



**Australian Government**  

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**National Water Commission**

Submission to the Senate Environment, Communications and the Arts  
References Committee Inquiry into Water Licences and Rights

1 October 2009

## **Preamble**

On 20 August 2009 the Senate agreed that the Standing Committee on the Environment, Communications and the Arts References Committee would hold an inquiry into Water Licences and Rights. This submission addresses the terms of reference for the inquiry, and is intended to provide information which may assist the Committee in its deliberations. The submission is drawn from the Commission's 2009 assessment of progress in the implementation of water reform. The full report can be found at [www.nwc.gov.au](http://www.nwc.gov.au).

The National Water Commission is an independent statutory authority within the Environment, Water, Heritage and the Arts portfolio. Established under the *National Water Commission Act 2004*, the Commission was created to drive the national water reform agenda. It provides advice to the Council of Australian Governments (COAG) and the Australian Government on national water issues and progress in the implementation of the National Water Initiative (NWI).

To assist in the implementation of the NWI and to improve water management and knowledge the Commission manages the Raising National Water Standards Program and the National Groundwater Action Plan.

## **The National Water Initiative**

The NWI is a joint commitment by the Commonwealth Government and all State and Territory Governments (the Parties) to make the nation's water use more efficient and sustainable, leading to greater certainty for investors, producers, communities and the environment. It is Australia's blueprint for managing the nation's water.

The NWI states that the Parties agree to implement the NWI in recognition of the continuing national imperative to increase the productivity and efficiency of Australia's water use, the need to service rural and urban communities, and to ensure the health of river and groundwater systems. The objective of the Parties in implementing the Agreement is to provide greater certainty for investment and the environment, and underpin the capacity of Australia's water management regimes to deal with change responsively and fairly.

Water entitlements of various forms (e.g. access licences, statutory rights, contracts and supply agreements) have long been used to define users' access to water, and concern about the clarity, flexibility and consistency of those entitlements has been a significant driver for water reform. The NWI established a framework for developing clear, nationally compatible and secure water access entitlements, to be defined in statute as a perpetual or ongoing and exclusive entitlement to a share of water. Typically, volumetric allocations are made against these entitlements each year or irrigation season depending on the amount of water available, as defined in the relevant water plan.

The issuing of water access entitlements or licences is typically a matter for state governments, notwithstanding the significant role of the Commonwealth in the water planning in the Murray-Darling Basin. Progress is being made in meeting NWI commitments through legislative reform and the 'unbundling' of water entitlements from land. However, implementation of the NWI water access entitlements framework remains slow in some jurisdictions. How far jurisdictions intend to roll out NWI-consistent water access entitlements, particularly in unregulated surface and groundwater systems (in the engineering sense), remains unclear.

## **Issues**

### *Water Planning*

Water plans establish a balance between environmental and consumptive uses and are fundamental to water management. Under the NWI, transparent, statutory-based water plans should be developed for all surface water and groundwater management units in which access entitlements to water are issued.

The necessary legislative reforms have been completed in all jurisdictions except Western Australia, but ongoing delays in completing and implementing water plans across much of Australia are preventing the full realisation of the benefits of an effective water planning regime envisaged under the NWI. Over the past two years, few new plans have been finalised. Many remain outstanding (in all jurisdictions except the ACT).

The formulation of a water management plan is usually an important prerequisite for creating a water market for a particular water system. In effect, planning defines and caps the water available for consumptive use, which can then be reallocated through trade. Good planning is essential for sustainable water management to prevent overallocation and other problems that arise if diversion limits or resource characteristics are poorly specified.

Delays in the planning processes also delay the commencement of water trading and its associated benefits. Delays in the development of water plans can impose effective barriers to trade, and to recovery of water for the environment through market-based purchase programs. Water markets provide opportunities for water to be reallocated between competing uses. An effective market for water trading provides flexibility in responding to emerging issues, such as drought and climate change. Water markets are therefore an important mechanism to allocate water efficiently and contribute to the NWI goal of managing water in a way that optimises economic, social and environmental outcomes.

A summary of water trading and water plans in Australia is at Attachment A.

*NWI consistent water access entitlements*

Clause 31 of the NWI states that water access entitlements will:

- Specify the essential characteristics of the water product;
- Be exclusive;
- Be able to be traded, given, bequeathed or leased;
- Be able to be subdivided or amalgamated;
- Be mortgageable (and in this respect have similar status as freehold land when used as collateral for accessing finance);
- Be enforceable and enforced; and
- Be recorded in publicly-accessible reliable water registers that foster public confidence and state unambiguously who owns the entitlement, and the nature of any encumbrances on it.

The table at Attachment B provides an overview of the status of entitlements across Australia (information drawn from the Commission's *Australian water markets report 2007–2008* (NWC 2008b) and other sources). It shows that in most states water access entitlements exist that are generally consistent with the NWI. However, the table also shows that those entitlements exist alongside other entitlement mechanisms that remain embedded in pre-existing legislation and that do not meet many of the characteristics outlined in the NWI. For example, many 'pre-existing' entitlements are not unbundled from land and are not tradeable.

The fact that most states still have both an NWI-consistent water access entitlements framework and pre-existing entitlement arrangements demonstrates that the transfer from one system to the other is incomplete, and the full benefits of water reform are yet to be realised.

Most of the reforms to introduce NWI-consistent water access entitlements have been implemented in high-priority regulated surface water systems with significant water use. While this covers a large proportion of consumptive water use, there are many other systems where entitlements are yet to be converted. The rollout of water access entitlements has been slow. For example, while the majority of water use (by volume) in New South Wales is covered by water access entitlements, 87% of total water licences (by number) have not been converted.

The Commission is concerned about the slow implementation of NWI-consistent water access entitlements, while recognising that:

- implementing legislative conversions to water access entitlements is often slow due to the strong links with the rollout of water plans; and
- in some cases, conversions can occur at a certain time (for example, an opportunity is triggered when entitlement holders are seeking to trade, as in New South Wales).

The Commission also recognises (under NWI clause 33(i)) that fixed-term or other types of entitlements such as annual licences may be issued, where

## Inquiry into Water Licences and Rights. National Water Commission

demonstrably necessary. However, even in those cases, there need to be certain limits on rights to access and take water, including to protect the interests of third parties and the environment. The Commission therefore considers that NWI-consistent entitlements should be implemented wherever possible.

Furthermore, the Commission is concerned that there is a lack of clarity in relation to:

- whether jurisdictions intend to implement NWI-consistent entitlements in *all* remaining surface and groundwater systems
- if not, the extent to which 'pre-existing' entitlements will be reformed to improve their compliance with NWI entitlement characteristics
- the timetable for implementation of such reforms.

The development of water markets and the challenges of drought have highlighted the need for more complete and transparent specification of water entitlements and allocation methods, particularly during sequences of low-inflow years. Despite examples of positive reforms and good practice, the Commission is concerned about the robustness and transparency of allocation systems during periods of critical water shortage, which are expected to become more frequent as a result of climate change.

The Commission also considers that miners, plantation forests and a range of other large industrial water users now need to be better integrated into the water access entitlements framework, so that those industries can reap the benefits of more secure water access and trade and further contribute to national productivity gains and long-term economic performance. Where full integration is not possible, appropriate alternative arrangements need to be clarified and implemented as soon as possible. The Commission considers that ultimately all surface and groundwater extractions, including for stock and domestic purposes, should be licensed and metered or otherwise measured.

### *Environmental Water*

Once an environmental water outcome (environmental objectives achieved through a specific watering regime) has been clearly defined, it must be 'secured'. Securing water for the environment involves moving from science-based recommendations to developing statutory instruments that provide for environmental and other public benefit outcomes in surface and groundwater systems. Statutory status, and therefore statutory security, for environmental water is an important feature of the NWI. The two main instruments used across the nation are environmental water access entitlements and rules-based environmental water.

Water recovery mechanisms (such as water purchases and investments in water savings) are tools being used by governments to secure environmental water entitlements, whereas rules-based environmental water is generally provided for under water plans.

## Inquiry into Water Licences and Rights. National Water Commission

All jurisdictions make statutory provision for environmental water. The legislative framework in three jurisdictions (New South Wales, Victoria and Tasmania) provides explicitly for both entitlement-based and rules-based environmental water and in South Australia, licences can be established for environmental purposes. Other jurisdictions provide for rules-based environmental water only. Each jurisdiction's primary water resource legislation generally requires water planning processes to address the use of water for environmental purposes.

Under the NWI, environmental water is required to have at least the same degree of security as water access entitlements for consumptive use. Attachment C provides information from the jurisdictions in relation to the security of environmental water.

In principle, entitlement-based and rules-based environmental water can be equally effective in securely delivering environmental outcomes. However, it is critical that both mechanisms are fully specified and implemented and monitored transparently. The shift to institutionalise the development of environmental water managers and environmental entitlements in some jurisdictions has been linked to efforts to improve the robustness and transparency of environmental management decisions and their effective implementation. It should be noted here that one of the findings of the Murray Darling Basin Sustainable Yield study was that in periods of extended drought, rules based water entitlements (usually environmental water) suffered disproportionately compared to entitlement based water entitlements (usually irrigators).

### *Interception*

The term interception relates to a number of land-use change activities, such as farm dams and bores, large-scale plantation forestry and harvesting of overland flow, which have potential to intercept significant volumes of surface and/or ground water now and in the future. The NWI parties recognised that, if these activities are not subject to some form of planning and regulation, they present a risk to the future integrity of water access entitlements and the achievement of environmental objectives for water systems.

The NWI requires that states have taken into account significant interception activities in water systems that are fully allocated, overallocated or approaching full allocation by 2011. Only limited progress has been made by most jurisdictions in addressing NWI water interception commitments. Key areas still to be addressed are how to identify potential activities that could intercept significant surface and/or groundwater in particular systems; how to determine their water use thresholds (how much water and when it is required to meet the environmental objective); and how best to incorporate appropriate management responses for incorporating activities into water access entitlement systems where interception is significant in stressed water systems.

Jurisdictional progress in the management of interception activities is listed below:

Inquiry into Water Licences and Rights.  
National Water Commission

- South Australia is the only jurisdiction that has in place a process for regulating the water interception impacts of commercial forestry plantations. At this stage, the process only covers the lower south-east of South Australia. This process is provided through regulations under the South Australian Natural Resource Management Act 2004. South Australia has recently established a statewide policy framework and introduced a Bill to establish a statewide approach to regulating the impacts of commercial forests on water resources.
- New South Wales has drafted a policy for floodplain harvesting that will require all floodplain harvesting activities to be licensed, and subjected to volume limits. Furthermore, no new licences will be issued to existing licence holders. This approach aims to increase flows into rivers during periods of significant rainfall.
- In Queensland, overland flow take is limited by law under the Water Act 2000 and finalised water resource plans. The Water Act 2000 requires water resource plans to manage interception of overland flow water if there is a risk that taking overland flow water in the area may significantly impact on the plan's outcomes. Queensland is currently implementing a process for converting overland flow authorisations to water access entitlements.
- Tasmania has interception by dams is regulated under the Water Management Act 1999, which requires permits for dam works and related water allocations to be appropriately assessed. Tasmania is also developing a groundwater management framework that will enhance control of interception by bores and has developed and tested a water availability and forest landuse planning tool to assess potential impacts of plantation forest water interception.
- In Western Australia, interception is accounted for when determining the water balance. While this achieves part of the intent of the NWI, Western Australia does not yet have legislation in place that allows regulation of interception.
- Jurisdictions have varying policies and regulations for the taking of water to off-stream farm dams. New South Wales has a policy of requiring that all farm dams that capture more than 10% of the average annual runoff must be licensed and include an entitlement. In South Australia, the taking of water in this manner requires a licence (except for stock and domestic purposes, although stock and domestic dams greater than 5 ML (megalitres) in the Western Mount Lofty Ranges will also be subject to licensing). Licences normally have conditions specifying extraction rates, threshold flow rates and metering obligations. These conditions are usually contained in the relevant water allocation plan. Metering of all licensed water use is a statewide policy.

- In the Northern Territory, constraints to capture of overland flow are defined in the Northern Territory Water Act. Specific entitlement-setting processes for water intercepted by off-stream farm dams in stressed water systems have not yet been developed in Queensland.
- The potential impacts of unlicensed activities (such as farm dams, stock and domestic groundwater use, and commercial plantations), and regulatory processes for addressing them, are currently being considered in the preparation of Victoria's Northern and Western sustainable water strategies.

## **Conclusion**

Significant progress has been made in the reform of water access entitlements as agreed under the NWI but, in the Commission's view, progress has not been fast enough. The Commission is convinced that reform will contribute to the national micro-economic reform agenda and deliver enduring benefits across Australia. These include economic productivity gains, sustainable use of natural resources, and a more harmonised and efficient approach to water management. The full implementation of the reform agenda is essential.