

**Commonwealth House of
Representatives Standing Committee
on the Environment and Energy**

**Inquiry into the management and use
of Commonwealth environmental
water**

NSW Government submission

12 April 2018

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Introduction

NSW is committed to ensuring environmental water, including water purchased by the Commonwealth to maintain and enhance the health of our river systems can be used for its intended purpose.

NSW Government agencies play an important role in managing and supporting the delivery of environmental outcomes from environmental water in NSW through:

- / the development and application of state legislation and science-based policy
- / undertaking compliance and enforcement activities
- / the provision of specific advice in relation to ecosystem processes and requirements
- / working cooperatively with the Commonwealth Environmental Water Office (CEWO) to ensure the planning and management of all available environmental water within NSW, including Commonwealth environmental water, is integrated.

Our Government's current water reforms are aimed at strengthening water management in NSW and restoring public confidence by placing a greater focus on compliance and enforcement, transparency and best practice management. A key component of the reforms is improving environmental water management in NSW, including working with CEWO to ensure proposed changes enhance and assist the optimal use of water held by the CEWO.

Information about the current NSW water reforms and how they relate to the management of Commonwealth environmental water is provided below along with responses to the specific Terms of Reference.

NSW Water Reforms

In December 2017, the NSW Government released the NSW Water Reform Action Plan (WRAP) in response to the Independent investigation into NSW water management and compliance, conducted by Ken Matthews, AO (the Matthew's report) and the Murray Darling-Basin Water Compliance Review (MDBA Review).

The WRAP sets out the NSW government's commitment to ensure that there is an equitable and transparent approach to the management of water now and for future generations. A key component is ensuring transparency in how we share, allocate and manage water.

Both the Matthew's Investigation and the MDBA Review highlighted some of the problems and complexities of managing environmental water and stated the need for greater protections.

A key component of the WRAP is the development of both interim and enduring solutions to better manage environmental water in NSW. This work is being undertaken by an interagency working group consisting of representatives from a range of disciplines from relevant NSW Government agencies, the Commonwealth and CEWO. Proposed options include measures to protect the use of environmental water held by both the Commonwealth and the State.

Further information on the development of the interim solutions is provided under the first term of reference and is also outlined in the *Better management of environmental water, Consultation paper*. The options being considered are intended to enable the better management of environmental water so that the outcomes for environmental water can be maximised.

The interagency working group will present a package of interim solutions to the NSW Government in May 2018. Enduring solutions will be developed over time as part of the water resource planning process.

Under the WRAP, NSW has also committed to improving transparency in how we share, allocate and manage water and is in the process of developing a robust water measurement and metering framework to bolster compliance and enforcement around water take.

These initiatives are aimed at improving public and industry awareness, engagement and confidence in water management by improving the quality and availability of water information and in turn, increasing voluntary compliance. Increased voluntary compliance will support the success of new measures to protect environmental water under the WRAP, including held environmental water.

Part of the environmental water work under the WRAP will include publishing further explanatory material for the public about how environmental water is managed (including Commonwealth Environmental Water). The NSW Government has committed to providing this explanatory material by the first quarter of 2019 and is continuing to work towards this target.

The Government is dedicated to ensuring the reform program is high quality, enduring and developed in close consultation with stakeholders. It is currently seeking public feedback on the key components of the WRAP, including the proposed measures for the interim environmental water solutions package, alongside an Exposure Bill (exhibition will close on 15 April 2018).

The NSW Government continues to work closely with the CEWO to ensure that the proposed reforms will support its work delivering optimal environmental outcomes using the most efficient and effective means possible.

Further information on the NSW water reforms is available in the NSW Water Reform Action Plan (attachment A) and on the following website: <https://www.industry.nsw.gov.au/water-reform>.

Information on the current environmental water framework in NSW can be found at:
<http://www.environment.nsw.gov.au/topics/water/water-for-the-environment>.

Terms of Reference

TOR 1 - maximising the use of environmental water for the protection and restoration of environmental assets

The NSW Government is committed to maximising the use of environmental water for the protection and restoration of environmental assets.

The NSW Office of Environment and Heritage (OEH) manages NSW's environmental water holdings, including environmental water licences held by the NSW Government and callable environmental water allowances established under water sharing plans.

OEH is responsible for the development of the Long-term Watering Plans (LTWPs) and Annual Environmental Watering Priorities (AEWPs) for NSW:

- / LTWPs provide long-term objectives and strategies for managing environmental water, in conjunction with other types of water so as to give effect to the Basin-wide Environmental Watering Strategy, thereby contributing to basin-wide environmental outcomes.
- / AEWPs outline how environmental water is intended to be used in the coming year. Priority setting is dependent on ecological and climatic factors and water availability. All environmental water in NSW, including Commonwealth environmental water, is used in accordance with these priorities.

Annual water plans are also prepared for each valley that identify short-term objectives, such as:

- / building resilience into an ecosystem
- / triggering plant and animal breeding cycles
- / maintaining refuge during dry times
- / supporting fauna and enhancing wetland habitat during wet times
- / building on the successes of previous watering events.

Decisions for individual watering events to achieve planned short-term objectives are then made based on a number of considerations, including rainfall events, climatic conditions, water availability (including contributions by CEWO), water use, stakeholder support and ecological outcomes.

OEH cooperates with CEWO to ensure the planning and management of all available environmental water within NSW, including Commonwealth environmental water, is integrated and supports the Basin-wide Environmental Watering Strategy.

OEH publishes a yearly Outcomes Report for environmental water in NSW. The Outcomes Report 2016-17 highlighted a total of 54 deliveries of water for the environment, totalling almost 1,400 gegalitres. This water was delivered from state, Commonwealth and The Living Murray accounts, and resulted in a range of significant ecological benefits. These included internationally noted pelican breeding events, substantial native fish spawning and distribution, and extensive improved tree health throughout Ramsar declared forests.

As noted, a key priority under the WRAP is to identify solutions for improving the management of environmental water. The *Better management of environmental water, Consultation paper* identifies a number of options that could be used to better manage environmental water in NSW.

A key challenge to managing environmental water in NSW is the characteristics of the northern part of the Murray Darling Basin. Major regulated rivers in the northern part of the Basin are connected to the southern regulated rivers by the unregulated Barwon Darling River. The interim solutions being developed as part of the WRAP therefore focus on the Northern Basin.

Proposed interim measures that are currently being considered as part of the package of solutions include:

- / imposing restrictions on downstream licences when licensed environmental water is released from an upstream dam
- / changing access rules for flows through the Barwon-Darling (e.g. temporary or permanent changes to commence to pump thresholds)
- / using Individual Daily Extraction Limits (IDELs) to better manage flow sharing
- / active sharing of flows on an event basis (via voluntary arrangements, embargoes or Water Sharing Plan (WSP) rules)
- / using downstream environmental requirements as a trigger to manage upstream access.

Further information on each of these measures is included in the *Better management of environmental water, Consultation paper*.

These proposed interim measures are centred around improving the management of flows and extraction within and between river systems to protect and improve ecosystems, while enhancing cultural, social and economic outcomes from water. The frequency, timing and duration of flows is critical to achieving the objectives from improved environmental water management, specifically:

- / breaking extended cease-to-flow periods
- / whole-of-river flow connectivity
- / flushing flows
- / protection of licensed environmental water.

The NSW Government is committed to finding both interim and enduring solutions that will ensure environmental water is properly protected so the long term and short term objectives set for environmental water can be met.

TOR 2 - considering innovative approaches for the use of environmental water

When working cooperatively with NSW agencies, CEWO has shown flexibility and consideration in adapting to individual situations to achieve the most positive outcome. Examples of innovative approaches taken by CEWO in using environmental water include:

- / The delivery of emergency water via irrigation infrastructure to dilute and create refuge during the Murray hypoxic black water event of 2016-17
- / 'Underwriting losses' in highly variable irrigation delivery systems to prevent exposure of Murray/trout cod nests. This practice uses environmental water to fill the gaps between peak consumptive demand to reduce unnatural variations in flow and access CEWO accounts to ensure water levels do not drop at critical times.

The NSW Government looks forward to working with the CEWO in considering further innovative approaches for the use of environmental water.

TOR 3 - monitoring and evaluating outcomes of the use of environmental water

Monitoring and reporting on the use of environmental water in NSW

The use of environmental water across NSW is monitored and reported on. All environmental watering events include some monitoring to assess the effectiveness of environmental water. Planned environmental water rules are also evaluated against objectives in WSPs to assess their effectiveness. NSW undertakes monitoring activities across all NSW, including:

For licensed environmental water:

- / monitoring water ordering, accounting and measurement (gauging)
- / mapping the timing and extent of inundation using remote sensing
- / wetland vegetation condition and extent mapping
- / fauna surveys.

For planned environmental water:

- / monitoring the effectiveness of cease to pump rules in unregulated water sources (with a focus on fish and water quality)
- / monitoring fish and primary production response of flow rules such as supplementary water and transparency / translucency in regulated rivers
- / monitoring groundwater dependent ecosystem response in groundwater sharing plans.

Due to the complexities in determining the incremental benefit of managed and planned environmental water, it is important to monitor the long-term trends in condition as well as the short-term responses to each watering event. For example, monitoring long-term trends in vegetation health in a given valley will help to determine the cumulative impacts of interventions versus whether delivering a specific watering event resulted in improvements to vegetation.

CEWO also specifically monitors for outcomes achieved from the use of Commonwealth water in the Gwydir, Lachlan, Murrumbidgee and Murray Valleys across a five-year timeframe. Results from this monitoring are also used by OEH to help refine and improve future environmental water management decisions and monitoring.

While monitoring and reporting of ecological outcomes is currently focused at the asset and catchment scale, NSW is working with the Commonwealth to develop local and basin scale monitoring programs so that improved system health can be demonstrated at the Basin Scale.

Improvements to current systems

NSW is currently working on a joint evaluation framework for the Murray-Darling Basin Plan as well as a separate Monitoring Evaluation and Reporting (MER) plan for each Water Resource Plan valley in NSW that will cover off on licensed and planned environmental water.

In addition, NSW has also commenced discussions with CEWO to better integrate monitoring activities in the Barwon Darling. It is anticipated that MER will be integrated so both licensed environmental water releases and management provisions for planned environmental water can be assessed.

NSW chairs the multi-jurisdictional Joint Venture Steering Committee (JVSC) that reports to the Basin Officials Committee. The purpose of the JVSC is to enable an integrated approach to MER to be developed, through agreement on aligned objectives, evaluation questions, and monitoring programs.

TOR 4 - options for improving community engagement and awareness of the way in which environmental water is managed

The NSW Government is committed to improving transparency and public engagement in how we share, allocate and manage water in NSW, including environmental water, through the delivery of key actions under the WRAP.

These include:

- / seeking feedback on the creation of a public register of water information that could cover water entitlements, licences and work approvals
- / publishing compliance and enforcement activities undertaken by the new Natural Resources Access Regulator
- / implementing a new stakeholder engagement framework and publishing a schedule of stakeholder engagement activities
- / improving the availability and accessibility of information on the Department of Industry website.

Further information on the proposed measures is included in the *Transparency measures, Consultation paper*.

The Government is also seeking public feedback on initiatives to improve the transparency of when water take is permitted to make it easier for water users and members of the public to access and understand when water can be taken.

In addition, OEH has been working to establish new approaches to communicate with and engage with a wide range of stakeholders on environmental water, using innovative engagement based on the following principles:

- / increased transparency, detectability and accessibility of information about what it does and the purpose behind it
- / a focus on peoples' values when building awareness and understanding of environmental water
- / facilitation of stakeholder involvement in the delivery of environmental water
- / expanding existing relationships and trusted networks
- / linking to production values that communities relate to and explaining socio-economic and ecosystem service benefits.

Direct engagement with individuals, either through specific advisory groups, or community and stakeholder forums provides opportunities for dialogue about ecological outcomes being sought through environmental water delivery.

For example, OEH manages the delivery of discretionary planned environmental water in collaboration with a range of stakeholders and agencies. The primary forums for this collaboration are the valley specific Environmental Water Advisory Groups (EWAGs) which assist in the development of annual and longer term environmental water planning, monitoring and evaluation. EWAG membership is constituted by community members, water managers, landholders, Aboriginal groups, independent scientists, and relevant partner agencies, including CEWO.

The NSW Government is committed to working alongside CEWO to better understand and inform community perceptions of environmental water and its management.

It is also important to note the role that the Natural Resources Access Regulator will play in this area into the future.

Led by an independent board, the NRAR will ensure effective, efficient, transparent and accountable compliance and enforcement measures are put in place for natural resources management legislation and maintain public confidence in enforcement activities.

Since the appointment of the Board in December last year, considerable progress has been made on the formation and strategic direction of the NRAR. The Chief Regulatory Officer and executive team have now been appointed, ready for the commencement of NRAR in the second quarter of 2018. Both the Board and executive members have significant, relevant expertise in natural resource management that will allow them to provide the strategic and independent oversight needed for water regulation in NSW.

In February, the NRAR signed a Memorandum of Understanding with the Murray Darling Basin Authority to underpin a strong and cooperative approach to compliance and enforcement to ensure that the Basin Plan can be implemented as intended.

Next steps for the NSW Water Reform Action Plan

The NSW Government is currently consulting on the key initiatives under the WRAP. Consultation closes on 15 April 2018. An Exposure Bill, the draft Water Management Amendment Bill 2018, has also been released for consultation. The Bill gives examples of the amendments to the *Water Management Act 2000* and the *Natural Resources Access Regulator Act 2017* that could be enacted to enable key elements of the reforms.

The Bill is expected to be taken to Parliament later this year and will reflect the final policy positions developed through consideration of public views gathered during consultation. Some policy elements will be enabled in the regulations to be developed after the Bill has been considered by Parliament.

The package of amendments that will be introduced to Parliament is likely to include new rules that will lead to the better management of environmental water and improve transparency in how water is shared, allocated and managed. This will deliver on the water goals for NSW and ensure a sustainable water future.