



Submission to the Status  
and Issues Paper for the  
Macquarie- Castlereagh  
Water Resource Plan

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## 1. Introduction

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WaterNSW believes the development of NSW's Water Resource Plans presents a significant opportunity to continue to improve water management in NSW and deliver significant benefits to water users and the State.

We make this submission based on our expertise and experience as operator of the NSW's interconnected surface water and groundwater systems and as an advocate of our 46,000 customers across NSW.

While we operate these systems first and foremost within the regulatory framework, we strive to do so in an active, rather than passive manner. We have our customers front of mind in everything we do and our goal is to improve the water services that play a vital role in supporting strong and resilient communities, economies and environments.

We seek to do the best for our customers. We actively work with our customers to identify and develop improvements in water management rules to provide better outcomes for our customers and the environment.

This vision provides the foundation to much of our submission.

Since 1 July 2016, WaterNSW provides a 'one stop shop' for customer services and support for water users across NSW. This provides us with direct and unrivalled insight into the changing needs and demands of customers, both extractive and non- extractive.

We are investing significant effort to understand these changing needs and wants and we are working hard to make sure we can deliver on our customers' expectations.

This process is highlighting that while significant progress has been made in developing water markets in Australia, there remains considerable scope to improve the water market framework and its operation to benefit our customers.

As we set out in this submission, we believe the development of Water Resource Plans provides an important opportunity to implement a meaningful component of the required improvements to the water management framework in NSW.

We encourage DPI Water to seize this opportunity, on behalf of NSW, to maximise the value of the State's water resources and we offer our support to partner with DPI Water to achieve improved outcomes for rural communities and the environment.

WaterNSW is committed to working with our customers during each and every phase of the process of developing Water Resource Plans. We will also collaborate with DPI Water and other policy makers throughout this process.

## 2. Overview of WaterNSW

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### 2.1. Who we are

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WaterNSW is a NSW State-owned Corporation established under the *WaterNSW Act 2014 (NSW)*.

We have water under management equivalent to approximately two-thirds of all water used in NSW and with an estimated value of \$20 billion.

We are Australia's largest water utility and own and operate a \$2.2 billion portfolio of assets. These assets include 42 major dams, hundreds of weirs, regulators and pipelines, the largest surface and groundwater monitoring network in Australia with almost 6,000 monitoring sites and a fleet of over 5,000 usage meters.

Our operations span 30 regulated rivers across NSW in addition to unregulated surface water and groundwater aquifers.

We employ around 850 people across more than 60 locations.

Our purpose is to **improve the availability of water resources that are essential for the people of New South Wales.**

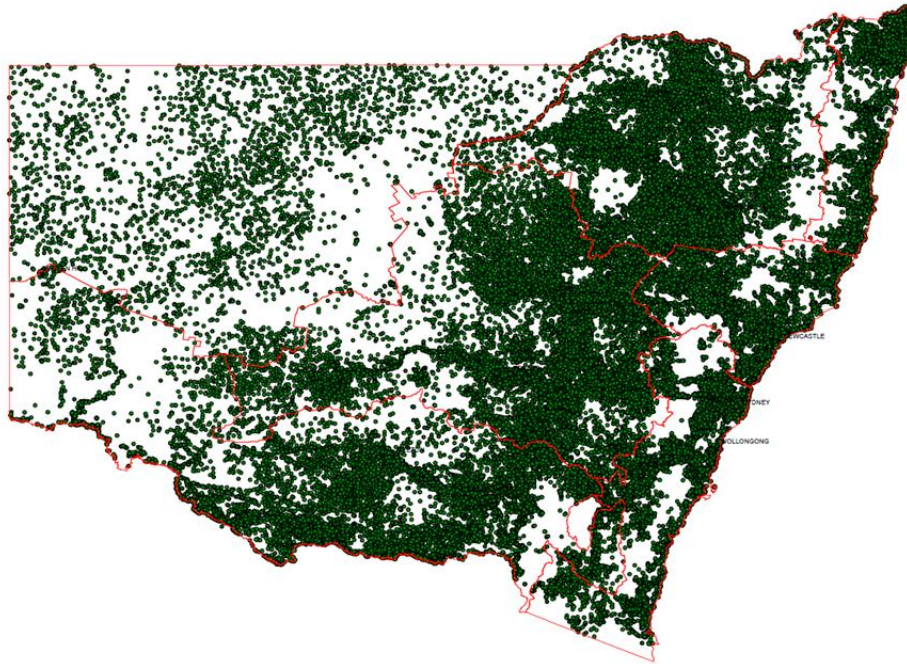
Across NSW, we utilise our portfolio of dams and weirs, along with the State's rivers to collect and deliver water to our customers.

We plan, develop, own and operate infrastructure to convert the State's highly variable rainfall into a secure and reliable water supply that is delivered to customers orders to support the resilience of regional and rural NSW, Greater Sydney's drinking water and the environment.

We are a one stop shop for customer services, including ordering and paying for water, managing customers water accounts, surface water and groundwater licenses and approvals and water trade.

For Greater Sydney, we play a critical role in water quality, as well as quantity, through protecting and managing the catchment areas that provide the source of Greater Sydney's drinking water. Sydney Water, our largest customer, uses the water we supply to deliver Greater Sydney's population of almost 7 million with water for drinking and household and business consumption.

In addition to Sydney Water, we have over 46,000 customers across NSW comprising regulated and unregulated surface water and ground water customers [see figure below].



Our customers include irrigation corporations, farmers, local water utilities and the communities they support, utilities and industry, the environment and water licence holders big and small. Across regional and rural NSW, from drought to flood and everything in between, we play a vital role in supporting strong and resilient communities, economies and environments.

But it's not just people that need our water. Some of our largest customers are environmental water holders who use the water to protect and restore the rivers, wetlands and floodplains across NSW and the Murray-Darling Basin.

### **3. Our Objectives for the Water Resource Plans**

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WaterNSW, and our customers, believe there is significant opportunity to further streamline the water management framework in NSW to deliver benefits for the State and its water users. We see development of the Water Resource Plans as an opportunity to refresh the regulatory framework to reflect NSW's contemporary water market structure and to move to best practice arrangements that provide for an adaptive and robust water market framework.

WaterNSW has developed a set of objectives to guide our involvement in, and position on the development of water market policy and regulation. These objectives provide transparency to our customers and stakeholders on the 'what' and 'why' of WaterNSW's submissions.

Our objectives are to contribute to a water market that is:

- 1) Modern
- 2) Efficient and Effective

- 3) Responsive
- 4) Understood by all

We have identified a number of key water management measures that will help to achieve these objectives. The development of the Water Resource Plans presents an opportunity for these measures to be discussed, properly considered and refined, before incorporating them into the Water Resource Plans and progressively implementing them. These measures are:

- 1) Clear separation of functions within the water management framework, with a focus on driving transparency, accountability and performance of market participants;
- 2) Reduced market complexities and improved market certainty, with a focus on greater consistency, predictability and confidence in market outcomes,
- 3) Operational and customer service flexibility to deliver outcomes with a focus on a policy framework that identifies outcomes and enables the market to determine how best to achieve those outcomes.

The following section considers each of these key measures, how they may be implemented through the development of Water Resource Plans and their benefit to customers.

## 4. Our Analysis

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### 4.1. Clear Separation of Functions within the Water Management Framework

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Over recent years, the NSW Government has reformed the State's water management arrangements aiming to drive greater efficiencies in the delivery of water services and improve the customer experience.

Importantly these changes have delivered clear separation of functions, with WaterNSW now responsible for the delivery of water and water services to the majority of NSW's water entitlement holders and DPI Water responsible for long term resource planning and regulation. Now in NSW all water services are delivered by corporatised entities that have a strong customer focus and commercial discipline.

While these reforms have delivered greater clarity for water users, there is scope for further improvement to better reflect the contemporary roles of WaterNSW and DPI Water.

The current NSW framework contemplates resource policy, resource management, market and system operations and resource regulation primarily in one legislative instrument, being Water Sharing Plans. This arrangement diminishes ownership and accountability. There needs to be a clear separation of roles and responsibilities between policy, market operations and regulation and

along the water delivery chain. This will provide a framework that drives transparency, accountability and performance of market participants

The Basin Plan does not require the various details typically contained within Water Sharing Plans to be included in Water Resource Plans. The Water Resource Plans should ideally focus on the enforceable components of the Basin Plan and limit details in areas that do not require endorsement by the Commonwealth and Murray-Darling Basin Authority. To achieve this, there needs to be a clear separation between Water Resource Plans (Commonwealth instrument) and Water Sharing Plans (NSW instrument).

In addition to the clear separation of water resource regulation between the Water Resource Plans and Water Sharing Plans, a clear separation of the role of DPI Water (as the policy maker and resource regulator) and the role of WaterNSW (as the system operator) needs to be appropriately considered within the water management framework. Consistent with the objectives of the Basin Plan, there is an opportunity to move to a more 'outcomes focused' form of regulation, at both the Commonwealth and State level.

Separation would then be pursued to establish rules that provide clarity and certainty to market participants. Such rules would include System Operating Rules and Water Service Rules that would provide clear governance for the operation of the water market and the provision of water services to customers.

#### Actions to be considered through the development of the Water Resource Plans

- disaggregate current water market framework to “group” by function;
- align the roles and responsibilities of market participants to functions;
- establish performance framework and reporting;
- establish “grouped” rules in separate, but linked, instruments; and
- identify and remove duplication and red tape.

#### Benefits to customers

- improved clarity and transparency on the roles and responsibilities of market participants that will support improved customer engagement and incentivise market participant performance;
- improved service delivery and efficiency through the removal or duplication and red tape;
- improved market participants focus on ‘mission critical’ that will drive lower prices and better quality of service.

## 4.2. Reduced Market Complexities and Improved Market Certainty

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Currently, WaterNSW must follow often very detailed water sharing rules contained within Water Sharing Plans when delivering water across NSW. From both the system operator and customer perspective, the existing water sharing rules are overly complex, difficult to understand and do not allow operators the flexibility they need to achieve the best possible outcome for customers and the environment. These issues are further exacerbated by different terminology being used in different Water Sharing Plans for similar rules.

The complexities associated with the high level of prescription in existing water sharing rules are key sources of problems for WaterNSW and frustrations for customers (e.g. access to uncontrolled flows). The development of Water Resource Plans (and associated Water Sharing Plans) for all surface water and groundwater systems over the next two years provides the opportunity to target better consistency between plans and at the same time, reduce the complexity in all plans and thereby improve market understanding of water sharing rules and ultimately market certainty. This will provide a framework that provides greater consistency, predictability and confidence in market outcomes.

### Actions to be considered through the development of the Water Resource Plans

- Following the process of separating and grouping rules (described above), the rules would be 'codified' to:
  - improve their robustness to deal with situations outside normal operations, and in turn limit administrative discretion;
  - promote a consistent approach<sup>1</sup> to rules using standard terminology;
  - refine the operation of certain rules, and improve information on key rules (including their rationale and operation)
- Establish a transparent and merits based rule change process that allows for market participants and customers to propose changes to the rules which will be assessed against an outcome based framework (discussed below). This process would balance the need for market confidence and certainty while providing a mechanism to foster innovations and continuous improvement.

### Benefits to customers

- Improved consistency of terminology and alignment of provisions across Water Sharing Plans will reduce the complexity of water management. Simpler and better understood arrangements will

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<sup>1</sup> WaterNSW is not advocating for blanket consistency across NSW. We recognise the need for, and value in, local differences. However, we believe there is value in greater consistency than the current framework.



allow customers to make better informed decisions with how they use their water. Well informed customers are less likely to be 'unnecessarily cautious' and use water for fear of losing it. This will increase the water availability for all water users;

- Less complexity will also reduce the burden on water customers who have various licences and/or operate across multiple Water Sharing Plans;
- Greater alignment of rules will improve transparency and reliability of water market information. Codification will also provide for more efficient processing of trades. A more informed market and lower 'effort' trade capability will support greater trade of water to where it is most valued;
- A rule change process will provide for a more dynamic and responsive water market through providing for 'localism of decision making' and cutting significant red tape.

#### 4.3. Operational and customer service flexibility with an Outcomes focus

WaterNSW believes the present water management arrangements across NSW contain too many prescriptive and fixed rules and does not provide for flexibility in system operations, ultimately leading to inefficiencies and lost opportunities. In line with key Basin Plan objectives, NSW needs to move towards a more sustainable and long-term adaptive management framework.

Preferably, the water management framework should be outcomes focused and provide for adaptive management, allowing market participants to determine how best to achieve the outcomes and to continuously develop and improve operations over time through learning, experience and customer/user engagement.

Such an outcome would appropriately provide NSW the operational flexibility to determine how best to satisfy the outcomes required under the Water Resource Plans, namely the Sustainable Diversion Limit (**SDL**).

##### Actions to be considered through the development of the Water Resource Plans

Transition of current water market framework to an adaptive management framework that is outcomes based. This could include:

- Development of systems operational rules to ensure compliance with, and full access to, the SDL. System rules need to be adaptively managed to ensure planned environmental water access is maintained, but not exceeded. Changes in utilisation levels for different customers (both consumptive and environmental) can have significant impacts on the total planned environmental water and access to the SDL. So adaptive management of relevant rules will be required to ensure the SDL is not exceeded, yet remains fully available. **For the Macquarie relevant rules may include; the volume of the Environmental Water Allowance, the size of the flood mitigation zone and access rules for supplementary licences.**

- Development of Planned environmental water management to ensure release of water to the environment is not triggered without an active analysis of the benefits of that action. This could be achieved through moving prescribed environmental water rules in Water Sharing Plans to an outcomes focused framework that will facilitate improved cost benefit analysis of planned environmental water. Rather than setting out detailed rules for planned environmental water such as translucency rules or specific carry over and transfer rules in a regulatory instrument, environmental water agencies would develop long-term environmental watering plans that clearly define the environmental outcomes or objectives required. How these outcomes are best achieved with regard to system operations would be developed through collaboration of the environment water agency and the systems operator to utilise each party's detailed local expertise. Initially, the relevant planned environmental flow rules could be converted to accounts that require an instruction to release, rather than an automatic release trigger. **For the Macquarie, examples include the Windamere translucency rules and the Environmental Water Allowance (translucent sub-account).**
- Development of outcome based framework to reduce third party impacts from the combination of individual rules for; carryover, dam spills, re-sets and carry over evaporation. The current rules do not necessarily allow customers the flexibility they need to achieve the best possible outcome for their businesses and the environment.
- The current Flood Mitigation Zone (**FMZ**) rules should be reviewed to ensure an optimal outcome for water security and flood mitigation. The ongoing improvement in weather forecasting and river operations systems mean that the FMZ may be larger than it now needs to be to meet the flood mitigation needs of the valley. A review should be undertaken to optimise the size and operation of the FMZ while increasing water security for the environment and consumptive customers.

#### Benefits to customers

- Adaptive management would will provide a framework to equitability and symmetrically deal with growth and decline in extractive use to promote outcomes where extractive utilisation is close to the SDL and in turn address concerns raised by our customers that they believe they are receiving less water than their share of extractive water, under the Water Sharing Plans.
- A framework that provides the ability for the cost benefits analysis to inform opportunities to optimise the balance between achieving environmental outcomes and making water available for consumptive use. For example, over time, there may be an opportunity to do more with less with respect to planned environmental water, which could lead to future adjustments to SDL and ultimately more water being available for consumptive use, providing benefits to local economies and the local environment.
- The framework would set clear objectives and planned outcomes and enable system operators to use their local expertise (in association with local customers) to determine how best to optimise

the operation of the system in real time, in turn increasing resource availability. For example, delivering rain rejections to specific environmental targets, rather than treating this as a loss.

- Improved environmental outcomes through a framework that provides true collaboration between market participants, for example policy makers, resource managers, environmental watering agencies and customers. An example of this could be coordinating the delivery of irrigation and environmental orders in combination with tributary flows to achieve multiple outcomes for all customers. Further, a framework of true collaboration would also provide an effective forum to identify and make the necessary changes required to implement environmental measures such as environmental re-use, piggybacking and toolkit measures while avoiding third party impacts.
- Improved flexibility to deliver water and water services that meet customers changing needs. Rather than having rules and requirements for licencing and dealings prescribed in Water Sharing Plans, an outcomes based framework would provide flexibility for customers to engage with service providers to develop new products or water service solutions. It would also allow for a streamlined and 'risk based' licencing and compliance framework that makes it easier and cheaper, for water customers to transact. This could range from abridged renewal processes to amalgamation of various licencing and approval instruments, as well 'out-come based' flexibility in state-wide "Dealing Principles" and specific trading rules.