Ms Jeanette Radcliffe
Committee Secretary
Senate Rural and Regional Affairs and Transport Committee
Department of the Senate
PO Box 6100
Parliament House
CANBERRA ACT 2600

Dear Ms Radcliffe

## INQUIRY INTO WATER MANAGEMENT IN THE COORONG AND LOWER LAKES

Please find attached a copy of a submission to the Inquiry the Department of Environment, Water, Heritage and the Arts to support our previous Initial Submission of 1 September.

The Department's contact officer on this matter remains Mr Harry Abrahams, A/g Assistant Secretary, Murray Darling Basin Reform Branch who may be contacted on 02 6274 1557 or <a href="mainto:Harry.Abrahams@environment.gov.au">Harry.Abrahams@environment.gov.au</a>.

Yours sincerely

Tony Slatyer
First Assistant Secretary
Water Reform Division

NQ September 2008







# INQUIRY INTO WATER MANAGEMENT IN THE COORONG AND LOWER LAKES

# Second Submission by Department of Environment, Water, Heritage and the Arts

#### Background

The Department provided an initial submission to the Inquiry on 1 September 2008 which addressed Terms of Reference 1(a), 1(b)ii and 1(b)iii. The initial submission specifically covered options for short-term management interventions to improve the health of the Coorong and Lower Lakes.

This second submission addresses Terms of Reference 1(b)i, 1(b)v, 1(c) and 2(a) - (d) and 2(g).

1(b)i possible incentive and compensation schemes for current water holders who participate in a once off voluntary contribution of water to this national emergency

The Water for the Future programs for acquisition of water are focused primarily on purchasing water entitlements directly through the market rather than providing incentives to donate water either as entitlement or available allocation. This approach has been adopted as the investments are to assist in a market based transition to reduced sustainable diversion limits anticipated in the Basin Plan. This supports the key principle enshrined in the National Water Initiative (NWI), the importance of secure water entitlements in allowing water to move to more efficient uses using market mechanisms.

Given the effectiveness of the Governments first water purchase round, a new Basin-wide water purchase tender will be announced in 2008 - 09 in addition to the northern Basin tender announced recently.

The following taxation incentives are available for people seeking to donate water to achieve conservation outcomes:

- provision of environmental organisations with deductible gift recipient status, which allows donors of money or property to the organisation to claim an income tax deduction;
- the opportunity for a donor, who has donated a gift of \$5,000 or more to an environmental organisation, to apportion the donation against their tax returns over a five year period;
- a capital gains tax exemption for gifts of property left in a will to an eligible organisation.

These arrangements are primarily intended to support the activities of the non government organisations by encouraging the donation of property or money to them.

One example of how these arrangements can be used is the Waterfind Environment Fund (WEF). In 2006 the Australian Government Water Smart Australia program provided a grant of \$0.7M to WEF to establish a web-based environmental water trading system and mechanisms to facilitate water donations to approved environmental projects on the Murray River in South Australia. The WEF is a not-for-profit organisation dedicated to improving the health of Australian river systems.

The WEF was listed on the Register of Environmental Organisations administered by the Department in October 2007. The Register is a list of environmental organisations eligible to receive tax deductible donations. It is established under Subdivision 30-E of the *Income Tax Assessment Act 1997*. Donations of money or property to these organisations are tax deductible from the date of their entry onto the Register. Both permanent water entitlements and temporary allocations come within the definition of property.

The Queensland Government has recently announced its decision to gift several parcels of water entitlements totalling 10.6 gigalitres from rivers in the Northern Basin to the Commonwealth Environmental Water Holder.

1(b)v assessment of the potential contribution of bringing forward irrigation infrastructure spending under the Council of Australian Governments agreement to deliver water to save the Coorong and lower lakes

The Commonwealth has agreed in principle to provide close to \$3.7 billion for state priority water projects in South Australia, New South Wales, Victoria, Queensland and the Australian Capital Territory (ACT), subject to due diligence assessment of the social, economic, environmental, financial and technical aspects of the projects.

The objective of these projects under the Sustainable Rural Water Use and Infrastructure Program is to help secure a long term sustainable future for the irrigation communities of the Basin. Through these projects, water savings will be achieved and water will be returned to the environment. The structure and content of the projects are still being developed by the various State Government and, in some cases, private irrigator proponents. They have yet to be subject to the necessary due diligence assessment.

It is important to recognise that large scale infrastructure projects by their very nature can not readily be accelerated. Large scale projects such as those agreed in principle at the July 2008 COAG meeting have significant lead times in planning and design and take a significant period of time to implement once developed. To truncate proper project design and due diligence arrangements would likely result in poorly designed projects, unsatisfactory

outcomes for all parties, and significantly reduced value for money for the investment.

Further, this program's purpose is to bring the Basin onto a long term sustainable footing – rebalancing the system, addressing over-allocation, improving water efficiency and preparing irrigation communities for the impact of climate change. The program is not designed to address short term water supply problems.

# the impact of any water buybacks on rural and regional communities and Adelaide including compensation and structural adjustment

As noted above in our comments regarding 1(b)I a market approach is central to the NWI. The investment of \$3.1 billion, focused on voluntary acquisition of water entitlements, and will ensure they receive full market value for their entitlement to assist the irrigation sector in transition to the reduced long term sustainable diversion limit envisaged under the Basin Plan. In addition, the investment of \$5.8 billion through the Sustainable Rural Water Use and Infrastructure Program will provide a substantial injection of funds into regional areas and have a positive impact on regional economic activity.

It is also recognised, however, that the distribution of these benefits may not be uniform and some individuals and/or communities may suffer dislocation if farmers leave an area after selling water entitlements.

The Department has engaged the Australian Bureau of Agricultural and Resource Economics to analyse the impacts of the Government's initial entry into the water market and to evaluate the impact on rural and regional communities of increasing the scale of water buybacks over the next three years. This report is due in early 2009. The Department has also convened a Stakeholder Consultative Committee, with membership from irrigators, community members, environmentalists and water experts, to provide it with input on water purchasing rounds. The Department will be reviewing impacts regularly as the purchase program proceeds.

The implications for the long-term sustainable management of the Murray Darling Basin system, with particular reference to:

### 2(a) the adequacy of current whole-of-basin governance arrangements under the Intergovernmental Agreement

The 3 July 2008 Intergovernmental Agreement on Murray-Darling Basin Reform (IGA), provides Commonwealth and Basin States new Basin wide management and planning arrangements.

Basin Governments agreed to pass legislation providing for a referral of certain powers to the Commonwealth in accordance with paragraph 51 (xxxvii) of the Constitution. The matters covered include:

- transferring of the current powers and functions of the Murray-Darling Basin Commission to the Murray-Darling Basin Authority;
- strengthening of the role of the Australian Competition and Consumer Commission (ACCC); and
- enabling the Basin Plan to provide arrangements for meeting critical human water needs.

Basin Governments have to put in place integrated planning and management of the Basin's water and other natural resources, in the context of a Commonwealth-State partnership.

A key element is the preparation of a whole of Basin Plan by the independent, expert Murray-Darling Basin Authority. The States will have an advisory role in the preparation of the Plan. The Commonwealth Minister will be the decision-maker.

Central to the Basin Plan will be the new long-term average sustainable diversion limits. These limits on the amount of water (both surface and ground water) that can be taken from Basin water resources must reflect an environmentally sustainable level of take. The limits will be set for individual water resources and for the Basin as a whole.

The Commonwealth Minister, in approving the Basin Plan including the new sustainable diversion limits, will be accountable to Parliament.

Basin Governments agreed to use best endeavours to pass legislation to enable the reforms to commence on 1 November 2008. Schedule A of the IGA identifies the four legal elements under preparation:

- 1. a revised Murray-Darling Basin Agreement, to be included as a Schedule to the *Water Act 2007*;
- 2. Water Amendment Bill 2008, which includes provisions enabling the referral of state powers as agreed in the IGA;
- 3. Basin State referral bills; and
- 4. a referral Intergovernmental Agreement.

The roles and responsibilities of the Commonwealth Minister, the Ministerial Council, the Murray-Darling Basin Authority, the Basin Officials Committee and the Basin Community Committee are described in detail at Schedule B to the IGA. A diagram of the new institutional structure and governance arrangements is at Schedule C to the IGA. (Attachment A)

In relation to existing functions that will be moved from the Murray-Darling Basin Commission into the new Murray-Darling Basin Authority, States will retain a decision making role through a new Ministerial Council. To streamline decision making, the new Ministerial Council will have a single representative from each of the six Basin jurisdictions. The Council will be chaired by the Commonwealth Minister.

## 2(b) the adequacy of current arrangements in relation to the implementation of the Basin Plan and water sharing arrangements

Basin Plan – contents, approval process and timing
The Basin Plan will be the mechanism by which Basin governments and
communities determine future water management and allocation decisions to
meet production, social and environmental objectives across the whole of the
Murray-Darling Basin. The 2011 Basin Plan will be the first ever Basin-wide
integrated surface and ground water resource management plan. The
preparation of such a plan will be a complex task. Effective development of
the Plan will necessitate significant scientific and community input, and
consideration of production and environmental effects.

The purpose and mandatory content of the Basin Plan, as set out in the *Water Act 2007*, is at Attachment B to this submission.

Governments agreed in the 3 July 2008 Intergovernmental Agreement on Murray-Darling Basin Reform (IGA) that arrangements for meeting critical human water needs for those communities dependent on the River Murray system (excluding the needs of those communities dependent on the Edward-Wakool system downstream of Stevens Weir in NSW) will be a mandatory component of the Basin Plan.

A key element of the Basin Plan will be the new long-term average sustainable diversion limits. These limits on the amount of water (both surface and ground water) that can be taken from Basin water resources must reflect an environmentally sustainable level of take (*Water Act 2007* s23(1)). The limits will be set for individual water resources and for the Basin as a whole.

As noted in the IGA (clause 11.1), the first Basin Plan will be made in 2011, reflecting the comprehensive nature and complexity of the Basin Plan. The Water Act requires a minimum public consultation period of 16 weeks on the first proposed Plan.

As agreed in the IGA (clause 3.3.2), the new Ministerial Council will have a role in providing advice on the Basin Plan:

- if any, or all, of the Ministers disagree with a long-term average sustainable diversion limit or other parts of the draft Plan, the Council may refer these matters back to the Authority for reappraisal; and
- once the Authority returns the Basin Plan, the Ministerial Council will consider it and submit its views to the Commonwealth Minister, who will make the final decision.

The Commonwealth Minister, in approving the Basin Plan including the new sustainable diversion limits, will be accountable to Parliament.

In the IGA, governments affirmed the primacy of the Basin Plan, and the autonomy of the Authority in preparing the Basin Plan, in the context of clear

accountabilities to the Commonwealth Minister, the Ministerial Council and the new Basin Officials Committee.

Treatment of existing water resource plans

The Basin Plan and new sustainable diversion limits will take effect through water resource plans made by the Basin states. The process for ensuring the transition from existing State plans to those consistent with the Basin Plan is clearly outlined in the Water Act and significant issues regarding the assignment of sovereign risk would likely arise if these arrangements were altered.

One of the aims of the National Water Initiative is for water planning to provide certainty to water entitlement holders and communities for the duration of a water resource plan. Consistent with this, the Commonwealth has made a commitment to respect water sharing arrangements that are provided for in existing water resource plans.

Part 11 of the Water Act 2007 sets out transitional arrangements for existing water resource plans. As existing water resource plans expire, they will be subject to the review processes established by States. The new plans will have to be compliant with the Basin Plan and will be subject to accreditation by the Commonwealth Minister. Once the sustainable diversion limits have been incorporated into the water resource plans of a state, the state must ensure that water taken is consistent with the sustainable diversion limits.

The Murray-Darling Basin Authority has enforcement powers (conferred under part 8 of the Water Act) to ensure compliance with the Basin Plan. In the IGA, the states affirmed their support for the audit, monitoring and enforcement provisions of the Water Act, and noted the responsibility of the Authority in this regard. Furthermore, governments agreed to work with the Authority to develop enforcement arrangements to complement the Water Act's enforcement provisions, to protect States' shares and ensure compliance with the Basin Plan and water resource plans within catchments.

#### State water shares

State water shares means the sharing of surface water in the River Murray System between New South Wales and Victoria, and the entitlements to this water by South Australia, as provided for in the Murray-Darling Basin Agreement. The rules and accounting arrangements in the Murray-Darling Basin Agreement are used to determine the quantity of water in each State's share at any given time. The IGA provides an agreed definition of State water shares.

The relationship between State water shares and the sustainable diversion limits is described in the IGA (clause 3.2.8). For surface water in the River Murray system, the Basin Plan will determine the quantity of water available to be taken by New South Wales, Victoria and South Australia from their State water shares, but will not alter the State water shares themselves. State water shares can only be changed by the unanimous decision of the new Murray-Darling Basin Ministerial Council.

Water for the Future – infrastructure investments and water purchasing
The Commonwealth is complementing these long-term governance reforms
with the \$12.9 billion Water for the Future program, which has four priorities:
tackling climate change; supporting healthy rivers; using water wisely and
securing our water supplies.

The \$5.8 billion 'Sustainable Rural Water Use and Infrastructure' element of this program will support value for money water efficiency measures (which may involve on and off farm investments) that secure a long-term sustainable future for irrigation communities, in the context of climate change and reduced water availability into the future. Projects must deliver substantial and lasting returns of water to the environment, to secure real improvements to river health.

In July 2008, when COAG signed the IGA, the Commonwealth announced investments of close to \$3.7 billion for state priority projects in Basin States. These projects will improve irrigation efficiency; raise the productivity of water use; secure water supplies for townships, communities and irrigators; and make water savings that will be returned to rivers and wetlands.

To address the problem of over-allocation of water entitlements, the Commonwealth Government has committed \$3.1 billion to purchase water through the 'Restoring the Balance in the Murray-Darling Basin' element of *Water for the Future*. Purchasing started in 2007-08.

A Stakeholder Consultative Committee was established to provide input to the Department's review of the outcomes of the first round of water purchasing, including the community and industry impact. This committee comprises irrigators, community members, environmentalists and water experts. The Department commissioned an independent assessment of the first round of water purchasing.

On 14 August 2008 the Prime Minister announced the intention to accelerate the Commonwealth's water purchasing activities. These include:

- expanding the previously announced Queensland water tender to accept
  water entitlements from properties elsewhere in the northern basin subject
  to the water being securable against downstream interception. It was
  announced on 8 September that this tender process will commence on 15
  September.
- initiating a new Basin-wide water purchase tender in 2008-09;
- working with irrigation communities to buy water entitlements from areas willing to move out of irrigation, facilitated by a price premium reflecting the value of water savings from closure of infrastructure such as supply channels;
- working with State Governments to co-fund the purchase of appropriately located irrigation properties and their water entitlements to enhance environmental outcomes in the northern basin. Toorale Station in NSW was purchased by the NSW Government with assistance from the Australian Government on 10 September as part of this commitment; and

 initiating the previously announced \$80 million of water purchasing in South Australia.

#### Commonwealth Environmental Water Holder

The Water Act 2007 establishes the statutory position of the Commonwealth Environmental Water Holder (CEWH) to manage the water entitlements that are purchased or recovered through infrastructure efficiency measures. The Water Act 2007 provides that the CEWH must perform its functions for the purpose of protecting or restoring environmental assets so as to give effect to relevant international agreements. However, the range of outcomes that constitute 'giving effect to relevant international agreements' is broad. Prioritisation will be determined based on the best available advice and research with the aim of achieving the maximum environmental outcomes for example in the recent \$50 million round the priorities were identified as Wetlands of International Importance (Ramsar), Wetlands on the Directory of Important Wetland in Australia, aquatic ecosystems supporting listed threatened species; and listed threatened communities and migratory birds

The arrangements for its utilisation will be developed collaboratively with other environmental water holders and environmental site managers.

## The role of markets in facilitating environmentally sustainable water use and management in the Murray-Darling Basin

The market has a key role to play in ensuring the sustainable management of water resources in the Murray-Darling Basin system.

Current water market arrangements can be characterised as partly developed. The ongoing drought has seen an increased level of activity in the water market, underscoring the importance of the market in helping industry manage reductions in the availability of water. Increased trade volumes have, however, exposed shortcomings in the way the market functions.

The Australian Government's efforts to improve the functioning of the market are focussed on four key factors: appropriate institutions and governance (as described above); good information; secure property rights; and effective regulation.

#### Good information

The Bureau of Meteorology has responsibility under the *Water Act* 2007 to collect and publish water information and establish a National Water Account. The Council of Australian Governments (COAG), is also considering establishing a national water market system. This will provide a register for water titles and allocations, administer transactions and provide information to meet the needs of water managers and users.

#### Secure property rights

Secure property rights are fundamental to a well functioning market. The National Water Initiative recognises the need for clear and nationally-compatible characteristics for secure water access entitlements. Work

remains in some areas, such as unbundling of water access from water delivery entitlements and in ensuring that interception activities do not degrade the rights of entitlement holders. This involves more complete specification of entitlements and proper enforcement of laws, and greater recognition by all water users of issues around ownership of water.

#### Effective Basin wide regulation

Economic efficiency is promoted by effective competition. Regulation of infrastructure facilities that have natural monopoly characteristics, which covers both bulk and retail service provision, is a means by which lack of competition can be addressed, and can in turn promote economic efficiency.

Basin states currently have very different arrangements in place for the economic regulation of rural water market pricing and service provision.

The Water Act, and the further amendments that are contemplated as a result of the IGA, will bolster the role for the Commonwealth economic regulator, the ACCC, to regulate rural water services across the Basin.

The Water Act also creates three new sets of water rules - charge, market and trading rules. The ACCC will provide advice to the Commonwealth Water Minister and Murray-Darling Basin Authority on the rules, and will also play a role in enforcing the rules.

- The water market rules will assist to free up the trade of water access rights within the Basin by ensuring that the policies or administrative requirements of irrigation infrastructure operators do not prevent, or unreasonably delay, trade.
- The water charge rules will ensure that fees and charges payable to irrigation infrastructure operators, bulk water operators and government agencies for water services are based on full, but not excessive, cost recovery.
- The water trading rules for the trade or transfer of tradeable water rights will be able to deal with barriers to water trade.

The ACCC will provide its advice on the water market rules and the water charge rules to the Australian Government in December 2008 and June 2009, respectively.

The water charge rules will not apply, and the ACCC will have no role, with respect to urban retail water pricing.

#### Barriers to trade

There are a number of barriers to trade currently in existence. These are hindering the development of a proper functioning water market.

A key barrier to free trade is the annual four per cent limit on net permanent water trade out of irrigation areas in the southern Murray-Darling Basin.

The four per cent limit, and its inconsistent application across states, acts as a significant constraint on trade and inhibits both the flexibility of farmers and other water users to buy and sell water entitlements so their water portfolio best suits their needs. It also limits the purchase of water to be used to achieve specified environmental outcomes.

On 3 July 2008, COAG stated its ambition to increase this limit from four to six per cent by the end of 2009 and agreed to hold regional consultations to discuss a staged lifting of the out of area trade limit. The consultations were held in regional South Australia, New South Wales and Victoria in August and September 2008.

The Commonwealth attaches a high priority to reforming the interim threshold limit. Reflecting this, the Prime Minister announced on 14 August 2008 that the Commonwealth will actively pursue water reforms to lift the limit and apply it on a consistent basis as soon as possible.

The transaction time taken to approve water trades is also a cause for concern. Reducing delays in trade and transaction costs will be considered by COAG.

## 2(c) long-term prospects for the management of Ramsar wetlands including the supply of adequate environmental flows

There are currently 16 wetlands of international importance (Ramsar-listed wetlands) in the Murray-Darling Basin (see table below). It is important to recognise that with limited water available not all watering requirements can be met. Trade offs are being made and will continue to be made while water availability remains low.

Management challenges facing the Ramsar wetlands in the Murray-Darling Basin include provision of adequate environmental flows (volumes, timing, frequency and duration), environmental degradation as a result of invasive non-native species, and adaptation to the impacts of climate change.

The Australian Government, with the states, is progressively improving the management and reporting framework for Australia's Ramsar wetlands to better address these threats and maintain the ecological character of the sites. The approach for each site incorporates: improving the understanding of the needs and condition; better planning; providing additional environmental flows; and investment in complementary on-ground works, scientific research, monitoring and reporting.

#### Specific actions include:

 Development of Ecological Character Descriptions (ECDs) for each Ramsar site, using the National Framework and Guidance for Describing the Ecological Character of Australian Ramsar Wetlands. ECDs inform future management and monitoring of these sites and provide an enhanced information base against which to assess potential impacts of actions on internationally important wetlands.

- Development and implementation of Ramsar site management plans, in accordance with the Australian Ramsar Management Principles as outlined in Schedule 6 of the EPBC Act Regulations.
- Developing a Ramsar Rolling Review approach to report on the condition of Australia's Ramsar sites and inform future management and investment priorities.
- Provision of environmental water held by the Commonwealth Environmental Water Holder to Ramsar sites.
- Development of the Basin Plan by the Murray-Darling Basin Authority, incorporating an Environmental Watering Plan. The Basin Plan will draw on ECDs for MDB Ramsar sites (see Murray-Darling Basin Reform IGA Clause 3.2.11). The purposes of the Environmental Watering Plan, outlined in the Water Act 2007 (s.28), specifically refer to the protection and restoration of wetlands in the Murray-Darling Basin.
- The Murray-Darling Basin Commission's The Living Murray initiative, which aims to recover up to an average of 500 gigalitres of water per annum by June 2009 to provide increased environmental flows at six Icon Sites and undertake complementary on-ground works and measures at the sites. These Icon Sites include components of Ramsar sites.
- Australian Government investment in the Macquarie Marshes and Gwydir Wetlands Ramsar sites, through the New South Wales Wetlands Recovery Program (\$13.4 million) and River Environmental Restoration Program (\$71.7 million).

Under Article 3.2 of the Ramsar Convention, Contracting Parties are obliged to inform the Ramsar Secretariat if the ecological character of any Ramsar-listed wetland has changed, is changing or is likely to change as the result of technological developments, pollution or other human interference.

In late 2006, the Department received a report on the ecological character of the Coorong and Lakes Alexandrina and Albert Ramsar site (the Coorong Ramsar site), which found that while the site was changing prior to listing, it has further declined since its listing in 1985. Following consultation with the South Australian Government, the Australian Government notified the Ramsar Secretariat of this change in the ecological character.

The Department will provide an update on the Coorong Ramsar site for the Ramsar Secretariat prior to the meeting of the Contracting Parties to the Ramsar Convention later this year (28 October to 4 November 2008). The update will be informed by current activities and will discuss long-term options for management of this site. Ramsar Sites in the Murray-Darling Basin

Ramsar Site Name	Year	Area (ha)	State
Telling the telling	Listed		
Ginini Flats Wetland Complex	1996	343	ACT
The Macquarie Marshes	1986*	18,726	NSW
Gwydir Wetlands	1999	823	NSW
Narran Lake Nature Reserve	1999	5,531	NSW
Fivebough & Tuckerbil Swamps	2002	689	NSW
NSW Central Murray State Forests	2003	84,028	NSW
Paroo River Wetlands	2007	138,304	NSW
Currawinya Lakes (Currawinya National Park)	1996	151,300	QLD
Coorong and Lakes Alexandrina & Albert	1985	140,500	SA
Riverland	1987	30,640**	SA
Banrock Station Wetland Complex	2002	1,375	SA
Barmah Forest	1982	28,515	VIC
Gunbower Forest	1982	19,931	VIC
Hattah-Kulkyne Lakes	1982	955	VIC
Kerang Wetlands	1982	9,419	VIC
Lake Albacutya	1982	5,731	VIC

<sup>\*</sup> An additional parcel of land was added to the site in 2000

## 2(d) the risks to the basin posed by unregulated water interception activities and water theft

#### Interception

Interception is the taking and use of water outside of the formal water access entitlements system. Examples of activities that intercept water include farm dams, stock and domestic bores and large-scale plantation forestry. While the current levels of interception across the basin are not accurately available the CSIRO have advised that by 2030, increases in interception activities and groundwater extraction in the Murray-Darling Basin (MDB) will result in a further reduction of approximately 740 GL of annual streamflows beyond existing impacts. The estimated increase in farm dam construction by 2030 could reduce annual runoff in the MDB by 180 GL/yr above current impacts<sup>1</sup>.

The NWI recognises that there are potentially significant volumes of water unaccounted for in interception activities that may undermine the integrity of the water entitlement system and the achievement of environmental objectives.

The intention of the NWI for management of interception activities is to assess the significance of such activities on catchments and aquifers and to apply appropriate planning, management and/or regulatory measures where necessary to protect the integrity of the water access entitlements system and the achievement of environmental objectives (NWI, paragraph 56).

<sup>\*\*</sup> The site boundary was modified in 2007; the original listing was for 34,618 ha

<sup>&</sup>lt;sup>1</sup> Jordan, P. et al (2008) An assessment of the future impact of farm dams on runoff in the Murray-Darling Basin, Australia. Paper presented at Water Downunder 2008.

The NWI provides a framework for risk-based management of interception based on the level of allocation in a given catchment or aquifer.

In the First Biennial Assessment of Progress in Implementation of the NWI (2007), the National Water Commission stated that "water interception activities continue to be recognised by governments as serious challenges to water security but action by governments to date has been neither concerted nor systematic."

More specifically, the NWC found that:

- there is uncertainty within jurisdictions as to how to approach the requirements on interception;
- current jurisdictional responses to interception are variable and patchy;
   and
- where there is legislation, compliance does not appear to be adequate and policing is very sporadic.

### Responsibilities for regulation of water interception

Responsibility for the management of interception rests with state and territory governments, although few jurisdictions have comprehensive regulatory arrangements in place at this point.

The Murray-Darling Basin Authority (MDBA) has responsibility under the Commonwealth *Water Act 2007* to set the long term sustainable diversion limit for the Murray-Darling Basin. The limit will be a key component of the new Basin Plan to be prepared by the MDBA, and will include limits for individual catchments and aquifers within the Basin. The MDBA will be required to accredit state and territory catchment/aquifer-level water resource plans once existing state plans expire. Accreditation includes consideration of the efficacy of arrangements in state plans to manage the impact of interception activities.

 On 26 March 2008 the Council of Australian Governments (COAG) agreed to a forward work program to address water reform issues. One of the projects supporting this work relates to accelerating the interception commitments of the NWI and a nationally consistent approach to the management of interception, in line with those commitments.

COAG is scheduled to consider recommendations on this issue on 2 October 2008.

#### **Water Theft**

The investigation and enforcement of illegal water diversions is primarily the responsibility of the states and territories. This includes enforcement with regard to activities such as water theft, meter tampering and unapproved diversion and storage structures.

The Water Act 2007 provides for a greater Commonwealth role through the Murray-Darling Basin Authority in the enforcement of illegal taking of water in

the Murray-Darling Basin once the Basin Plan is in place and current plans expire.

The Commonwealth has responsibility where the illegal taking of water relates to matters of national environmental significance under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) that have occurred since its commencement in 2000.

The Department is actively investigating allegations about the illegal taking of water, including diversions affecting the Ramsar listed parts of the Macquarie Marshes. An audit of diversion structures across the Macquarie Marshes area is currently being undertaken in cooperation with New South Wales authorities.

## 2(g) the impacts of climate change on the likely future availability of water.

In recognition that climate change impact on water inflows across the basin may result in reduced water availability the Government is pursuing water reform agenda to better prepare communities to adapt to climate change. Improved information is necessary to better adapt to climate change. Accordingly the Government has invested more than \$11m in the CSIRO Murray-Darling Basin Sustainable Yields project. This is a rigorous and detailed basin-scale assessment of the anticipated impacts of climate change, catchment development and increasing groundwater extraction on the availability and use of water resources in the Basin.

The project draws on the most up-to-date water information and models provided by relevant state and territory agencies, and the project methods have been subject to independent external review. It represents the most comprehensive hydrologic modelling ever undertaken for the entire Basin, including modelling of rainfall-run off and groundwater recharge, fully linked modelling of all major river systems and modelling of the major groundwater systems and their connections to the surface water system.

The Basin was divided into 18 regions for the purposes of the project. The regions are the major tributaries of the Basin and reflect existing river system models and surface water sharing plan areas.

The project considers water availability under several climate and development scenarios and will provide a robust, Basin-wide estimate of water availability on an individual catchment and aquifer basis, taking into account climate change and other risks.

The project assesses current water use and the impacts of climate change, as well as analysing the effects of other risks, such as the likely expansion in the number of farm dams and commercial forestry plantations and the changes in groundwater extractions allowable under existing groundwater plans.

Reports have been published to date for all 18 Basin regions. Reports and information released to date can be found at <a href="http://www.csiro.au/partnerships/MDBSY">http://www.csiro.au/partnerships/MDBSY</a>

### EMERGENCY WATER (MURRAY-DARLING BASIN RESCUE) BILL 2008

The Department has identified a number of issues associated with the Emergency Water (Murray-Darling Basin Rescue) Bill 2008 as follows.

### Development of an Interim Basin Plan within 30 days

The development of a Basin Plan includes a number of processes such as information gathering, modelling and consultation with affected stakeholders, which are expected to take two years to complete.

The Water Act requires a minimum public consultation period of 16 weeks on the first proposed Plan. The purpose and mandatory content of the Basin Plan as set out in the Water Act 2007 is at Attachment A.

### Proposed water sharing and allocation arrangements

The MDB reforms agreed with the Basin States in the IGA entail far reaching changes in how the Basin water resources will be planned and managed. These include sustainable diversion limits for each basin catchment and aquifer, major new investments to achieve water use efficiencies and the return of water to the environment, and comprehensive institutional reforms. These reforms build on key features of the National Water Initiative that are important for ensuring future water use efficiency in the irrigation sector, particularly maintaining the integrity of current water entitlements and water sharing plans.

The National Water Initiative (NWI) provides water users with a right to a share of the water made available for extraction at any particular time (clause 2). Furthermore, water access entitlements can only be cancelled at Ministerial and agency discretion where the responsibilities and obligations of the entitlement holder have clearly been breached (clause 32).

The proposed sharing regime (clause 10 of the Bill) would require changes to states' water entitlement regimes. The Bill proposes that the Commonwealth Minister determines the share of water needed to maintain Basin water resources, the share of the remaining non-flood water to which a Basin Sate is entitled, and the share to be granted to the environment.

Under the IGA Sustainable diversion limits in the Basin Plan will set the available quantity of water that can be taken from each Basin catchment and aquifer.

Under the IGA on Murray-Darling Basin Reform (section 3.2.8), state water shares can only be changed by the unanimous decision of the Ministerial Council. Uncertainty arising from the Bill's proposed sharing regime is likely to adversely impact on the willingness of entitlement holders to manage risks through carry-over of water, reduce confidence in the water trading market, and lead to reduced investment in water efficiency measures.

Murray-Darling Basin Authority Chair and Chief Executive Officer

As an outcome of the COAG's 3 July meeting, relevant First Ministers signed an IGA on Murray-Darling Basin Reform that establishes the new governance of the Murray-Darling Basin, including the transition of the MDBC to the new MDBA.

The proposed Bill suggests changes to the role of the Chair and CEO of the MDBA (section 13 and Schedule 1). These sections of the proposed Bill are already incorporated in similar arrangements that have been agreed through the IGA on Murray-Darling Basin Reform and will therefore be included in the Bill being prepared to implement the IGA.

Constitutionality

Parts of the Bill appear to go well beyond the relevant Commonwealth constitutional powers of corporations, interstate trade and international affairs. A referral of powers by the States to the Commonwealth would need to be beyond that currently agreed in the July IGA. The Department recommends the Committee seeks legal advice on this matter.