

Outcomes from public consultation on active management of Macquarie–Bogan unregulated and alluvial water sources

Active management is intended to protect environmental water from extraction in the unregulated Lower Macquarie River and Marthaguy Creek water sources so that it can remain in the water source.

Implementing active management involves amending the *Water Sharing Plan for the Macquarie Bogan Unregulated and Alluvial Water Sources 2012*.

The Department of Planning, Industry and Environment (the department) undertook a range of consultation activities with stakeholders commencing in September 2018 and continuing throughout 2019 and 2020. This report summarises the key issues raised during consultation on active management in the Macquarie unregulated water sources and includes consideration of written submissions and conversations.

Consultation activities

Date	Activity	Participation
September 2018	Presentation and discussion of active management concept with Macquarie Castlereagh Stakeholder Advisory Panel	Stakeholder advisory panels were set up for each water resource plan area. Panel members include representatives from NSW government agencies, water users, environmental interest groups, Aboriginal communities and local councils. The panels provide the department with stakeholder input into the planning process for water resource plan development. The panels help identify issues, examine options and provide the us with feedback and advice.
October 2018	Presentation and discussion of the active management concept with Macquarie Cudgegong Environmental Flow Reference Group/Environmental Water Advisory Group (EFRG/EWAG).	The group includes a range of interested stakeholders including representatives from the Aboriginal community, NSW Local Land Services, Cudgegong Valley water users, NSW Department of Primary Industries, Nature Conservation Council/Inland Rivers Network, Macquarie Effluent Creeks Association, Macquarie Marshes Environmental Landholders Association, Macquarie River Food and Fibre, Environment, Energy and Science division of Department of Planning, Industry and Environment, WaterNSW, and the Commonwealth Environmental Water Office (observer status).

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Date	Activity	Participation
26 June 2019	<p>Public meeting – Warren RSL</p> <p>The department presented the objectives and principles of active management and outlined operational issues and policy options.</p>	<p>The department consulted lower Macquarie–Bogan unregulated licence holders, local environmental representatives and local officer of the former Office of Environment and Heritage on active management to protect held environmental water being used in-stream.</p> <p>The Commonwealth Environmental Water Office, WaterNSW and Aboriginal representatives were also invited but did not attend.</p>
25 September to 29 October 2019	<p>Online public exhibition of proposed amendments to the <i>Sharing Plan for the Macquarie Bogan Unregulated and Alluvial Water Sources 2012</i> to facilitate active management</p> <p>The department sought feedback on two documents:</p> <ul style="list-style-type: none"> Proposed amendments to the Water Sharing Plan for the Macquarie–Bogan Unregulated and Alluvial Water Sources 2012 to facilitate active management, September 2019 Active Management in Unregulated Rivers – Draft policy for public consultation, September 2019. 	<p>Fourteen submissions were received on the proposed amendments. Submissions were from licence holders (including consumptive and environmental water holders), individual community members and environmental group representatives.</p>
10 October 2019	<p>Public Meeting – Warren</p> <p>Departmental staff presented information about the proposed amendments to water sharing rules to protect active environmental water from extraction and explained how to submit feedback.</p>	<p>Nine attendees as well as government representatives attended, including water users, representatives from peak representative bodies and conservation groups (Inland Rivers Network, Healthy Rivers Dubbo, Dubbo Field Naturalist and Conservation Society) and other authorities (Warren Shire Council, Murray–Darling Basin Authority, WaterNSW, the former Office of Environment and Heritage).</p>
8 April 2020	<p>Presentation to Macquarie Stakeholder Advisory Panel</p> <p>Departmental staff presented information about the proposed amendments to water sharing rules to protect active environmental water from extraction and explained how to submit feedback.</p>	<p>Panel members included representatives from NSW government agencies, water users, environmental interest groups, Aboriginal communities and local councils.</p>

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Date	Activity	Participation
17 June 2020	<p>Webinar (meeting held online due to COVID-19)</p> <p>The department provided a summary of the rules to facilitate active management exhibited in 2019, the feedback received, and changes in response to feedback. The department explained the proposed procedures to implement active management in the Macquarie–Bogan before seeking feedback from stakeholders on the proposed procedures. Attendees were asked to provide written comments on procedures presented by 30 June 2020.</p>	<p>The six attendees were primarily licence holders with representatives from the Commonwealth Environmental Water Holder and Department of Agriculture. The recorded presentation was distributed more widely to stakeholders who had indicated a specific interest in Macquarie active management processes.</p> <p>Eight written submissions were received following the webinar.</p>
20–21 October 2020	<p>Face-to-face meetings with individual licence holders – Warren</p> <p>The department and WaterNSW provided licence holders with a walkthrough of the active management process and IT systems that licence holders participate in from 1 December to comply with the new active management rules. Licence holders could ask questions and bring up any remaining concerns about active management implementation.</p>	<p>The department and WaterNSW conducted five meetings with licence holders and noted their concerns, active management related or otherwise.</p>
17 November 2020	<p>Face-to-face customer forum – Carinda</p> <p>The meeting discussed implementation details and mutual obligations prior to active management coming into effect on 1 December.</p>	<p>The department and WaterNSW conducted face-to-face meetings with the six licence holders who wished to attend.</p>

Outcomes from consultation

The public consultation period provided valuable feedback from stakeholders that informed the department's recommendations on proposed amendments to the *Water Sharing Plan for the Macquarie Bogan Unregulated and Alluvial Water Sources 2012*. The feedback also helped us develop policy, operational procedures and systems to implement active management.

Overview of issues raised

We received feedback from community members, licence holders, user groups, environmental groups, and a federal agency.

We have divided the issues raised into three broad categories: proposed changes to the water sharing plan, implementation issues and statewide policy issues.

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How issues were considered

We examined the nature of issues raised in each submission. In responding, we considered the:

- objectives and principles outlined in the *Active Management in Unregulated Rivers - draft policy for public consultation*
- principles outlined in the Murray–Darling Basin Plan
- principles set by the NSW Government for water resource planning
- any statutory, technical or administrative constraints.

Feedback that was less specific to the Macquarie–Bogan, such as general comments on the active management policy and issues relating to implementing active management not specific to the Macquarie–Bogan, is captured in the *Active Management in Unregulated Rivers – draft policy: Public consultation summary*.

Proposed changes to Macquarie–Bogan unregulated water sharing rules

Protecting environmental water from extraction

The proposed amendments provided for held environmental water and some forms of planned environmental water from upstream water sources to be protected from extraction.

Some feedback supported protecting held environmental water from extraction so it can be used for its intended environmental purposes. Supporting submissions noted that the changes would contribute to improved water management outcomes in the Macquarie–Bogan and contribute toward achieving Murray–Darling Basin Plan objectives.

Protecting planned environmental water from upstream water sources was strongly supported by some sectors. Some submissions expressed concern regarding transparency on which planned environmental water would be subject to active management and the effect on reliability. Some felt planned environmental water was already adequately protected and should not be subject to further complexity and restriction.

Some licence holders did not support the proposed changes to access rules to protect active environmental water, indicating the amended access rules would significantly decrease the reliability of water and the viability of their businesses. Some suggested environmental water is the only water available.

Licence holders indicated there has been a reduction in reliability of unregulated licences arising from a range of factors including increased efficiency in the regulated system. They were concerned that active management may make this situation worse. Some sought recognition of the current decrease in reliability and a commitment that active management will not further reduce it. Some submissions objected to changes without compensation, proposing a buyback of licenses.

Multiple licence holders indicated that the proposed changes would shift value to the grazing properties in the Macquarie Marshes.

One submission recommended that the Macquarie Environmental Water Allowance Sub-allowance 1 should be protected and allow access to Macquarie Environmental Water Allowance (active) Sub-allowance 2 (Macquarie EWA2).

One submission suggested that if the target environmental outcome was within the Macquarie Marshes, there may be no need to actively manage below the Marshes. An environmental submission welcomed a more consistent means of protecting environmental water, highlighting the

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historical and intended use of held and planned environmental water to contribute to connectivity into the Barwon-Darling unregulated water source.

Our response

The department recommended implementing active management in the Lower Macquarie and Marthaguy Creek water sources to protect held environmental water and the Macquarie EWA2 from extraction in these areas. As a result of public submissions, we revised the definition of 'active environmental water' to remove the phrase 'planned environmental water from a water source upstream of these water sources that required protection from extraction as determined by the minister' from the definition. The revised definition still includes:

- held environmental water from an upstream water source
- unregulated water that a licence holder wants to protect from extraction (under Clause 51 of the water sharing plan)
- releases made from the Macquarie EWA2 under the *Water Sharing Plan for the Macquarie and Cudgegong Regulated River Water Source 2016*.

This change:

- provides greater clarity on the environmental water that is protected from extraction
- minimises the risk of unintended effects on unregulated river access licence reliability and reflects the original purpose of active management – to protect the held environmental water as well as planned environmental water already prohibited from extraction under the current water sharing plan.

There is strong community support to protect from extraction held environmental water recovered by environmental water holders for environmental purposes. This licensed water would have been used upstream by the previous owners, and therefore not available in the unregulated water sources.

In addition to protecting held environmental water, active management provides a practical mechanism to implement an existing rule in the Macquarie–Bogan water sharing plan that prohibits extraction by unregulated licence holders from flows arising from releases of Macquarie EWA2 from Burrendong Dam in the Macquarie regulated system. Prior to active management, there had not been a practical mechanism to implement this rule. Active management supports the intent of the 2012 Macquarie–Bogan water sharing plan to protect this water from extraction by providing a tool to identify the flows arising from the Macquarie EWA2 and mechanisms to adjust access. There was strong community support to enforce rules established in 2012.

Take from flows arising from the Macquarie Environmental Water Allowance Sub-allowance 1 is not prohibited as this is currently not required under the current Macquarie–Bogan water sharing plan.

Implementation

General

Submissions commented on implementation processes including measuring, monitoring, improved river modelling, and transparency of decision-making. They highlighted a need for consistent compliance mechanisms such as metering and measuring requirements. Concerns were raised about the feasibility of estimating transmission losses due to insufficient metering, complexities of the system, variations depending on the state of the Macquarie Marshes and local rainfall.

Concerns were also expressed about who would be responsible for active management, suggesting the river operators are best placed to undertake this role.

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Our response

We considered the comments regarding transparency of decision making, complexity and implementation issues when we developed the active management procedures manual that sets out how active management operates in the Macquarie unregulated water sources.

The department consulted with WaterNSW and targeted stakeholders to ensure the methods established to implement active management are practical.

Options to adjust access

There were mixed views about setting volumetric limits for licences to protect active environmental water. Submissions expressed concern about how the available volume would be distributed among licences, suggesting it may be open to abuse.

Some submissions did not support allocating a volume to inactive licences. Others sought equitable treatment of active, inactive and held environmental water licenses.

Some submissions preferred that we protect environmental water by adjusting the cease-to-pump conditions rather than distributing the available volume among licences, given there aren't many licence holders in the system. Others had opposing views. Smaller licence holders indicated they would be disadvantaged if we share the available volume based on a percentage of shares. There was some opposition to an expression of interest (EOI) process and announcements.

Our response

Adjusting commence/cease-to-pump conditions in the Macquarie unregulated water sources would be ineffective at protecting active environmental water as some of the extraction is below the gauges used for determining access. In these cases, extraction does not affect the flow at the gauge upstream, so the entire volume in the river downstream of the gauge could be extracted – including environmental water. In comparison, license holders with access linked to downstream gauges must stop pumping when flow at the gauge drops to their access threshold.

Prohibiting access if only active environmental water is present and setting volumetric limits for each licence if there are mixed flows is the most suitable alternative. Therefore, we have not changed the draft water sharing rules from those shown in the public exhibition.

We considered the implementation concerns while developing the active management procedures manual that sets out how daily volumetric limits are determined if active environmental water and other water is present. Only licences that submit an EOI may access water, so no volume is allocated to 'inactive' licences that do not wish to access. All other licence conditions still apply.

Inactive licence holders

Some stakeholders indicated they do not support inactive licence holders participating in the sharing of water or to call on water to be protected and left in the water source. They believe it will result in fewer opportunities for existing unregulated licences.

Our response

Licences of the same class and category are being treated equally under active management. A licence that has been inactive has the same right to take water as an active licence, provided all other licence conditions are met. Only licences that have an active EOI are able to access water. There will be no volume 'set aside' on the basis of licence shares.

Local rainfall contributions to available water

Feedback highlighted that local rainfall that contributes to flow in the Macquarie, Marthaguy and Gum Cowal water sources should be available for access by license holders. There needs to be

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a method for quantifying contributions in order to include local rainfall contributions in available volume forecast assessments.

Active management is designed only to prevent extraction of water defined as active environmental water (that is, volumes arising from held environmental water and some planned environmental water). Water resulting from local rainfall is not actively managed water and should be available for access by license holders.

Our response

It is difficult to detect and quantify in real time local rainfall contributions that enter the water source between gauges in order to make the volume available to water users without compromising protected volumes.

The active management procedures manual allows WaterNSW to adjust access day to day during a flow event if additional flow is detected at the downstream gauge of a management zone (indicating there have been inflows between the upper and lower gauges). This means that licence holders may receive additional access the following day, provided WaterNSW is sure the total volume of active environmental water protected remains approximately the same over the event. Otherwise, as water passes a gauge and is measured, it will be available for licence holders downstream.

Gauge accuracy

Flows are measured at various points along the system so any differences between forecast and actual flows can be determined, and any adjustments undertaken.

There was some concern about a lack of gauges in the system (especially the Marthaguy gauges) and the lack of a reliable downstream gauge before the Barwon–Darling. This may result in incorrect estimation of flows and the proportion of active environmental water in the Marthaguy Creek. Some users at the bottom of the Lower Macquarie may either over- or under-extract available water. These license holders have three water sources to draw from, the most significant of which is the Lower Macquarie River.

Our response

Decisions in water management are based on the best information available at the time.

Gauge data will be used to estimate proportional contributions of active environmental water and available water. There are no plans to install new gauges for active management. Gauges needed for active management were submitted to a hydrometric review to ensure adequate resourcing and maintenance. Lower Macquarie licence holders potentially affected by this issue may be able to draw from the Lower Macquarie, Marthaguy Creek and Castlereagh Rivers. Of these, the largest contributor is the Lower Macquarie River.

The contributions of flows passing the Terrigal creek gauge, along with a number of other water sources, are available for a small number of licenses at the end of the Lower Macquarie. The uncertainty that may result from inaccurate estimations of active environmental water and available water proportions in Terrigal Creek are likely to be small relative to the cumulative flow at the bottom of the system, and are equally likely to underestimate or overestimate active environmental water.

We will analyse events where Terrigal Creek contributes to available water downstream and monitor the significance of the proportion. We will examine the data during the active management annual review to determine if further management development is needed or possible.

As part of the annual review, we will look at access levels for licences at the lower end of the system to compare whether access determined using flow at the gauge (some distance away from

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the extraction point) instead of the previous visible flow condition at the extraction point is significantly different.

Further consultation

The active management procedures manuals are subject to an annual review. This includes seeking feedback from licence holders and other interested community members on the success of active management in terms of outcomes for environmental water and whether processes and obligations are workable.

Consultation is important to ensure active management evolves and improves in response to new information, insights and stakeholder feedback. The active management procedures manual outlines the minimum consultation requirements for the annual review of the manual.

For more information about the department's initiatives on protecting environmental water under the Water Reform Action Plan see the department's [environmental water hub website](#)¹.

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¹ <https://www.industry.nsw.gov.au/water/environmental-water-hub>