



SUBMISSION

Productivity Commission
2024 Review of National Water Reform

February 2024



Contents

NSW Irrigators' Council.....	3
NSW Irrigation Farming.....	3
Introduction.....	4
The 2020 review of national water reform progress	5
Scope of 2024 Inquiry in national water reform progress	8
Submission overview	9
Summary of NSWIC recommendations:	9
Submission.....	11
1. Water Access Entitlements & Planning Framework	11
1.1 Achieving sustainable levels of extraction	11
1.2 Water Access Entitlements in Coastal NSW	14
1.3 Risk Assignment Framework	16
1.4 Declining Reliability	16
2. Indigenous Access.....	19
3. Water Markets and Trading.....	21
3.1 Protecting third-parties	21
3.2 Inter-Valley Trade	21
3.3 NSW Coastal Trading Rules	22
4. Best-Practice Water Pricing and Institutional Agreements	22
4.1 Cost-share ratio	22
5. Water Resource Accounting	25
5.1 Metering & Measuring	25
6. A new National Water Initiative.....	28
Conclusion	28



NSW Irrigators' Council

The NSW Irrigators' Council (NSWIC) is the peak body representing irrigation farmers and the irrigation farming industry in NSW.

NSWIC represents more than 12,000 water access licence holders in NSW who access regulated, unregulated and groundwater systems. NSWIC has member organisations in every inland river valley of NSW, and multiple coastal valleys. Our members include valley water user associations, food and fibre groups, irrigation corporations and commodity groups from the rice, cotton and horticultural industries.

NSWIC engages in advocacy and policy development on behalf of the irrigation farming sector. As an apolitical entity, the Council provides advice to all stakeholders and decision makers. NSWIC welcomes this opportunity to provide a submission to the Productivity Commission, assessing the progress of the Australian, State and Territory governments towards achieving the objectives and outcomes of the National Water Initiative (NWI). NSWIC see this as a valuable opportunity to provide expertise from our membership. Each member reserves the right to independent policy on issues that directly relate to their areas of operation, expertise or any other issues that they deem relevant.

NSW Irrigation Farming

Irrigation farmers in Australia are recognised as world leaders in water efficiency. For example, according to the Australian Government Department of Agriculture, Water and the Environment:

“Australian cotton growers are now recognised as the most water-use efficient in the world and three times more efficient than the global average”¹

“The Australian rice industry leads the world in water use efficiency. From paddock to plate, Australian grown rice uses 50per cent less water than the global average.”²

Our water management legislation prioritises all other users before agriculture (critical human needs, stock and domestic, and the environment), meaning our industry only has water access when all other needs are satisfied. Our industry supports and respects this order of prioritisation. Many common crops we produce are annual/seasonal crops that can be grown in wet years, and not grown in dry periods, in tune with Australia's variable climate.

Irrigation farming in Australia is also subject to strict regulations to ensure sustainable and responsible water use. This includes all extractions being capped at a sustainable level, a hierarchy of water access priorities, and strict measurement requirements.

¹ <https://www.agriculture.gov.au/ag-farm-food/crops/cotton>

² <https://www.agriculture.gov.au/ag-farm-food/crops/rice>



Introduction

The National Water Initiative (NWI) was developed as the blueprint for Australian water reform following a 1994 Council of Australian Governments meeting. In the Productivity Commission's 2017 statutory inquiry into progress on national water reform, it was found that most jurisdictions had made good progress towards achieving the NWI objectives, and that the reforms had significantly improved the way water resources are managed. This should be applauded.

However, there remain outstanding aspects from the initial agreements that have not been fully implemented or implemented as intended. In 2021, following its 2020 statutory inquiry, the Productivity Commission made several recommendations for the renewed agreement, including:³

- Increase emphasis on water service provision, provide more detail for water resource management and refer to cultural outcomes in NWI objectives;
- Embed the concept of fit-for-purpose water resource management in a new NWI;
- Reshape principles covering governance, regulatory and operational arrangements for water trading and markets to provide leading practice foundations for developing markets;
- Adopt principles for best-practice independent economic regulation; and
- Commit to a culture of evidence-based decision making, innovation and continuous improvement to underpin successful implementation.

Since 2004, significant changes have occurred to water management in Australia, shifting the context for water management, and fundamentally, the baseline on which future water planning is founded. Since the NWI was adopted, Australia has endured two of the most severe droughts on record (Millennium Drought and 2017-20 drought), followed closely by major flood events from 2021 to 2023.

There have also been sweeping changes through reforms, including the original 2012 Murray-Darling Basin Plan followed by a substantial rewrite of key aspects of the Basin Plan with the passage of the Water Amendment (Recovering our Rivers) Act 2023. State-level reforms such as the NSW Non-Urban Water Metering Reform, and the establishment of a dedicated water compliance agency, Natural Resources Access Regulator (NRAR) have further altered the water management context in which the NWI should be evaluated.

In this, the third statutory review of national water reform progress against the NWI, NSWIC strongly encourages the Productivity Commission to consider the importance of reliable and secure water access to grow our nation's food and fibre, and the need for best-practice water management strategy to ensure the productive use of water resources into the future.

NSWIC also recommends changing the language of 'rebalancing consumptive and environmental shares' to instead focus on providing transparent and predictable systems of allocating water based on water availability and priority of use. The language of 'rebalancing' has prioritised reducing access to water to grow for and fibre over the last two decades. But with overallocation now largely addressed and Sustainable Diversion Limits being met, it is time for the NWI to place equal emphasis on complementary measures to achieve environmental outcomes.

³ [Call for submissions - National Water Reform 2024 \(pc.gov.au\)](https://www.pc.gov.au/call-for-submissions-national-water-reform-2024)



The 2020 review of national water reform progress

In 2020, NSWIC provided a submission to the Productivity Commission's Issues Paper for its 2020 statutory inquiry into progress on national water reform. The submission provided our perspective on NSW progress towards achieving NWI objectives and whether the reforms are achieving the intended outcomes. Our key findings included:

- The NWI has delivered many improvements to water management in Australia, and these should be applauded. There is scope for the NWI to be contemporised, to meet new and emerging challenges, and to address the adverse impacts of past reforms.
- NWI objectives of 'addressing overallocated systems' in the Murray-Darling Basin can be considered achieved with Sustainable Diversion Limits now being met following significant water recovery. This has, of course, had significant social and economic ramifications, particularly for communities dependent on irrigated agriculture.
- The previous water reform era focused on shifting the balance of water between users – e.g. between environmental and productive buckets of water. Now that this balance has been struck, future water planning must shift the conversation beyond simply moving water between types of users (i.e. between buckets), to how water can be optimally utilised by each water user (i.e. within buckets).
- The Risk Assignment Framework is poorly applied in practice and lacks the supporting architecture to be effective. The absence of an agreed metric and method to measure reliability, absence of reporting, and minimal baseline data, are leading causes to poor implementation.
- Third-party impacts are too narrowly defined, and not captured by performance indicators.
- In NSW, water pricing for rural bulk water does not meet the NWI objectives of following a 'user pays' principle; rather, NSW pricing is based on an 'impactor pays' principle. This has water users paying for public interest items such as water quality monitoring, environmental management, flood mitigation and compliance.
- Underusage is a significant problem, which is poorly understood, poorly accounted, and lacks policy mechanisms to facilitate improvements.
- Metering and measuring in NSW have significantly improved in recent times, with ongoing reforms. Consistency with other jurisdictions is required. NSW's new metering standards are recognised as world-leading.
- NWI outcomes for community partnership and adjustment have been particularly poorly implemented, and triple-bottom line provisions need to be strengthened.
- 'Adaptive management' is fundamentally important to water management, but water managers have failed to apply this principle in practice. Instead, water management suffers from a stiffness/rigidity of policy, even when it comes to implementing formal inquiry recommendations.



NSWIC's recommendations were:

- A renewed NWI should contribute to a better understanding of 'reliability', including providing measurement options/approaches, and requirements for reporting; communication/data availability; and, impact assessments. A renewed NWI should also improve the supporting architecture to deliver the principles of the risk assignment framework.
 - Governments should commit to assessing the cumulative impacts of water reforms on the reliability and security of water entitlements.
- Broaden the definition of third-party impacts, as well as performance indicators for water trading, to include socio-economic impacts and impacts on water entitlement reliability. Require the trading framework and rules to limit effects on third parties.
- Productivity Commission to lead the development of a framework for setting prices for rural bulk water that accounts for and facilitates cost recovery for public interest/benefit items. This framework is to be included in a renewed NWI.
- Direct investment in complementary and non-flow measures with potential to achieve important ecological outcomes while minimising adverse socio-economic outcomes.
- Governments should develop (1) under-usage trigger points (based on over-usage trigger points for non-compliance) and (2) stimulus policy mechanisms which come into play when trigger points are reached.
- Improved metering and measurements in other jurisdictions to ensure consistently high standards nationally.
- A renewed NWI should facilitate Governments developing new and improved socio-economic objectives and performance indicators, through robust MER programs, to improve understanding of socio-economic impacts of water reforms.
- Recommit to historic commitments for adaptive management. Explore opportunities to improve accountability for adaptive management in practice, such as by establishing a board with responsibility for ensuring adaptive management occurs, including auditing, monitoring and driving forward action on the implementation of the recommendations from reviews/inquiries/assessments.
- Governments should actively commit to programs designed to improve public confidence in water management, improve awareness of recent and ongoing reforms, and improve water literacy of the broader community.

In 2021, NSWIC provided a submission on the Productivity Commission's National Water Reform Draft Report. This second submission responded to the Commission's call for suitable triggers for rebalancing environmental and consumptive shares in the context of climate change.

NSWIC raised serious concerns about the proposition that climate change requires a 'rebalance' of environmental and consumptive uses, as this approach to climate change adaptation completely misunderstands the system of water management in NSW. In this



State, the amount of water allocated for irrigation in any given year is already automatically adjusted to climatic conditions in real time, and therefore over time reflects the impacts of climate change on water availability.⁴

In our submission, we analysed climate change, pricing, and stability. Our findings included:

Climate Change

- Irrigators are first and hardest hit by reducing water availability from climate change, given water allocation systems automatically respond to changing water availability, by only providing a share of available water to consumptive users once other needs, including water to keep rivers flowing, have been met.
- NSWIC recommends changing the language of ‘rebalancing consumptive and environmental shares’ to instead focus on providing transparent and predictable systems of allocating water based on water availability and priority of use.
- Rules to ensure critical needs are met during and following extreme dry periods (first flush arrangements), and provide a transparent and predictable approach, without requiring permanent ‘rebalancing’ which impacts every year.
- With significant reductions to inflows over the past 20 years, community expectations of achieving the rivers experienced in the previous century are likely unattainable. Whilst it may be confronting, realistically, the only feasible option is managing the rivers of the present and future, not the past, given changing patterns of inflows.

Pricing

- A new cost-sharing framework for setting prices is required that appropriately recovers costs for public interest items and reflects the source of demand originating beyond immediate water users given public interest and social expectations of water management.

Stability

- Communities are experiencing water reform fatigue, and whilst adaptive management is important, the revolutionary reform agenda of the recent decade creates instability and uncertainty for communities.
- It should be a principle of the NWI moving forward that water management systems should provide stability, certainty, and predictability.

Both these submissions are available on request.

⁴ [Climate Change and Water: Irrigated Agriculture on the Frontline | NSWIC \(nswic.org.au\)](https://www.nswic.org.au)



Scope of 2024 Inquiry in national water reform progress

The Productivity Commission's 2024 inquiry seeks to assess progress towards achieving NWI objectives and whether this in addition to subsequent national water reforms are achieving the intended outcomes. Specifically:

“In undertaking the inquiry, the Commission should assess:

- progress in jurisdictional adoption of NWI principles, objectives and key outcomes and, where not adopted, issues that may influence implementation, and the opportunity costs of not doing so.
- outcomes to date of the NWI and related water reform efforts, taking account of other reform drivers.
- where practicable, implications for key water security and management challenges for Australia, including economic, environmental, social and cultural.

The Commission should provide recommendations:

- on actions that the parties to the NWI might take to better achieve the objectives and outcomes of the NWI.
- to support all Australian governments in efforts to progress national water reform in light of current priorities, including water security and the involvement of First Nations communities in water management.
- on how the Australian Government can better utilise the Act as a framework for guiding national water reform policy.

In conducting the inquiry, the Commission should consider:

- the objectives provided for in clause 23 of the NWI
- any current Commonwealth, state or territory reform initiatives relevant to the Inquiry scope
- the perspectives and cultural rights of First Nations Australians.

The Productive Commission also notes:

In addition to issues raised in the terms of reference, the Commission is also interested in: Whether the findings and recommendations and the NWI renewal advice from the Commission's 2020 inquiry should be strengthened or added to in light of policy developments, environmental or other changes over the past three years (since the completion of the last inquiry).

Submitters are encouraged to identify issues and provide suggestions for ways forward. The Commission would appreciate evidence in support of any views, such as data, research reports and case studies.”



Submission overview

Summary of NSWIC recommendations:

- A. The NWI and governments should move away from the language of rebalancing and addressing over-allocation, and place equal emphasis on complementary measures to achieve environmental outcomes.
- B. The NWI should recognise the existing systems of water allocation and priority of use that automatically adjust water allocations for consumptive uses according to the water available in real time climate conditions, after higher priority needs have been met.
- C. The NWI will require inland and coastal programs designed to:
 - a. Improve public confidence in water management;
 - b. Improve awareness of recent and ongoing reforms;
 - c. Improve water literacy of the broader community; and,
 - d. Provide opportunities for timely and collaborative consultation processes with water users.
- D. The NWI will share the risk of reductions or less reliable water allocations due to climate change.
- E. The NWI will require governments to assess the cumulative impacts of water reforms (i.e., policy decisions and river operation changes) on the reliability and security of water property rights.
- F. The NWI will contribute to a better understanding of ‘reliability’, including providing measurement options/approaches, reporting and communication requirements, and impact assessment requirements.
- G. The NWI will improve the supporting architecture for delivering on the principles of the risk assignment framework. This may include:
 - a. An independent body to manage reliability data to guide application of the risk assignment framework.
 - b. Establish a *Reliability Index* dashboard to communicate reliability data.
 - c. Require any proposed water policy change to be accompanied by a *Reliability Impact Assessment* during consultation, describing explicit impacts to water users and intended impact mitigation/compensation.
 - d. Requirements that each Water Sharing Plan must specify, or at least include in supporting documents, the metrics relevant to that WSP to determine the baseline for reliability and assess any policy changes which may impact on yield or reliability.
- H. The NWI will promote methodologies similar to that of the Cultural Billabong Project into water management and planning, as a First Nations partnership-based model, with adequate resourcing to support willing landowners.
- I. The NWI will require the framework and rules governing trading to limit effects on third parties.



- J. The NWI will broaden the definition of third-party impacts to include, for example, socio-economic impacts on (non-entitlement holders), regional and industry development, the environment, and the integrity of water access entitlements.
- K. Water markets will be maintained specifically within the Productivity Commission's Murray-Darling Basin Plan five-yearly review to help assess States' progress.
- L. Governments will further investigate the appropriate trading mechanisms and trading zones in coastal regions to encourage active and liquid markets. These markets will aim to encourage the most efficient use of entitlements and allocations which will provide economic, social and ecological benefits in coastal regions.
- M. The NWI pricing objectives to provide guidance on apportioning costs for public interest items, recognising the source of the demand, and the benefits of these items to the community.
- N. The NWI will require consistently high standards for metering and measurement across jurisdictions.



Submission

1. Water Access Entitlements & Planning Framework

1.1 Achieving sustainable levels of extraction

NWI Clause 23 (iv) states that full NWI implementation includes completing “*the return of all currently overallocated or overused systems to environmentally sustainable levels of extraction*”. This objective can be considered achieved in the Murray-Darling Basin with Sustainable Diversion Limits now in place and being met, through significant water recovery. This has, of course, had significant social and economic ramifications, particularly for communities dependent on irrigated agriculture.

A sustainable balance has been attained in the Murray-Darling Basin through the recovery more than 2100 GL of water for the environment⁵ under the Murray-Darling Basin Plan. In total, the equivalent of 1 in 3 litres of irrigation water has been redirected to the environment (when combined with 875 GL recovered pre-Basin Plan water reforms⁶). Consequently, total diversions for agriculture, towns and industry have been reduced to just 28 per cent of inflows, while 72 per cent of inflows are for the environment, remaining in rivers (both as Held Environmental Water (HEW) and Planned Environmental Water (PEW)). This is well within globally accepted standards for water diversions⁷.

These rebalancing efforts (i.e., reapportioning water between environment and consumptive use) have succeeded in achieving positive environmental outcomes. For example, in 2021-22 the Commonwealth Environmental Water Holder (CEWH) reported the most wide-spread waterbird breeding in over 20 years⁸, and Federal Water Minister Tanya Plibersek credited the Basin Plan with saving rivers in the severe drought⁹, building resilience for the environment to respond as soon as rain returned.

Now, it is imperative that focus shifts beyond ‘rebalancing’ or moving water between types of users (i.e. between environmental and productive water use buckets), to how water can be optimally utilised by each water user (i.e. within buckets). However, the persistent political narrative of water management and irrigated agriculture fails to recognise the significant reforms of the past decades. Ultimately, this narrative jeopardises progress on future reforms, by perpetuating outdated priorities such as water recovery from farmers.

This shift requires a change in language of the National Water Initiative and by governments, placing equal emphasis on complementary measures.

The Productivity Commission touched on complementary natural resource management in its NWI renewal advice section 3.3:

⁵ [Progress on Murray-Darling Basin water recovery - DCCEEW](#)

⁶ [Pre-2009 water recovery table 2017 | Murray-Darling Basin Authority \(mdba.gov.au\)](#)

⁷ N. Elroy Poff et. al (2009). The ecological limits of hydrologic alteration (ELOHA): A new framework for developing regional environmental flow standards.

⁸ [Waterbird breeding bonanza in the Basin - DCCEEW](#)

⁹ [National Press Club address | Ministers \(dceew.gov.au\)](#)



“3) statutory water provisions for the environment which are **integrated with complementary natural resource management** to achieve agreed environmental outcomes and, where this does not compromise environmental outcomes, managed to also achieve cultural and social benefits.”¹⁰

It is NSWIC’s view that this objective does not give enough emphasis to complementary measures. “Integrated with complementary natural resource management” suggests that statutory water provisions for the environment (i.e., ‘rebalancing’) remain the priority for the management of surface and groundwater resources. Complementary natural resource management must be given the same policy priority and funding/resourcing, as water alone will not improve ecological health and functions in rivers, wetlands and floodplains.

The 2018 Productivity Commission’s 5-Year Implementation Review of the Murray-Darling Basin found that unless river constraints are addressed, more water could be recovered from farmers but it could be unusable.¹¹ Again, water recovery as a sole action cannot deliver the desired environmental benefits, emphasising the need to adopt complementary measures to address degradation drivers, including: integrated aquatic pest control, enhanced fish passage, improving water quality and habitat restoration – as increasingly called for by scientists.¹²

Following the Menindee Fish Deaths event in the Darling-Baaka River in 2023, the Office of the NSW Chief Scientist & Engineer (OCSE) performed an independent review into the causes. In its report, the OCSE wrote:¹³

“Mass fish deaths are symptomatic of degradation of the broader river ecosystem over many years. Changes to flow regime and fish passage from water infrastructure and altered water use in the Northern Basin are likely key factors in decreasing water quality and the decline of native species.”

And,

*Explicit environmental protections in existing water management legislation are neither enforced nor reflected in current policy and operations. **Water policy and operations focus largely on water volume, not water quality.** This failure in policy implementation is the root cause of the decline in the river ecosystem and the consequent fish deaths.”*

OCSE recommendations to mitigate against future mass fish deaths included:

- 4.1 Immediate term measures (0-12 months) to manage water quality should focus on maintaining dissolved oxygen in the Menindee weir pool. Potential interventions include:
 - d. reducing oxygen demand in the Menindee weir pool by reducing biomass-including fish removal (especially carp) and suppression of algal growth.
 - e. applying short-term technical fish passage solutions to create temporary opportunities for fish to progress upstream.

¹⁰ [Findings, recommendations and renewal advice - Inquiry report - National Water Reform 2020 \(pc.gov.au\)](#), page 3

¹¹ [Inquiry report - Murray-Darling Basin Plan: Five-year assessment - Productivity Commission \(pc.gov.au\)](#)

¹² Lee J. Baumgartner et. al (2019). Ten complementary measures to assist with environmental water programs in the Murray-Darling River system, Australia.

¹³ [Menindee Fish Deaths Report – Findings and Recommendations \(nsw.gov.au\)](#)



- 2 Mid-term strategies (1-5 years) include:
 - a. construction of fishways identified in the NSW Fish Passage Strategy. Priority and resourcing should be given to the construction of effective fishways to maximise fish mobility above the Menindee weir pool.

The OCSE review strongly demonstrates the need to adopt complementary measures, such as fish passageways and carp control, across the Murray-Darling Basin system to achieve progress towards desired environmental outcomes.

In 2023, the Federal Minister for Water reassured industry and Basin communities that the Government had all options on the table, including complementary measures. However, the Water Amendment (Recovering our Rivers) Act 2023 that passed Parliament effectively enabled more buybacks as the only option, effectively blocking other options such as complementary measures to fix the degradation drivers continuing to make our rivers sick.

This outcome demonstrates the ongoing belief that complementary measures are less important than water buybacks. However, this belief is detached from delivering actual environmental outcomes, as more water cannot be delivered where it needs to go, due to constraints such as rules against intentionally flooding private property. Further, recovering ever more water from farmers ('rebalancing') will not progress the national water reform objective of improving the environmental health and resilience of our river systems.

Non-buyback options that governments can adopt include:

- First Nations, landholder and IIO partnership models;
- Off-farm water saving efficiency projects;
- Improved river operations;
- Market mechanisms; and,
- An integrated catchment water management approach.

Additionally, a stocktake of other rules-based changes across the Basin needs to occur to recognise and account for the cumulative impacts across the breadth of these reforms that have occurred separate to, but alongside, the Basin Plan. Further details on these non-buyback options can be found in NSWIC publications including our Beyond Buybacks Report (2023)¹⁴, Delivering the Basin Plan Submission (2023)¹⁵, and our Guide to Fixing the Basin Plan Submission (2023).¹⁶

As a specific example of what's possible, the value of participatory approaches with landholders are increasingly recognised. Of the 30,000 wetlands in the Basin, 93 per cent are on private property. Partnership models provide opportunity to achieve both the productive use of water resources while restoring and maintaining natural ecosystems. This is increasingly recognised as best-practice water management, and a new paradigm in which water management should shift. For example, a recent peer-reviewed article says that:

“These exemplars should not be overlooked as a tangential good-news-story but should be recognised as an emerging contemporary paradigm of best-practice and valued for its potential to be incorporated as a centrepiece of contemporary water management in the Basin. A contemporary paradigm of best practice based on participation and co-

¹⁴ [Beyond Buybacks – Why we need more than “just add water” | NSWIC \(nswic.org.au\)](#)

¹⁵ [Delivering the Basin Plan | NSWIC \(nswic.org.au\)](#)

¹⁶ [Guide to Fixing the Basin Plan | NSWIC \(nswic.org.au\)](#)



beneficiary outcomes offers significant opportunity to boost environmental health, and also begin rebuilding Basin community trust, ownership and acceptability of water reforms in the Basin. Indeed, working together offers our best hope of moving forward.”¹⁷

The irrigation industry has taken the lead on this by registering a commitment on the UN Water Action Agenda in 2023 as SDG Action 50827 to ‘Boost partnerships with irrigation sector for environmental water delivery, to public and private lands’¹⁸. It will be imperative that the public sector catches up with the initiatives being driven by the private sector, as working together provides the biggest opportunity to achieve positive outcomes.

The NSWIC Working Together Report (2023)¹⁹ provides several further examples of this occurring in practice.

One specific example is the “Restoring Murray Waterways” facilitated by Murray Irrigation. In partnership with DPIE, MILs irrigation network is used to deliver water to environmental assets. Since 2001, more than 205 GL of environmental water has been delivered to wetlands, ephemeral creeks and rivers within the MIL footprint. The Restoring Murray Waterways project aims to deliver another 600 GL of environmental water to deliver better environmental outcomes, protect the Barmah-Millewa Choke, and secure the supply of water to downstream users, while upgrading existing infrastructure within the MIL channel network and private land within the region’s rivers, creeks and wetland.²⁰

The renewed NWI must catch up with the lessons learned from the reform journey since 2004, and shift the focus to emphasise a strategic, co-ordinated and properly resourced program of complementary measure to optimise water management to achieve better environmental and socio-economic outcomes. Increasing recognition by scientists and independent reviews demonstrate the need for complementary measures to address degradation drivers, including use of participatory approaches that support both the productive use of water while restoring and maintaining natural ecosystems.

1.2 Water Access Entitlements in Coastal NSW

Water access in coastal NSW has been shaped by significant reforms that have reduced long-term average annual diversions. Rules-based changes through NSW Water Sharing Plans are recognised as a form of water recovery, particularly in unregulated systems.²¹ The NWI clauses 36 to 40 describe the purpose of water planning as assisting “*governments and the community to determine water management and allocation decisions to meet productive, environmental and social objectives.*”

Coastal water users hold strong concerns that ill-informed decision-making processes that have occurred inland will be adopted in coastal NSW, without considering the different characteristics of coastal catchments. These concerns have been heightened with the announcement of a ‘sustainable water extraction in coastal catchments’ study. This body of

¹⁷ <https://www.tandfonline.com/doi/full/10.1080/13241583.2022.2097365>

¹⁸ <https://sdgs.un.org/partnerships/boost-partnerships-irrigation-sector-environmental-water-delivery-public-and-private>

¹⁹ [Working Together – A call to action | NSWIC \(nswic.org.au\)](https://www.nswic.org.au/working-together)

²⁰ [Restoring Murray Waterways - Murray Irrigation Project](https://www.murrayirrigation.com.au/restoring-murray-waterways)

²¹ [Research report - Market Mechanisms for Recovering Water in the Murray-Darling Basin \(pc.gov.au\)](https://www.pc.gov.au/research/reports/market-mechanisms-for-recovering-water-in-the-murray-darling-basin)



work commenced following the abrupt return of coastal harvestable rights from 30 per cent to 10 per cent of the average annual regional rainfall runoff from a water users landholding.

The NSW DCCEEW has provided the following information to coastal water users:²²

“Water sharing plans place rules around how much water can be extracted from rivers and aquifers in NSW. It is important to ensure the amount of water that is allowed to be taken is sustainable in the long-term.”

A lot of work has been done on inland water sharing plans to understand water requirements and to manage extraction to protect the environment and other users. Improving our understanding of water requirements on the coast is fundamental to making robust water management decisions.”

The scope, framework, modelling and timeframes that will be used for this coastal sustainable extraction research remains unclear, demonstrating a lack of effective community partnership and engagement, preventing water users from understanding any risk or potential change to the consumptive pool.

The renewed NWI must require inland and coastal programs designed to:

- Improve public confidence in water management;
- Improve awareness of recent and ongoing reforms;
- Improve water literacy of the broader community; and,
- Provide opportunities for timely and collaborative consultation processes with water users.

Case Study: Bega River Area Water Sharing Plan (WSP) Remake

In 2022, the *Bega River Area Regulated, Unregulated and Alluvial Water Sources Water Sharing Plan* (Bega WSP) came under review, setting the rules for water extraction for the next 10 years.

Irrigators in the Bega Valley have a demonstrated history of voluntary water sharing to ensure stream flows and investment in natural resource management to protect and enhance local water ways. The \$10 million they have personally invested in NRM activities has resulted in landscape change and waterway improvement.

There is a strong desire to continue improvements via the Bega Valley Circularity initiative. Unfortunately, irrigators appear to be the victim of their own success with waterway condition improvements resulting in a higher risk assessment rankings and increased restrictions on works approval conditions.

When government consultation began on the Bega WSP, the community had a goal to improve the water sharing plan by reducing irrigation pressure on low stream flows. To do this, they called for increased on farm storage options and capture of high flows for use during low flow periods as a means of improving water reliability for industry and reducing irrigation pressure on river during low-flow periods.

²² [Sustainable water extraction in coastal catchments \(nsw.gov.au\)](https://www.nsw.gov.au/sustainable-water-extraction-in-coastal-catchments)



After the consultation, NSW DCCEEW set WSP rules that made on-farm storage more difficult and placed limits on high-flow entitlement availability. Consequently, goals set by the community to progress towards positive environmental outcomes were not achieved. Instead, rivers remain under pressure during low-flow events, and the community remains ill-equipped in the case of fire or drought.

1.3 Risk Assignment Framework

The principles in the Risk Assignment Framework (NWI clauses 46-51) are critical to protecting the integrity of property rights of water entitlements. As raised in previous submissions to the Productivity Commission, NSWIC is of the position that the Risk Assignment Framework is poorly applied in practice and lacks the supporting architecture to be effective.

The absence of an agreed metric and method to measure reliability, and lack of reporting and baseline data, are leading causes to poor implementation. Significant improvements are required for the risk assignment framework to be operationalised effectively in practice.

NSWIC is concerned that Governments have introduced policy changes over time with a haircut approach (i.e., less than three per cent reductions). These have cumulative impacts on entitlement reliability but are not subject to this framework and therefore avoid compensation.

A reduction in the reliability of a water entitlement is in effect, an erosion of a water property right, and undermines the integrity of the water management framework. Policy settings eroding reliability must not be a means of reducing water use.

1.4 Declining Reliability

The new NWI should support the resilience of our productive sector in the face of a variable climate. This includes the provision of reliable and secure water access. ‘Reliability’ is defined under the NWI as *“the frequency with which water allocated under a water access entitlement is able to be supplied in full”*. There has been a long standing, and highly regarded, commitment to water users amid recent water reforms of “no impacts on yield or reliability” of water entitlements. However, there remains no agreed measure of reliability, nor are changes assessed, assigned against the Risk Assignment Framework, or reported.

Central to the issue of reliability is climate change, which poses significant risks to water security for irrigated agriculture in NSW and threatens the long-term productivity of the irrigated agriculture sector. The NWI renewal advice section 6.2 calls for *“processes to better account for climate change”*. In particular:

“A process for rebalancing between environmental and consumptive uses as a result of climate change is developed. Rebalancing due to climate change should occur when there is sufficient evidence that the expected benefits will outweigh the likely costs.”²³

²³ [Findings, recommendations and renewal advice - Inquiry report - National Water Reform 2020 \(pc.gov.au\)](#), page 8



As we have previously stated, Sustainable Diversion Limits are now in place and being met, through significant water recovery. With ‘rebalancing’ completed, the focus should move to complementary measures to optimise water use by each user, including the environment.

With longer and more frequent droughts forecast, irrigators are expected to be allocated less water. Average surface water availability across the entire Murray-Darling Basin for 2030 is projected to fall by 10 per cent. The impact is expected to be greater in the southern Basin, and these predictions are also more reliable in the south.²⁴

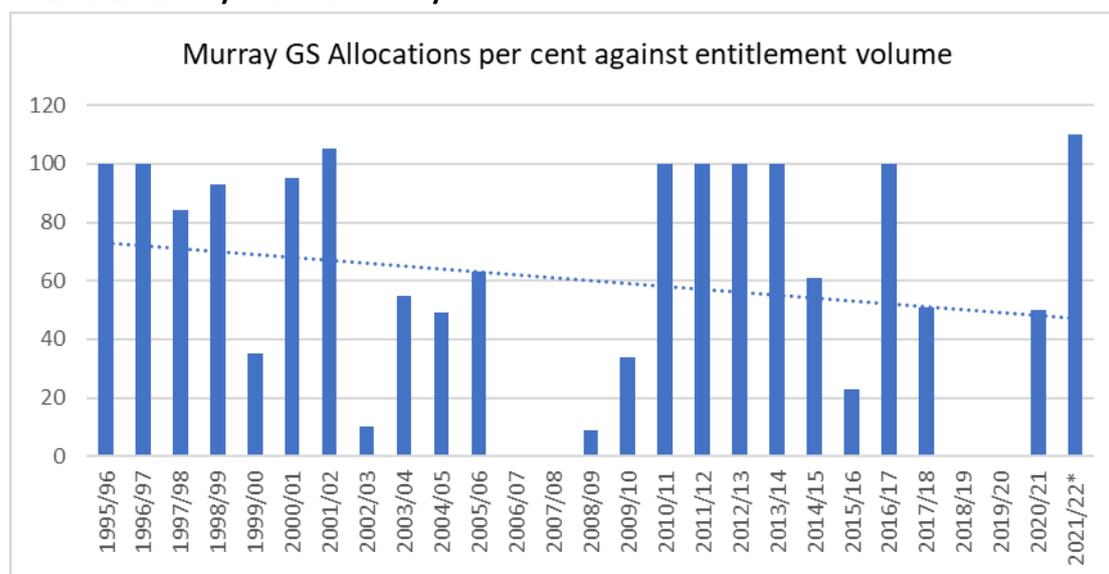
Across all NSW valleys there is a trend of a long-term decline in water allocations to general security licences. Irrespective of licence volume, the amount of water these licence holders are actually allocated is declining over time. This declining trend is attributable to two key factors:

1. Climate change – and the automatic response mechanisms responding to declining inflows and less water availability; and
2. Policy drivers – such as rule changes or more conservative reserve policies that cumulatively erode reliability of water allocations over time.²⁵

Little effort has been made to investigate the relative weighting of these two key factors. In NSWIC’s Climate Change and Water Report, the general-security allocations and trends overtime were created for two valleys, NSW Murray and Murrumbidgee. The trend line (blue-dotted) shows the declining trend:²⁶

Currently, irrigators are not compensated for the loss of water from climate change. Under the Water Act 2007, Sch 3A, irrigators bear the full risk of any reductions or less reliable water allocations as a result of “seasonal or long-term changes in climate” and “periodic natural events such as bushfire and drought”.

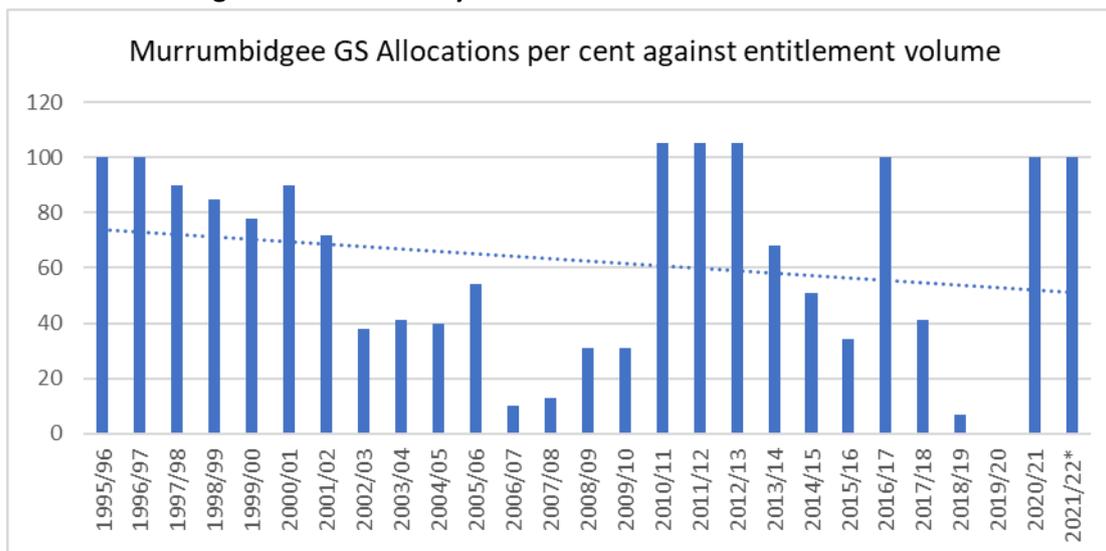
Figure 1: NSW Murray General-Security



²⁴ <https://www.mdba.gov.au/importance-murray-darling-basin/environment/climate-change>

²⁵ [Climate Change and Water: Irrigated Agriculture on the Frontline | NSWIC \(nswic.org.au\)](#)

²⁶ [Climate Change and Water: Irrigated Agriculture on the Frontline | NSWIC \(nswic.org.au\)](#)

**Figure 2: Murrumbidgee General-Security**

NWI renewal advice section 6.2 maintains this approach:

“There are clear provisions for allocating risk, with water access entitlement holders continuing to bear the risks to the consumptive pool arising from climate change and periodic natural events (as reflected in paragraph 48 of the NWI).”²⁷

This is of concern to water users considering current allocation trends, particularly if the NWI persists in prioritising ‘rebalancing’ as a climate change adaptation. The result is a double hit with ever more water entitlements being recovered from farmers at the same time as their allocation reliability is declining.

Recommendations:

- A. The NWI and governments will move away from the language of rebalancing and addressing over-allocation, and place equal emphasis on complementary measures to achieve environmental outcomes.
- B. The NWI will require sound systems of water allocation and priority of use that automatically reduce the share of water to consumptive uses to reflect water availability in real time and critical higher priority needs.
- C. The NWI will require inland and coastal programs designed to:
 - a. Improve public confidence in water management;
 - b. Improve awareness of recent and ongoing reforms;
 - c. Improve water literacy of the broader community; and,
 - d. Provide opportunities for timely and collaborative consultation processes with water users.
- D. The NWI will share the risk of reductions or less reliable water allocations due to climate change.

²⁷ [Findings, recommendations and renewal advice - Inquiry report - National Water Reform 2020 \(pc.gov.au\)](https://www.pc.gov.au/inquiry/nwr/2020/2020-01-20-2020-01-20), page 8



- E. The NWI will require governments to assess the cumulative impacts of water reforms (i.e., policy decisions and river operation changes) on the reliability and security of water property rights.
- F. The NWI will contribute to a better understanding of ‘reliability’, including providing measurement options/approaches, reporting and communication requirements, and impact assessment requirements.
- G. The NWI will improve the supporting architecture for delivering on the principles of the risk assignment framework. This may include:
- a. An independent body to manage reliability data to guide application of the risk assignment framework.
 - b. Establish a *Reliability Index* dashboard to communicate reliability data.
 - c. Require any proposed water policy change to be accompanied by a *Reliability Impact Assessment* during consultation, describing explicit impacts to water users and intended impact mitigation/compensation.
 - d. Requirements that each Water Sharing Plan must specify, or at least include in supporting documents, the metrics relevant to that WSP to determine the baseline for reliability and assess any policy changes which may impact on yield or reliability.

2. Indigenous Access

NWI Clause 52 states:

“The Parties will provide for indigenous access to water resources, in accordance with relevant Commonwealth, State and Territory legislation, through planning processes that ensure:

- i) inclusion of indigenous representation in water planning wherever possible; and*
- ii) water plans will incorporate indigenous social, spiritual and customary objectives and strategies for achieving these objectives wherever they can be developed.”*

The National Cultural Flows Research project has been significant in providing a greater understanding of Aboriginal values relating to water. This research should be drawn upon to shape any management objectives and plans, in consultation with First Nations.

Research for the Nation Cultural Flows Research project identifies many cultural water outcomes, which cannot be achieved by a simple ‘just add water’ approach alone – but require on-ground management (including land management) and participation by First Nations people through custodianship and relationship.

NSWIC supports NWI renewal advice section 3.5 to “develop new elements covering Aboriginal and Torres Strait Islander people’s interests in water, and infrastructure development.”²⁸ NSWIC sees opportunity for partnership-based models to be expanded in the Basin to achieve cultural objectives through use of environmental water.

²⁸ [Call for submissions - National Water Reform 2024 \(pc.gov.au\)](https://www.pc.gov.au/submissions/nswic)



However, further work must be done to ensure all water users can be confident of the structure, scope and detail of these elements, objectives, and strategies. For example, the planning and entitlement frameworks must be upheld in the allocation of water, and assurance must be provided that additional entitlement pools are not created. It must be understood that there is no 'new' water, and so water entitlements owned by First Nations must be purchased from the existing entitlements on issue.

Case Study: Billabong Restoration Project

Led by the NSWIC First-Nations advisor, NSWIC is pursuing a cultural water project, which is an Indigenous-designed methodology to close-the-gap and incorporate Indigenous science and knowledge into water management.

The 'Billabong Restoration Project: offers culturally appropriate employment to care-for-country on billabongs and riparian areas. As our First-Nation advisor says:

"Billabongs, through First Nations' eyes. Are the kidneys of the river. They produce the 'antibiotics' for the rivers 'immune system.'"

"The Ngemba people feel empowered to work and connect with their rivers, floodplains and billabongs for all of Australia. This brings many current benefits to their society: hope, motivation, value, employment, health, education, understanding, equity and reconciliation."

The Project offers an important paradigm shift to recognise Indigenous science in water management and is an important collaboration between traditional owners and out irrigation communities.

Recommendations:

- H. The NWI will promote methodologies similar to that of the Cultural Billabong Project into water management and planning, as a First Nations partnership-based model, with adequate resourcing to support willing landowners.



3. Water Markets and Trading

3.1 Protecting third-parties

While Clause 58 (v) addresses protecting third parties, this is further detailed in Schedule F (3); the NWI only narrowly defines third parties as holders of entitlements. Subsequently, the Water Act 2007 and the 2012 Murray-Darling Basin Plan both adopt the NWI objective of protecting third parties without providing a more nuanced understanding of third parties.

Third parties extend beyond entitlement holders to the broader social and economic and environmental impacts arising from market operations. This includes the changing trends of water use brought on by market dynamics, and the impacts this has on communities, industries/sectors, businesses, and jobs. This also extends to the uneven impacts between geographic regions, as well as various irrigated agriculture sectors/commodities.

In 2009, the National Water Commission set out NWI trade performance indicators based on the extent of trading, and movement of water to highest value use²⁹. There is a continued need for contemporised performance indicators that include the ability of the market to:

- support a productive irrigated agriculture sector and the dependent regional economies/communities; facilitate efficiency of water use;
- foster confidence of businesses and individuals in its effective operation; and,
- respect channel capacity constraints and natural system limitations for healthy river environments.

NSWIC agrees with the key findings of the ACCC's recommendations from the Murray-Darling Basin Water Markets Inquiry, specifically³⁰:

- Quality, timely and accessible information for water market participants is lacking;
- Very few rules exist to govern the conduct of market participants, and no specific agency exists to oversee trading activities;
- Trading behaviours that can undermine the integrity of markets, such as market manipulation and insider trading, are not adequately regulated;
- The rules, policies and arrangements that enable and support trade in the southern Basin do not always adequately reflect scarce storage and delivery capacity, and this has led to river channel congestion and negative third party and environmental impacts.

3.2 Inter-Valley Trade

Inter-Valley Trade (IVT) rules are critical to mitigate environmental damage from market operations. An example of this is the Goulburn River IVT, where the lower reaches of the Goulburn River were being damaged by high flows, and the IVT rules enabled this to be managed for positive environmental outcome.

While we agree that water should be traded freely within hydrologically connected systems - regulatory measures like IVTs are required to mitigate these damages.

²⁹ [Australian Water Reform 2009 BA complete report \(agriculture.gov.au\)](https://www.agriculture.gov.au).

³⁰ [ACCC Murray-Darling Basin Water Markets Inquiry | NSWIC \(nswic.org.au\)](https://www.nswic.org.au)



3.3 NSW Coastal Trading Rules

Clause 58 (i) of the NWI outlines:

The States and Territories agree that their water market and trading arrangements will:

- I. *facilitate the operation of efficient water markets and the opportunities for trading, within and between States and Territories, where water systems are physically shared or hydrologic connections and water supply considerations will permit water trading.*

NWI renewal advice section 7.2 suggests:

“The boundaries of water markets should be shaped by hydrology; trade between locations or sectors should not be limited by artificial administrative impediments.”

NSW coastal water users note the current stifled nature of water trading and water markets in their regions, both in regulated and unregulated river sources. In water sharing plans, interconnected coastal river systems have been broken down into small trading areas based on types of flows. Consequently, limited trading takes place in these areas, hindering the market system. As a result of limited trading, water prices are lower than normal.

Recommendations:

- I. The NWI will require the framework and rules governing trading to limit effects on third parties.
- J. The NWI will broaden the definition of third-party impacts to include, for example, socio-economic impacts on (non-entitlement holders), regional and industry development, the environment, and the integrity of water access entitlements.
- K. Water markets will be maintained specifically within the Productivity Commission’s Murray-Darling Basin Plan five-yearly review to help assess States’ progress.
- L. Governments will further investigate the appropriate trading mechanisms and trading zones in coastal regions to encourage active and liquid markets. These markets will aim to encourage the most efficient use of entitlements and allocations which will provide economic, social and ecological benefits in coastal regions.

4. Best-Practice Water Pricing and Institutional Agreements

4.1 Cost-share ratio

NWI Clause 67 states that for cost recovery for planning and management:

“The States and Territories agree to bring into effect consistent approaches to pricing and attributing costs of water planning and management by 2006, involving:

- i) *the identification of all costs associated with water planning and management, including the costs of underpinning water markets such as the provision of registers, accounting and measurement frameworks and performance monitoring and benchmarking;*
- ii) *the **identification of the proportion of costs that can be attributed to water access entitlement holders** consistent with the principles below:*



- a) charges exclude activities undertaken for the Government (such as policy development, and Ministerial or Parliamentary services); and*
- b) charges are linked as closely as possible to the costs of activities or products”.*

In NSW, cost-sharing arrangements are based on an 80:20 cost-share ratio for capital expenditure (80 per cent share for water users), and 100:0 for operating expenditure (100 per cent share for water users). This means productive water users carry a significant burden of water management costs.

The most recent IPART Pricing Determination (2021) resulted in substantial price increases for water users in almost all NSW valleys. The WaterNSW Rural Bulk Water Prices increased by an average of 29 per cent for entitlement charges and 31 per cent for usage charges. Note: this refers to water license fees & charges, not the price of water on the market.

Typical annual bills for bulk water charges for High-Security water increased by over 30 per cent in the Lachlan (51.8 per cent), Namoi (49.8 per cent), Macquarie (42.3 per cent), Hunter (40.8 per cent), Gwydir (39.9 per cent), and Peel (33 per cent).

Similarly, typical annual bills for General-Security water increased by over 30 per cent in the Lachlan (47 per cent), Macquarie (41.3 per cent), Hunter (40.9 per cent), Namoi (33.2 per cent), Peel (26.7 per cent), Murrumbidgee (26.2 per cent), and Gwydir (25.6 per cent). Further details for all valleys are contained below, sourced from IPART.³¹

The key driver of this price increase is attributed to WaterNSW’s expenditure needing to be higher to deliver effective services into the future. Most significantly, that WaterNSW needs higher levels of operating expenditure to maintain its assets to an acceptable quality. This means IPART’s “decision on the customer share of WaterNSW’s efficient costs ... are around \$56.4 million or 19 per cent higher than those we used to set current prices in 2017”.

Additionally, many water users also experienced price increases under WAMC charges (the Water Administration Ministerial Corporation – the entity responsible for water management in NSW, i.e. water planning, compliance, allocations, etc). While IPART capped the WAMC price increase to 2.5 per cent per year, or 10.4 per cent from 2020–21 to 2024–25 (before inflation and excluding the MDBA and BRC charges), this still saw a significant rise for many users. Specifically:

- For regulated water sources, bills for most water sources increased by up to \$250 in 2021–22. However, in the Border Rivers valley, bills rose by around \$610.
- For unregulated water sources, bills increased by up to \$460 for four water sources and decreased by up to \$240 for the remaining eight water sources.

Further details for all valleys are contained below, sourced from IPART³².

³¹ [Review of WaterNSW's rural bulk water prices Final Report \(2021\) – IPART \[P 15\]](#).

³² [Review of WaterNSW's rural bulk water prices Final Report \(2021\) – IPART \[P 13\]](#).



Table 1.5 Typical annual bills by valley, including MDBA and BRC costs (\$2021–22)

	Current 2020–21 (\$2020–21)	Final Report (\$2021–22)	Change from current to Final Report
High security			
Border	\$8,705	\$9,655	10.9%
Gwydir	\$12,360	\$17,295	39.9%
Namoi	\$19,960	\$29,905	49.8%
Peel	\$32,275	\$42,935	33.0%
Lachlan	\$18,535	\$28,135	51.8%
Macquarie	\$14,695	\$20,910	42.3%
Murray	\$6,580	\$7,840	19.1%
Murrumbidgee	\$4,405	\$5,685	29.1%
Lowbidgee	N/A	N/A	N/A
North Coast	\$15,730	\$15,900	1.1%
Hunter	\$13,875	\$19,535	40.8%
South Coast	\$25,895	\$26,180	1.1%
General security			
Border	\$4,000	\$4,457	11.4%
Gwydir	\$5,712	\$7,177	25.6%
Namoi	\$10,746	\$14,314	33.2%
Peel	\$8,099	\$10,263	26.7%
Lachlan	\$7,623	\$11,206	47.0%
Macquarie	\$5,987	\$8,462	41.3%
Murray	\$3,421	\$3,829	11.9%
Murrumbidgee	\$2,090	\$2,637	26.2%
Lowbidgee	\$420	\$860	104.8%
North Coast	\$10,546	\$10,664	1.1%
Hunter	\$9,570	\$13,484	40.9%
South Coast	\$14,285	\$14,440	1.1%

Notes: Includes BRC costs in the Border valley and MDBA costs in the Murray and Murrumbidgee valleys. The Lowbidgee valley has supplementary licences that are charged fixed entitlement charges only.
Source: IPART analysis.

Table 1.2 Change in typical water user bills from 2020–21 to 2024–25

Water source	Regulated water users (2-part tariff)	Unregulated water users on 2-part tariff	Groundwater users on 2-part tariff	Unregulated water users on bills 1-part tariff	Groundwater users on bills 1-part tariff
Border	55%	-11%	-1%	5%	-5%
Gwydir	25%	-11%	N/A	5%	N/A
Namoi	2%	-11%	N/A	5%	N/A
Peel	17%	-11%	N/A	5%	N/A
Lachlan	10%	4%	N/A	11%	N/A
Macquarie	12%	4%	N/A	11%	N/A
Far West	N/A	22%	N/A	22%	N/A
Murray	14%	5%	N/A	14%	N/A
Murrumbidgee	17%	9%	21%	12%	17%
North Coast	14%	10%	N/A	12%	N/A
Hunter	12%	10%	N/A	11%	N/A
South Coast	12%	-13%	N/A	-15%	N/A
Inland	N/A	N/A	-8%	N/A	-11%
Coastal	N/A	N/A	11%	N/A	12%

Source: IPART analysis.



Many of the recent and current demands for new or improved services come from outside of the water user base. Yet under the current cost-share ratio, water users who access only 28 per cent of total inflows for agriculture, towns and industry use, are having to pay to meet the demands of non-water users. It is evident in media that the general public places great importance and value on water systems, regardless of whether they have any direct relationship to the system (i.e. as a water user).

NSWIC suggests identifying the proportion of costs attributable to items of public interest could ease the cost burden of recent price increases on water users. Cost-sharing frameworks must be reflective of the source of the demand or expectations, so that those demanding increased services cover the appropriate costs.

This would include cost-sharing public interest items such as environmental water management, water quantity monitoring, fish passage, water strategies, and infrastructure. Items such as water quantity monitoring, for example, have proven critically important in recent times for flood management and emergency service operations but are funded entirely by water users.

It must be recognised that water users cannot meet the cost of the services being demanded. For example, the unaffordability of water users' covering the costs associated with constructing fish passageways have stalled the progress of this infrastructure across the Murray-Darling Basin. To progress these projects Government intervention will be required to cover costs.

Recommendations:

M. The NWI pricing objectives to provide guidance on apportioning costs for public interest items, recognising the source of the demand, and the benefits of these items to the community.

5. Water Resource Accounting

5.1 Metering & Measuring

It is the position of NSWIC that all water must be metered. Put simply - if it can't be measured, it can't be managed. The NSW irrigation industry supports continual improvements to metering, monitoring and measurement of water use; supports sustainable limits on use; and, has zero tolerance for non-compliance with water laws.

The NSW Non-Urban Water Metering Reform is a globally recognised gold-standard reform. The rollout began five years ago with water users across inland NSW (tranches 1 to 3) now required to comply. The fourth and final tranche affecting coastal water users will reach its deadline on 1 December 2024 (unless a condition on a water access licence states otherwise and they are required to comply now).

Irrigation Australia Limited calculated the percentage compliance of each state to the NWI. States were assessed on their compliance to several requirements, and their percentage compliance calculated:



National Framework Requirements	NSW	QLD	VIC	SA	ACT	TAS	NT	WA
Implementation of the national standard for meter construction, installation and maintenance (AS4747)	5	2 ⁽¹⁾	3 ⁽¹⁾	5	4 ⁽¹⁾	4 ⁽¹⁾	2 ⁽¹⁾	2 ⁽¹⁾
Use of a Certified Installer and Validator for installation	5	0 ⁽²⁾	3 ⁽²⁾	0 ⁽¹⁾	0 ⁽²⁾	2 ⁽²⁾	0 ⁽²⁾	0 ⁽²⁾
Use of a Certified Installer and Validator for validation	5	5	5	3 ⁽²⁾	0 ⁽³⁾	4 ⁽³⁾	0 ⁽³⁾	0 ⁽³⁾
Any meter installed after 30 June 2010 must comply with the national metering standards as at July 2020	3 ⁽¹⁾	0 ⁽³⁾	2 ⁽³⁾	2 ⁽³⁾	3 ⁽⁴⁾	0 ⁽⁴⁾	0 ⁽⁴⁾	0 ⁽⁴⁾
Any meter installed prior to 1 July 2010 shall be replaced with a compliant meter by 1 July 2020	0 ⁽²⁾	0 ⁽⁴⁾	2 ⁽²⁾	0 ⁽⁴⁾	0 ⁽⁵⁾	0 ⁽⁵⁾	0	0 ⁽⁵⁾
Total score from 25	18	7	15	12	7	10	2	2
Percentage compliant	72%	28%	60%	48%	28%	40%	8%	8%

Table 1: IAL assessment and compliance scores for each state and territory³³

NSW was found to be 72 per cent compliant to the NWI, achieved through the development and implementation of the metering reform. It is likely that this percentage has grown since 2020 as more water users have been required to comply with metering requirements. NSW have achieved full policy compliance in:

- Implementation of the national standard for meter construction, installation, and maintenance (AS4747).
- Use of a Certified Installer and Validator for installation.
- Use of a Certified Installer and Validator for validation.

The NWI renewal advice section 3.3 suggests the following modernised objective:

“a fit-for-purpose system of water metering, measurement and accounting, coupled with effective compliance, that promotes water user and community confidence in the integrity of water management and water markets.”³⁴

It is the experience of water users and industry that the NSW non-urban metering reform is not fit-for-purpose. In 2023, NSWIC published Addressing Metering Compliance Barriers report³⁵ in response to the NSW Non-Urban Water Metering Policy five-year review. The report outlines acknowledged and experienced barriers to compliance and provides suggestions for ways to move forward.

Table 2 contains a summary of identified barriers and potential solutions:

Barrier	Solution
Excessive administrative costs to nominate a work as inactive.	Provide a simple pathway to correctly nominate works that is; cost-free, easily reversible,

³³ [National Water Reform Inquiry 2020 – Irrigation Australia Limited](#)

³⁴ [Findings, recommendations and renewal advice - Inquiry report - National Water Reform 2020 \(pc.gov.au\)](#), page 3

³⁵ [Addressing Metering Compliance Barriers \(2023\) | NSWIC \(nswic.org.au\)](#)



	streamlined through removal of physical impediment requirements.
Inconsistent metering conditions on licences requiring compliance before the tranche 4 deadline.	NSW Government to remove pre-existing metering conditions on licences, and instead refer to one instrument – the Non-Urban Water Metering Policy.
Metering requirements place undue costs on low risk (smaller) water users.	Review exemption under work size-based framework. Further consultation with industry on a low volume user exemption, or alternate strategies.
Metering review changes affect water users in tranche 4.	Provide a minimum 12-month extension for coastal NSW (tranche 4) compliance.
Limited DQP supply in all NSW valleys.	Government to coordinate DQP services to match supply with demand. This should not incur a fee-for-service.
Telemetry equipment and systems are currently not fit for purpose.	Decouple data loggers and telemetry from metering requirements. Government to assume responsibility for telemetry system (water user can opt out if desired).
Floodplain harvesting metering requirements are currently not fit for purpose.	Revisit the Floodplain Harvesting measurement policy to ensure it is effective practically. Permitted entitlement holders to take water with approved, certified secondary meters until such time that barriers are addressed. Continue water user consultation to find a solution to policy failures.
Poor education and communication of metering report and recording requirements	Development of clear education strategy. Improvement of iWAS portal and streamline recording and reporting requirements.
Limited DQP supply to service faulty meters. Poor faulty meter reporting system.	Do not place time-based requirements on the repair of meters. Improve and streamline S91 faulty meter report form.
A significant portion of costs for the Metering reform are recovered from water users' fees and charges (on top of the purchase of required equipment and labour).	Review of the cost-shares associate with this reform – the NSW government must pay for its own reform, at least until the government can demonstrate the reform is being delivered effectively and efficiently.

Table 2: Summary of barriers and potential solutions in NSWIC Metering Report

NRAR metering reform compliance statistics from July 2023 report that the overall compliance rate for active works is 20 per cent for northern Inland and 35 per cent for southern Inland³⁶. While significant time, labour, and finance has been committed by most water users to attempt to achieve compliance, several implementation barriers are beyond water users' control, preventing or delaying compliance. Several practical solutions are required for the Metering Reform to be fit-for-purpose and achieve high level compliance.

Recommendations:

N. The NWI will require consistently high standards for metering and measurement across jurisdictions.

³⁶ [Metering compliance reports | NSW Dept of Natural Resources Access Regulator](#)



6. A new National Water Initiative

Many regional communities in NSW are experiencing reform-fatigue and keenly feeling the impacts of consecutive and cumulative water management reforms. Best-practice water management must garner confidence, establish stability, and promote resilience in our productive sector. To achieve this, over-arching water management tools and policy guidance structures should be predictable and transparent.

As governments reflect on lessons learnt throughout the past decade, and incorporate new knowledge into the new NWI, it is imperative that current elements of the NWI be maintained and improved to improve confidence, stability and predictability. These objectives are:

1. Water Access entitlements and planning;
2. Water markets and trading;
3. Best-practice water pricing and institutional arrangements;
4. Integrated management of water for environmental and other public benefit outcomes;
5. Water resources accounting;
6. Urban water reform;
7. Knowledge and capacity building; and
8. Community partnerships and adjustment.

Australia is recognised as a world leader in water policy and management. Governments play a key role in driving forward water reform in each jurisdiction. A genuine commitment and willingness across governments is required for effective implementation and achievement of these objectives. It is essential governments learn from poorly implemented objectives and commit to improvement. Through this commitment to best practice we can effectively address challenges today and into the future.

Conclusion

The NWI has facilitated significant improvements to water management in Australia. This submission has outlined key areas in which:

- The NWI has not been fully implemented, or not implemented as intended; and
- The NWI requires modernising to remain relevant to future water management.

The context for water management has evolved significantly since the 2004 NWI ushered in National Water Reform. This creates opportunity and need for a new NWI to guide the adaptive management of Australia's water resources.

NSWIC and our members are available to answer any questions and provide further information.

NSWIC reiterates the positions provided in our previous submissions to PC reviews of national water reform.

Kind regards,
NSW Irrigators' Council.