from state and territory agencies and other sources using web-based technologies. The committee welcomes this development as it will go some way to filling the huge gap in water resources data and tools that can deliver reports to policy makers and irrigators as well as to the farming community.

2.47 The committee raised concerns with the Department of Agriculture, Fisheries and Forestry about farmers' and irrigators' need for up-to-date water resources information that the National Land and Water Audit – coming as it does every five years – cannot fulfil. In response, the committee was told that the Bureau of Rural Sciences is developing the Water 2010 project to address this issue:

> … our objective to try to gather together all the information that exists across the country—in state jurisdictions, in the main—and to collate it in one place. The aim is to be in a position across Australia, in the next two or three years on a kilometre-by-kilometre grid, to be able to do a water balance—what the rainfall is; what the discharge to the ground water and to rivers is; what the draw-down by industries or whomever is — and be able to answer those sorts of questions. [28]

2.48 The Water 2010 project aims to produce an interactive website and CD ROM to enable users to explore factors influencing Australia's dynamic water balance. It applies a land-use mapping-based approach to show how and where water is generated and used, including run-off, transpiration, irrigation and groundwater. To ensure the most current data is available to users, the website will be integrated with a national water database, and will be maintained and continuously updated by state and Commonwealth agencies.

Standards and measures

2.49 While the NWI's goal of implementing a robust water trading system is dependent on the availability of reliable water resources data, it is equally reliant on the development of sound water accounting measures. The committee notes that the National Water Commission's Science Advisor, Dr Colin Chartres has called for national scientifically based standards for metering, gauging monitoring and reporting to be agreed by all the states involved in the NWI. Dr Chartres argues

---

27 Dr Colin Chartres, General Manager, National Water Commission, *Estimates Hansard,* 30 October 2006, p.75.

28 Dr Colin Grant, Bureau of Rural Sciences, *Committee Hansard,* 7 March 2006, p.86.

that new measurement technologies now exist that will simplify the process of collecting data about water use.[29]

2.50 He was supported in this by the West Australian Farmers Federation (WAFF) who called for:

> All irrigation usage above 5 megalitres per year (or such amount determined by the regulator from time to time) should be metered. Information about each individual's usage, together with usage patterns in the irrigation area should be made available online. The near absence of compulsory metering is a serious shortcoming in the State's water resource management process.[30]

2.51 The adoption of standardised metering is just one of the challenges in the area of water accounting. CSIRO pointed out in its submission that most water entitlements across Australia are defined as gross (not nett) entitlements. The means that:

> Whenever one irrigator adopts a more efficient form of irrigation, the amount of water that returns to the river or aquifer decreases and hence less water is available either to other water users or to the environment. [31]

2.52 CSIRO's submission explains that the effect of using gross entitlements is that efficient irrigators (often downstream) need to keep acquiring more water just to "stand still", that is irrigate the same area, because others upriver are increasing the efficiency of water use. [32]

2.53 This is not an argument against using water more efficiently; rather it is a caution that the effects of doing so must be factored into the water accounting system when decisions are being made about water allocations. The volumes of water involved could be large: CSIRO referred to an estimated net reduction of around 1,692GL from the Murray's river flow (and allocations to irrigators) as a result of reduced drainage from water use efficiency savings, various land use impacts and increased groundwater usage in the basin. That reduction is equivalent to more than one tenth of the Murray's average annual water use. Together with factors such as reduced rainfall, reduced run-off and increased ground water extraction from areas connected to the river, it is a shortfall that must be taken into account if the issue of over allocation is to be resolved.

2.54 The past ten years have seen a situation of continual change in relation to how water resources are allocated and used in this country. Increasing awareness of the need to monitor, manage and regulate our limited and increasingly precious

---

29 Dr Colin Chartres, A Strategic Science Framework for the National Water Commission, p. 24.

30 *Submission* 23, West Australian Farmers Federation, p.7.

31 *Submission 40*, CSIRO, p. 6.

32 As above.

water resources, combined with advances in water monitoring and metering technologies, have lead to a growth of the data collected and potentially collectable by water management agencies. Given the complexity of water management issues and the need to ensure transparency and accountability for water use stakeholders, it has become increasingly important to ensure that water management decisions are made on the best data and best science available. The greater availability of reliable data will facilitate a number of key processes including:

- water policy development;
- better water planning and water management; and
- regulation of water extraction from our rivers, lakes and aquifers.

2.55 Greater access to reliable data will also benefit those scientists and researchers who are tasked with finding ways of helping us to adapt to drier conditions and to make more efficient use of the water resources available. The committee welcomes AWRIS and initiatives such as Water 2010 that will improve the data available about water resources around the country. They will go some way towards facilitating access to information about water resources for experts, as well as for farmers and the general community. But while AWRIS and other similar initiatives are addressing the problem of lack of data about water resources, two issues need to be resolved before the data can become a useful and flexible tool in the process of managing and maximising our water resources:

- the lack of a single protocol ensuring the use of standardised data formats, methods of collection and terminology *and*
- a commitment on the part of all the states and commonwealth agencies involved to openly share whatever data is available.

2.56 While CSIRO, the Bureau of Meteorology or the Bureau of Rural Sciences gave evidence that they have the capacity to develop good monitoring systems and large databases of information, they do not have the ability to require states and agencies to conform to common data standards and protocols, nor can they obtain data unless the agencies who hold it around the country choose to make them available. The signatories to the NWI initiative are the governments with the power to adopt the necessary protocols and common standards about collecting data and to make it mandatory for the data to be available through national databases and registers.

2.57 For this to happen, COAG needs to require the National Water Commission or another agency to develop the necessary standards, protocols and framework which will eventually be adopted by all the NWI signatories. The states and territories need to commit to make the metering and reporting of water usage mandatory in their jurisdictions and agree to share the data that becomes available through this process.

2.58 The willingness to standardise data, agree to common protocols and share all available information is also necessary to allow decision makers to have at their

disposal expert systems that give a complete picture about water resources, climate and atmospheric modelling and drought assessment. CSIRO's proposed WRON project (which is discussed in Chapter 4) will only achieve its goal of up-to-the minute information about water usage and availability if its developers can obtain the base data from all state and federal agencies as well as the relevant research centres. Only when that happens will decision makers be able to make useful forecasts of seasonal allocations with a known degree of uncertainty.

2.59 The committee is only too aware, however, that it can often be a formidable task for land and water managers to access the type of information that is most relevant to them. To address this issue, the National Water Commission should develop a communications programme that will produce communications products and tools to help particular client groups (including farmers and irrigators) to access water resource data and make informed management decisions. That programme should include the development of internet portals that package and make this information accessible in a format that meets the usage needs of particular users at the local level.

Recommendation 3

2.60 The committee recommends that the National Water Commission assume responsibility for making all the data currently available about water nationally accessible through integrated databases linked to its website.

Recommendation 4

2.61 The committee recommends that the National Water Commission develop a communications programme aimed at facilitating access to new research and new sources of online information about water resources and adapting to climate change for specific rural and regional client groups.

Exit fees

2.62 The decision on the part of any one party to permanently sell its water entitlement has implications for other parties within an irrigation scheme. The remaining members of that irrigation scheme have to share the fixed costs of bringing the water to their properties. If those costs become so onerous as to discourage the remaining members of the scheme to remain, the irrigation authority could find itself with stranded infrastructure assets. The imposition of 'exit fees' is one mechanism that has been used to slow the pace of water being sold out of an area (thus leaving the infrastructure 'stranded') while ensuring that the cost of maintaining the asset does not fall entirely on the remaining members of an irrigation scheme.

2.63 In its submission, ABARE advocated the payment of exit fees annually to spread the cost.[33] The Productivity Commission has recommended the removal of exit fees which it saw as anti-competitive and a barrier to trade. Farmers and irrigators alike have argued against that recommendation. The Australian Competition and Consumer Commission (ACCC) is currently considering the impact of access and exit fees as a means of reducing stranded assets. The MDBC told the committee:

> Without trying to prejudge what the ACCC are going to say, I would not be surprised if they set boundaries on what size access and exit fees should be rather than necessarily say that you cannot have them. That is a means of basically slowing the rate of adjustment. In some cases, for example in the high-impact salinity zones in Sunraysia, government has actually made a decision that they want water to move out of those areas because of the salinity impact and they do not allow net trade back in. So in some cases governments have deliberately made decisions that they want that kind of adjustment to happen over time because of the salinity impact. [34]

Social impacts of permanent water trading

2.64 While seeing permanent trade as a positive development for better management of the country's limited water resources, the committee is concerned about the social impacts of any permanent trade of irrigation water out of a particular region. The National Water Commission gave evidence to the inquiry that there are built-in safeguards within the National Water Initiative to ensure that the pace of structural adjustment is manageable for the local communities involved.

2.65 One of those safeguards is the current imposition of a limit of four per cent (per year) to the number of permanent water entitlements that can be traded out of an irrigation area. Over a number of years, that percentage can grow. The committee heard evidence that in the Pyramid-Boort region of Victoria (north-west of Bendigo), the percentage of permanent water entitlements traded has gone over 20 per cent. [35]

2.66 The decision of these Victorian farmers to abandon their properties is not solely related to pricing changes in their product markets. As noted above, the problems associated with soil salinity in this region of Victoria have also been a contributing factor. The committee notes that in this case – as in most other cases to date – the permanent water entitlement has primarily been traded to other regions of the same state.

---

33 *Submission 12*, ABARE, p. 10.

34 Mr Bob Douglas, Director, Water Policy Co-ordination, Murray-Darling Basin Commission, *Committee* Hansard, 12 October 2006, p. 12.

35 Mr M. Thompson, General Manager, National Water Commission, *Committee Hansard*, 15 September 2006, p. 27.

2.67 The committee was told that the Victorian government is monitoring the impacts of permanent water trade on the local community. Under the NWI, the National Water Commission has an ongoing role to monitor and assess the impact of water trading. The NWC told the committee that, in relation to the Pyramid-Boort area, an assessment of the community impacts was currently being conducted using National Heritage Trust funding and that it was also getting ready to do its own assessment of the impacts.[36]

2.68 The committee is aware that a review of all aspects of water trade, including its impacts on local communities, must be carried out by the Commission in 2009. However, the committee is supportive of ongoing assessment and monitoring of the situation in areas like Pyramid-Boort where a substantial level of permanent trade is being carried out. Only then will it be possible to minimise negative social impacts. Individuals and local communities should be provided with appropriate assistance and social services to adjust to the changes that transition from one industry base to another inevitably brings.

36 Mr M Thompson, General Manager, National Water Commission, *Committee Hansard*, 15 September 2006, p. 21.