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**Australian Government**  
**National Water Commission**

**Chair**

The Committee Secretary  
House of Representatives Standing Committee on Regional Australia  
Parliament House  
CANBERRA ACT 2600

By email: [mdb.reps@aph.gov.au](mailto:mdb.reps@aph.gov.au)

Dear Mr Worthington

**INQUIRY INTO CERTAIN MATTERS RELATING TO THE PROPOSED  
MURRAY-DARLING BASIN PLAN**

Thank you for your letter dated 1 June 2012, which requested the National Water Commission to provide comments against the terms of reference for your inquiry.

The Commission is pleased to be able to respond. Our submission addressing the Committee's Terms of Reference is enclosed.

The Chief Executive Officer, Mr James Cameron, will attend the public hearing from 9:30am to 11:30am on Wednesday 20 June 2012 in Committee Room 1R4, Parliament House, Canberra.

Yours sincerely

Professor Stuart Bunn  
Acting Chair

15 June 2012

## **Submission to House of Representatives Standing Committee on Regional Australia Inquiry into Certain Matters Relating to the Proposed Murray-Darling Basin Plan**

On 29 May 2012, the Minister for Sustainability, Environment, Water, Population and Communities, the Hon Tony Burke MP asked the House Standing Committee on Regional Australia to inquire into and report on certain matters relating to the proposed Murray-Darling Basin plan. This submission addresses the terms of reference for the inquiry, and is intended to provide information which may assist the Committee in its deliberations.

### **Overview**

The National Water Commission (the Commission) is responsible for auditing the effectiveness of the implementation of the Basin Plan and water resource plans, under Part 3 of the Water Act 2007. This oversight role, in addition to the Commission's broader role to promote and report on implementation of the National Water Initiative (NWI), will provide independent analysis and assurance on the extent to which implementation actions by the Murray-Darling Basin Authority (the Authority), Basin states and others are achieving the objectives of the Basin Plan and subsidiary instruments. Our early audits in particular will examine the governance arrangements, systems and processes that support implementation of the plan to allow an assessment of the likelihood of the implementation activities achieving the intended longer term outcomes.

This submission includes comments on specific matters identified within the terms of reference with the Commission's future role within the Murray-Darling Basin in mind and some background on the Commission and the NWI.

### **Comment with respect to individual terms of reference:**

- 1. Progress to date in water recovery towards bridging the gap by 2019 through both irrigation infrastructure investments and water purchases;*

The Commission made comment on recovery of water for the environment in our 2011 Biennial Assessment report, *The National Water Initiative – securing Australia's water future*<sup>1</sup>, finding that "Irrigation infrastructure investment is unlikely to be the most economically efficient mechanism for water recovery. While there may be benefits unrelated to water recovery from such investments, a rigorous economic assessment of the full benefits and costs (including external benefits and costs) should be undertaken to demonstrate to taxpayers that those investments are worthwhile." (Finding 3.6)

The Commission recognised that there has been a substantial increase in the level of water recovery for environmental purposes, most significantly through the Commonwealth's buybacks, although progress has also been made

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<sup>1</sup> <http://www.nwc.gov.au/reform/assessing/biennial/the-national-water-initiative-securing-australias-water-future-2011-assessment>

through the Sustainable Rural Water Use and Infrastructure Program, the Living Murray First Step Initiative and state managed water recovery programs.

Government investment in infrastructure renewal is a significant component of the main mechanisms adopted by the Australian Government and some state governments to recover water for the environment. Such investments can involve a cost per unit of water materially greater than the purchase of water entitlements in the market.

The Commission remains concerned that water recovery initiatives to date are being undertaken without a clear target level determined through water planning, meaning that the extent of overall adjustment can be unclear for entitlement holders. While they may deliver public or private benefits beyond the recovery of water for the environment, decision making on the use of such interventions is not always transparent and their net benefit to the community is generally not demonstrated, with consequential impacts on the level of support for the actions being taken.

Through the implementation of our core functions of audit, monitoring and assessment, the Commission plans to make further assessments of water recovery initiatives in the formulation of our Triennial Assessment report in 2014, and as it audits the implementation of the Murray-Darling Basin Plan.

Management of environmental water will also be evaluated by the Commission as it assesses the effective implementation of the Murray-Darling Basin Plan—consistent with a recommendation of the Committee’s report: *Of drought and flooding rains: Inquiry into the impact of the Guide to the Murray-Darling Basin Plan in Regional Australia*, released in 2011.

2. *The potential role that new environmental works and measures projects could play in partially offsetting SDL reductions under the Basin Plan, focussing particularly on prospective project proposals identified by state governments and community interests;*

Environmental works and measures projects have been identified by the Authority as part of the mix of approaches being employed to deliver environmental objectives while achieving sustainable levels of extraction within the Murray-Darling Basin.

Some of the proposed projects are focused on overcoming system constraints to delivery of specific environmental objectives, such as periodic floodplain inundation, or meeting specific targets at identified asset sites. While these have potential to achieve efficiencies in meeting targets at identified asset sites, it is important to ensure the end outcome delivers on the full suite of environmental objectives.

Other approaches include use of river management rules and reviewed river operational practices to achieve more efficient river operations that can deliver environmental and consumptive outcomes.

The Commission considers that use of a mix to approaches to deliver against environmental objectives is appropriate but cautions that, as with other water recovery measures, an assessment of the full benefits and costs (including external benefits and costs) compared to alternative approaches should be undertaken in determining the final mix of measures implemented to deliver environmental objectives.

Consistent with our future role of audit, monitoring and assessment, the Commission expects to examine the extent to which the works and measures activities have considered economic, social and environmental outcomes.

3. *The groundwater sustainable diversion limits (SDLs) for the Basin in the revised proposed Basin Plan*

The Commission supports the adoption of a more precautionary approach in determining groundwater SDLs for the Basin in the revised draft of the Murray-Darling Basin Plan, as the scientific knowledge that underpins the proposed groundwater SDLs varies significantly across the Basin.

The Commission identified in its 2011 Biennial Assessment report that “water managers must recognise the connectivity between surface water and groundwater systems, and manage connected systems as a single resource” and that “unless otherwise established, it should be assumed that all surface and groundwater systems are connected and that *the eventual impact* of groundwater pumping on surface water flow may be as high as 100%”.

The Authority’s approach to dealing with this uncertainty by adopting a risk based approach. This approach acknowledges that a number of systems in the Basin have in the past been over-allocated and in some cases existing pathways for reduced extractions are being implemented. The Authority proposes to manage connectivity through Water Resource Plan accreditation requirements. This type of approach is consistent with what the Commission would expect to see based on the level of evidence, data and information available. The Commission believes that it is important to better align water resource planning for both surface and groundwater resources as, independent of their connectivity, they are generally used in an integrated way.

In the 2011 Biennial Assessment report, the Commission also highlighted the shortcomings that still exist in the understanding of groundwater systems, the ecosystems that rely on them and their connectivity with surface water systems. The Commission has funded a number of projects as part of the Groundwater Action Plan to improve knowledge of groundwater systems and aquifer characteristics in the Murray-Darling Basin. At a national level, these include the *National Groundwater Information System* in partnership with the Bureau of Meteorology, and the *Atlas of Groundwater Dependent Ecosystems*.

The Commission is aware that there is more work proposed and underway to address some key information gaps in groundwater in the Murray-Darling Basin

and understands that information will be considered by the Authority in any revision of the groundwater SDLs as part of the 2015 SDL review.