Submission to Productivity Commission
National Water Reform – Issues Paper

ABOUT NELA

The National Environmental Law Association (NELA) is Australia’s leading environmental law organisation with a membership base of professionals in environment and resources law and related disciplines. NELA’s vision is that ecological sustainability is a guiding principle in regulating energy and resources, utilities, water management, pollution control, protecting biodiversity and cultural values, and land use planning and infrastructure.

We seek to protect the environment by shaping the law through information sharing, analysis and debate.

ABOUT THIS SUBMISSION

NELA welcomes the opportunity to comment on the Productivity Commission’s Issues Paper in its Inquiry into National Water Reform.

Given NELA’s broad membership base, representing a range of perspectives on water management, our submission focusses on the outcome of water reforms to date, and priority issues that we consider should be addressed to improve water management outcomes and the integration of water policy into broader resource management and planning frameworks.

In summary:

• The unbundling of water rights, introduction of market mechanisms, and formal recognition of environmental flow requirements has greatly assisted in the management of water resources in Australia. However, more can be done to ensure that allocations are equitable, precautionary and have regard to cultural rights.

• Strong baseline and monitoring data is critical to sustainable management of water resources. Water management plans must be regularly reviewed to ensure allocations are determined on the basis of the most up-to-date modelling.

• NELA considers that economic approaches to water management should be maintained, but recommends that complementary approaches such as public trust or guardianship be explored to protect ‘common good’ water resources, particularly those with strong cultural connections.

• National water management would benefit from more formal and consistent consultation practices to improve public participation and recognition of Aboriginal interests.

• Adaptive management should be embedded in water planning and management practices.

• The Productivity Commission should examine the benefits of establishing a legal and policy framework for water management that applies to all water users, transitioning away from special agreement rights and industry-specific legislation.
SUCCESSES OF WATER REFORM AGENDA TO DATE

NELA considers the water reform agenda, particularly the implementation of the National Water Initiative, to have demonstrated a number of significant achievements since the 1990s. These include:

**Development of water markets**

The increased sophistication of modelling and development of market mechanisms to address allocations has been a noteworthy achievement, particularly in specific basins and water systems such as the Murray Darling Basin.

Despite the management improvements facilitated by market mechanisms, a range of constraints continue to prevent such mechanisms from achieving an entirely sustainable system of water allocation. In particular, the “public good” qualities of water are often poorly recognised, trading mechanisms do not adequately reflect the volatility from climatic conditions, price mechanisms often exclude externalities (both costs and benefits), and a number of water supply situations remain uncompetitive (see below).

Strong baseline and monitoring data is also lacking for many catchments, further compromising the holistic management of water resources. For example, Tasmania has 48 identified catchments, but only 11 adopted water management plans, five of which were adopted more than 10 years ago.¹

**Unbundling water rights**

The move toward water markets has been greatly facilitated by the ‘unbundling’ of water rights from other property rights, and the development of entitlement based systems of allocation.

**Extraction limits**

The establishment and, by and large, maintenance of caps and controls on extraction from water systems, especially those that have historically been over-allocated, have been essential in the move towards greater recognition of sustainable water management practices. Establishing limits has allowed complex considerations, such as environmental flow, climate variability and Aboriginal rights to be factored into allocation decisions.

**Recognition of environmental flow requirements**

The integration of environmental priorities into water management, primarily through explicit decision-making criteria, surety allocations for environmental flows and the use of ecologically sustainable development as an underpinning paradigm, has been beneficial. Key institutional and policy innovations, such as environmental water regimes and water-holders, have assisted in ensuring that minimum ecological needs can be met.

Again, lack of baseline data, monitoring and regular review of catchment management plans can undermine the accuracy of environmental flow allocations.

**Water planning**

The emergence of water planning as a pivotal discipline with water governance has been intrinsic to the achievement and feasibility of other reforms, including market arrangements and controls on extraction. The engagement of water planning and management officers in most relevant State government departments has improved the integration of planning and management roles.

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**Commonwealth involvement**

The intervention of the Commonwealth in water management, especially on environmental grounds, has been an important legislative recognition both of the significance of water resources and the cross-jurisdictional nature of management responsibilities. Political tensions and difficulties abound in relation to the exercise of Commonwealth powers, including limitations on the application of the *Water Act 2007*.

The Commonwealth government’s recognition of the impact of mining activities on water resources as a matter of national environmental significance under the *Environment Protection and Biodiversity Conservation Act 1999* has also allowed for a more rigorous assessment of such impacts.

**Aboriginal water rights**

While much is yet to be done on this issue (see below), water reform initiatives have included limited action to recognise the connections of Aboriginal Nations to waters.

**PRIORITIES FOR FURTHER REFORM**

The National Water Initiative has been instrumental in achieving many of the successes outlined above. In large part, the initial success of the NWI has been a result of the use of economic mechanisms to address resource allocation.

NELA considers that, building on the successes of the NWI, more needs to be done to ensure that community and environmental interests are properly reflected in water governance. Economic approaches should be maintained, but complemented by other approaches better able to reflect the ‘common good’ nature of water resources.

NELA urges the Productivity Commission to consider the potential application of the following approaches:

- Greater recognition of fiduciary and public trust qualities in the management of water resources.²
- Guardianship models for high value waterways or wetlands, particularly those with strong Aboriginal cultural connections, associated with the attribution of legal personhood.³ Such reforms have recently been implemented in New Zealand (Whanganui River)⁴, and India (Ganges and Yuman Rivers).⁵

Other priority areas that we consider should be examined as part of the National Water Reform review are outlined below.

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² For example, compare Hon Paul Stein ‘Ethical issues in land-use planning and the public trust’ (1996) 3 *Environment and Planning Law Journal* 493 with Rt Hon Garfield Barwick ‘Problems in conservation’ (1975) 1 *UNSW Law Journal* 1


Reform and development of public participation

Historically, participation in the governance of water resources has been limited to government (through responsible agencies) and key commercial users, such as agriculture, mining and the industrial sector. While it is increasingly recognised that a wider range of stakeholders must be involved in resource management, more must be done to achieve this.

Consultative measures have become more commonplace under the NWI framework, however consultation procedures remain variable in their practical extent and legitimacy. NELA recommends that more consistent consultation practices be adopted, guided by government policy or regulation, to improve public participation in water management. Improvement in the practices and policy bases of public participation will have benefits for the efficiency, effectiveness, innovation and legitimacy of water management.6

Greater attention to Aboriginal rights and interests in water management

In addition to improving public participation generally, there are significant, outstanding questions regarding how to resolve Aboriginal and non-Aboriginal priorities, interests and outcomes in water management. Aboriginal interest in water is often its centrality to culture, community, reparation and justice. Those interests can be cultural (in a broad sense), as well as economic (supporting local industry, improving public health outcomes).

Current policy, law and practices concerning Aboriginal water7 and participation in water management are mainly limited to consultative processes, such as those set out in the Basin Plan. Collaborative and consultative exercises have now been the subject to considerable research and evaluation, and they have generally been found wanting.8

Although some gains have been made in relation to ownership and control of resources, more can be done to recognise Aboriginal water within the NWI. We urge the Productivity Commission to encourage rigorous discussion of Aboriginal rights in water, especially where for historic or legal reasons native title is largely absent or inadequate to meet community needs.

Embed adaptive management in law and policy

The application of ESD and precautionary principles, particularly given climatic variability, demands an adaptive approach to water management. In many cases, water management practitioners have been proactive regarding the incorporation of adaptive management approaches and tools into resource management.

NELA considers that these approaches need more explicit recognition and regulation through legal tools, rather than just through practice.

Presently, adaptive management approaches may be implemented through conditions on authorities (such as permits or licences).9 These tools may include obligations to, for example, establish baselines, thresholds and triggers for conduct (such as halting an activity or compelling an action to occur) and to monitor and report against identified indicators.

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6 See generally Bruce Lindsay ‘Public participation in water resources management in Australia: procedure and possibilities’ in Cameron Holley and Darren Sinclair Reforming Water Law and Governance (Springer, 2017, forthcoming); a copy is available from the author.

7 This is commonly expressed as ‘Aboriginal uses and values’


9 Gerry Bates Environmental Law in Australia (LexisNexis, 9th ed, 2016), [8.53]
Critically, as His Honour Preston CJ has stated, adaptive management must be more than a ‘suck it and see’ exercise. Effective adaptive management relies on access to comprehensive, integrated data and modelling, incorporating information on external pressures on the water system (including interception), so that precautionary thresholds can be established for initial authorities.

Ad hoc adaptive management though conditional consents, particularly where access to information is inconsistent, is inadequate to management of water resources at landscape, regional or national scales. NELA recommends that effort be directed at developing national policy approaches to guide the ‘best practice’ application of adaptive management principles in water resources management.

**Equitable water management and accounting**

In many jurisdictions, mining operations are subject to industry-specific legislation regarding access to water, or other exemptions from water management legislation. In terms of both interception (de-watering) and consumptive use (use of water in cooling procedures), the impact of the sector on the quality and quantity of water available to other users, including ‘the environment’, can be significant.

Given the interaction of groundwater and surface water resources, aquifer recharge requirements and interception impacts, sustainable water management practices are more likely to be achieved where all water use is subject to the same assessment and governance framework.

NELA recommends that the Productivity Commission examine the benefits of establishing a legal and policy framework for water management that applies to all water users.

Similarly, water rights afforded under historic special agreements should be brought within the applicable water management regime for each State. For example, recent amendments to the *Water Act 2000* (Qld) seek to transition special arrangements to water entitlements through negotiation with companies. The Queensland government has said:

> Bringing water rights into contemporary arrangements provides certainty for the sustainable management of water and provides greater certainty for companies through clear, well-defined and secure water entitlements.

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**NELA gratefully acknowledges the assistance of Dr Bruce Lindsay in preparing this submission.**

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10 *Newcastle and Hunter Valley Speleological Society v Liper Hunter Shire Council and Stoneco Pty Ltd* [2010] NSWLEC 48, [184]