



Department of Climate Change, Energy, the Environment and Water



# Customer Advisory Group (CAG) afternoon sessions Border Rivers

Water Group

**Peter Hansen**  
Engagement, Water Group

March-April 2026



# Acknowledgement of Country



The Department of Climate Change, Energy, the Environment and Water acknowledges that it stands on Aboriginal land.

We acknowledge the Traditional Custodians of the land and water, and we show our respect for Elders past, present and emerging.

We do this through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

Artist and designer Nikita Ridgeway from Aboriginal design agency – Boss Lady Creative Designs, created the People and Community symbol.



Department of Climate Change, Energy, the Environment and Water



# Acknowledgement of local community

I would also like to acknowledge our farmers, graziers, councils and local communities and the support they provide to their communities and the country.

Department of Climate Change, Energy, the Environment and Water

# NSW Border Rivers CAG Presentation

**Peter Hyde**  
Director Inland Planning

19 March 2026



# Northern Basin Connectivity

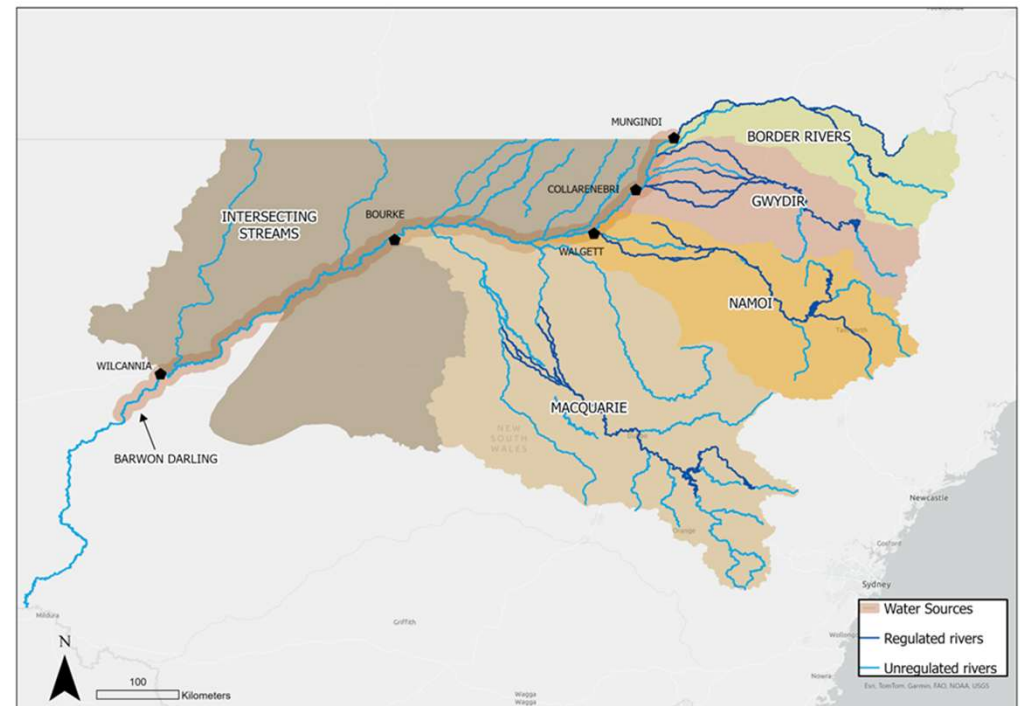
# Northern Basin Connectivity Program

## Project objective

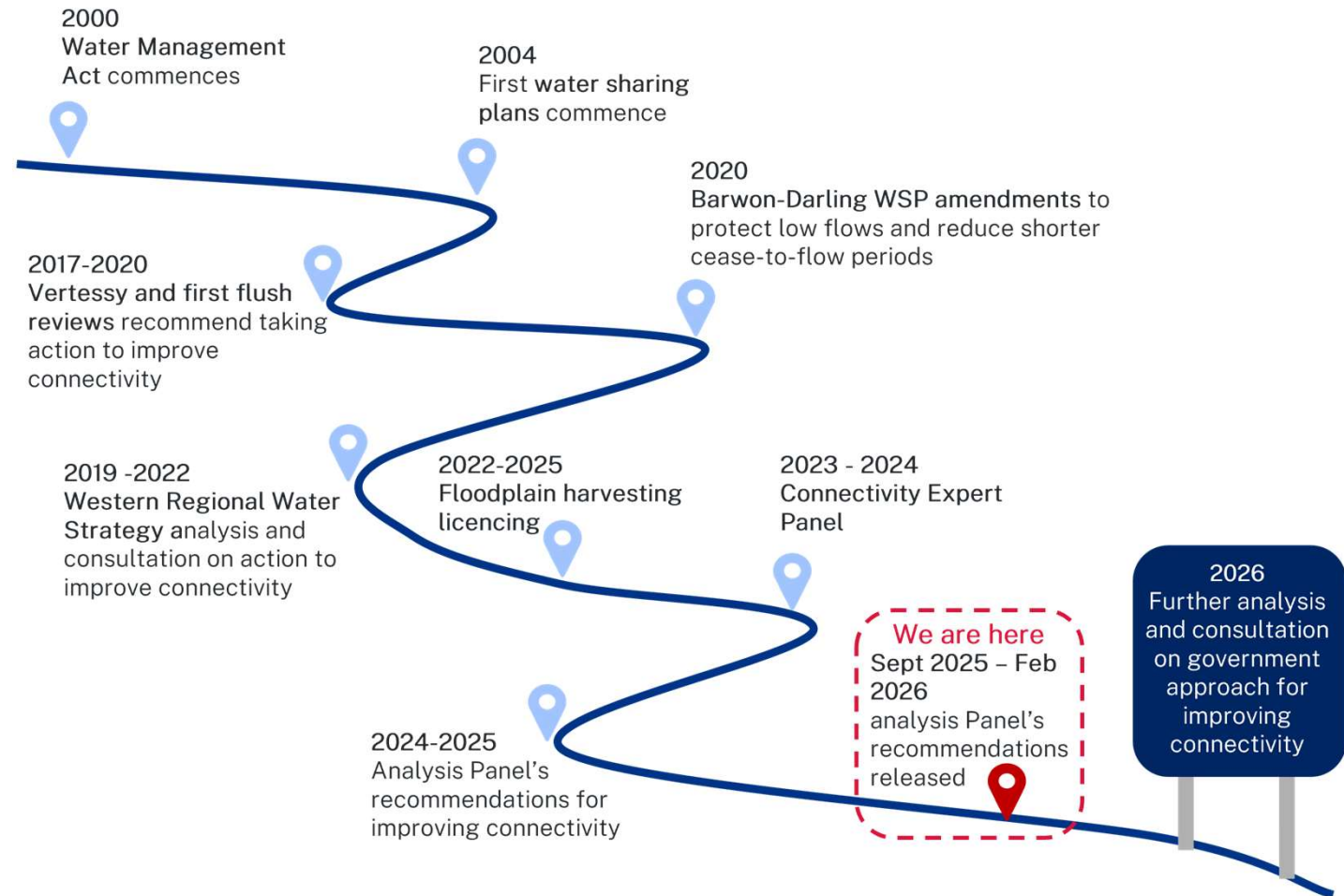
- Improve river connectivity between the Barwon-Darling and its tributary systems and then downstream to provide for human and environmental needs

## Expected project outcomes

- Northern Basin water sharing plans include provisions that aim to improve water flowing across connected catchments and manage resumption of flows. This will
  - increase transparency on how system operates under a range of conditions
  - reduce reliance on temporary water restrictions (s.324)
  - protect environmental water flows from northern to southern basin
- May result in changes to all regulated and unregulated water sharing plans in the northern Basin



Map of northern NSW Murray-Darling Basin



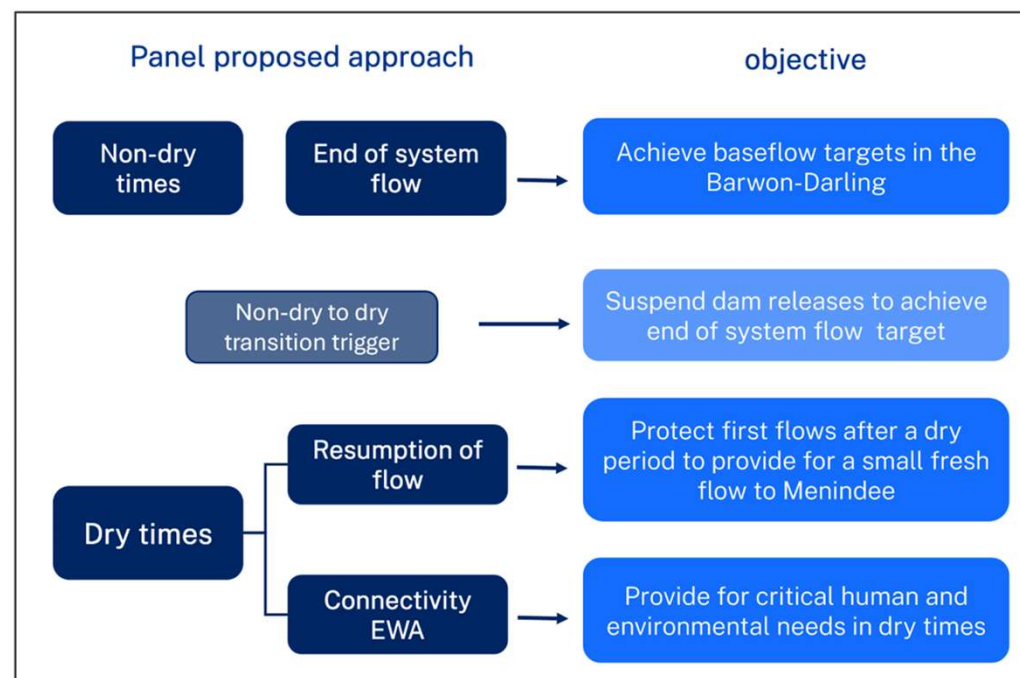
The Northern Basin Connectivity Program is building on previous programs

The Panel's report will be one of several factors considered by Government when determining water sharing plan changes to improve connectivity

# Panel recommendations

Panel proposed management options and rules for 3 climatic conditions

- **Non-dry times rules** are intended to maintain adequate downstream flows and ‘wetness’ of the system during these times to help the ecosystem to be more resilient and able to withstand drought
- **Transition from non-dry to dry times rules** are intended to provide for when the system begins to enter a “dry” stage and suspend dam releases to meet end of system targets
- **Dry times rules** are intended to allow the ecosystem to recover from drought as quickly as possible and provide for critical needs during extended droughts



Overview of Panel’s objectives and proposed approach for improving connectivity

Panel recommended that water protected through these rules should be protected through to Menindee Lakes

# End of System flow

Aims to achieve baseflows in the Barwon-Darling in non-dry times

## Panel's recommendation

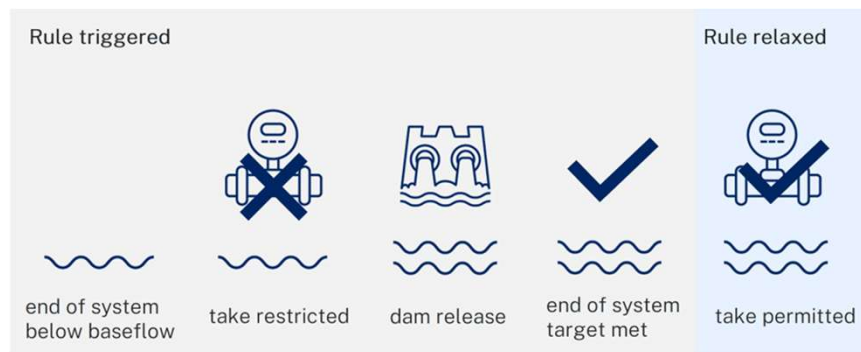
- water sharing plans should have an end of system (EoS) flow rule to enable Barwon-Darling base flow requirements in non-dry times
- achieved through limitations on supplementary and floodplain harvesting access in the first instance, with releases from storages if these flows are not adequate
- dam releases are suspended when system enters dry phase (dam inflows fall below the 75<sup>th</sup> percentile on average over 30 days)

## What was modelled

Two approaches for making dam releases to meet EoS targets

- high security account: releases from a new high security account
- translucency: a proportion of the daily dam inflow is released

## How the rule would work



## Where the rule was applied

- Border Rivers, Gwydir and Namoi regulated valleys

# End of system flow – benefits and impacts



Aims to achieve baseflows in the Barwon-Darling in non-dry times

## Flow changes

- Panel proposed that the without development base flows would provide an approximation for non-dry times base flows
  - This target is achieved for end of system (EoS)-high security accounts at Mungindi and Bourke
- Improvements from EoS-high security accounts are approximately twice that of EoS-translucency approach

*Long-term average change in diversions (1895-2023) percentage of time flows exceed or achieve base flows*

Location	Baseflow target ML/d	without development (%)	base case (%)	EoS – HS accounts (%)	EoS – transl'cy (%)
Mungindi	160	68	52	76	65
Collarenebri	280	66	50	60	54
Walgett	320	74	54	64	58
Bourke	500	75	70	76	73
Wilcannia	350	78	67	72	70

## Diversion changes

- EoS-High security accounts has larger impact on diversions as it requires a dam reserve to be set aside
- NSW Border Rivers has a higher end of system flow target and smaller storage than other valleys. This increases the level of impact of EoS –HS accounts.
- Diversion impacts EoS-high security accounts is approximately twice that of the EoS-translucency in Gwydir and Namoi

*Long-term change in diversions (1895-2023) for EoS- high security accounts and EoS-translucency. Includes absolute (GL/y) and relative change (%) from the base case*

Valley	Base case	EoS –HS accounts		EoS -translucency	
	GL/y	GL/y	%	GL/y	%
Border Rivers	214.2	-52.8	-24.6	-8.6	-4.0
Gwydir	446.2	-23.8	-5.3	-10.1	-2.3
Namoi	252.6	-10.6	-4.2	-5.2	-2.1

# Extended resumption of flow

Aims to provide for a small fresh flushing flow to Menindee following an extended dry period

## Panel's recommendation:

- resumption of flow rules should be applied in northern tributaries as well as the Barwon-Darling
- After a dry period, supplementary and floodplain harvesting access in the tributary valleys should be restricted until there has been a small fresh flow along the Barwon-Darling

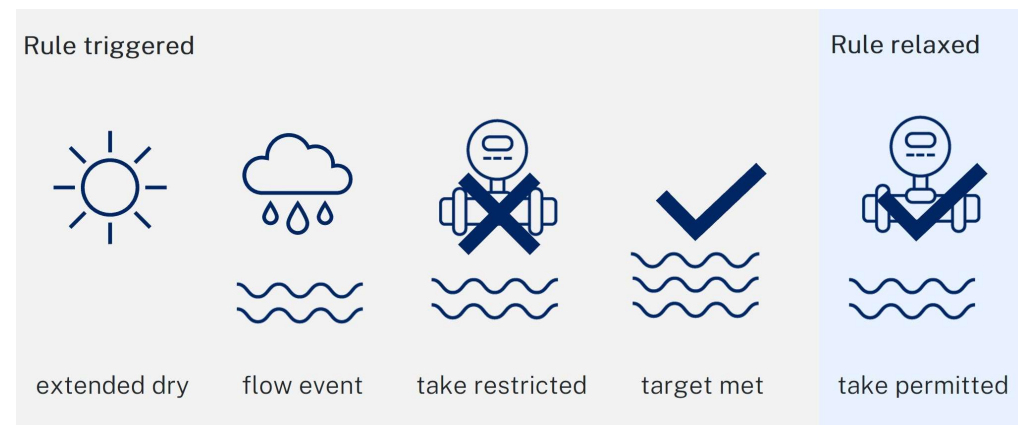
## What was modelled

Panel's proposed flow targets and trigger locations to restrict access in tributary valleys until all downstream targets met

- access restricted after non-achievement of base flow for 90 days
- restrictions lifted when 14-day small fresh forecast to be met

Trigger locations: Wilcannia, Louth, Bourke, Brewarrina, Walgett, Collarenebri and Mungindi

## How the rule would work



## Where the rule was applied

- Border Rivers, Gwydir, Namoi and Mcquarie regulated valleys (restrictions to supplementary and floodplain harvesting)
- Barwon-Darling –restrictions to A/B/C class licences and floodplain harvesting

# Resumption of flow – flow and diversion changes

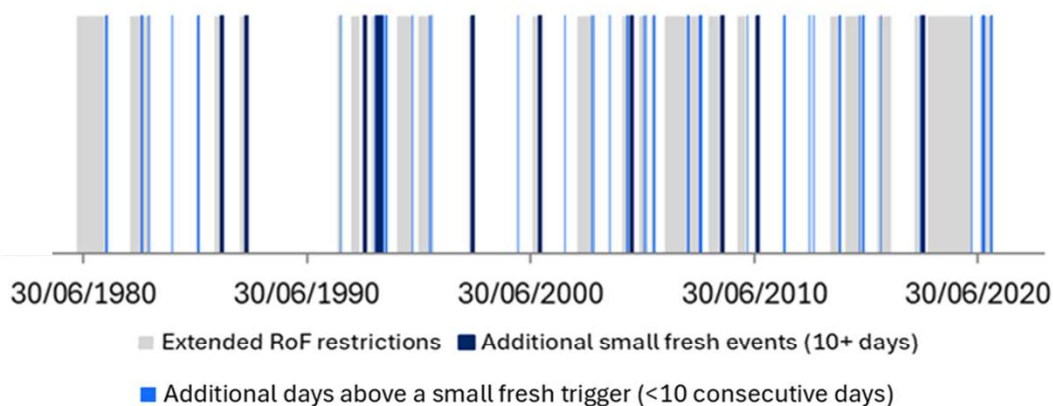


Aims to provide for a small fresh flushing flow to Menindee following an extended dry period

## Flow changes

- Improvements in flows above small fresh flow level at Wilcannia (1,400 ML/d)
  - Additional 1,032 days of flow above small fresh level
  - Additional 36 events where flows were above small fresh for 10 days. Of these events, 25 were over 14 days

Extended resumption of flow - additional days above small fresh flow volume at



## Diversion changes

- Diversions reduced by approximately
  - 5-6% in Gwydir and Namoi
  - 3.5% in Border Rivers and Barwon-Darling
  - 1% in the Macquarie
- Impacts vary between years

Long-term average change in diversions (1895-2023) for extended resumption of flow. Includes absolute (GL/y) and relative change (%) from the base case

Valley	Base case	Extended resumption of flow	
	GL/y	GL/y	%
Border Rivers	214.2	-7.2	-3.4
Gwydir	446.2	-25.4	-5.7
Namoi	252.6	-13.3	-5.3
Macquarie	330.2	-3.0	-0.9
Barwon-Darling	171.3	-6.4	-3.7

# Connectivity Environmental Water Allowance

Aims to use storage releases to reconnect pools to provide for critical needs during dry times

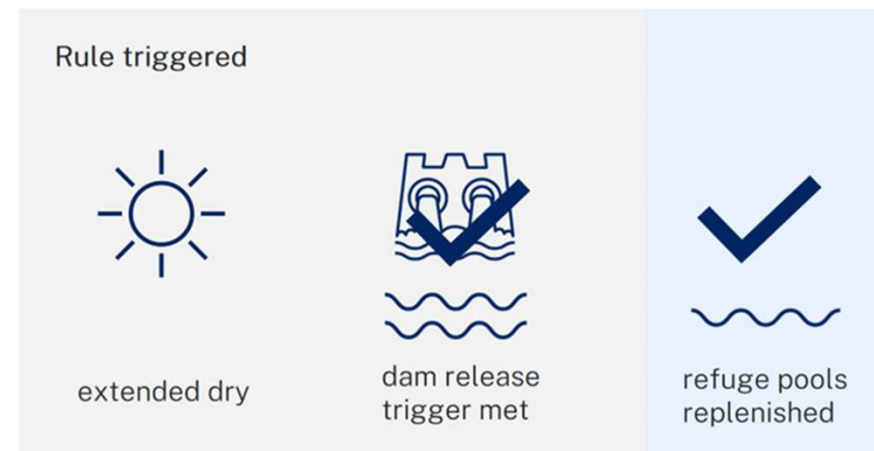
## Panel's recommendation

- Gwydir, Namoi and Border Rivers regulated water sharing plans should include a connectivity environmental water allowance (EWA) to provide pulses releases as needed for water quality and other environmental outcomes during dry times
- At minimum provide for reconnecting pools for critical human needs, environmental and water quality needs in dry times

## We modelled 2 approaches

- Connectivity EWA-dam inflow trigger
  - releases triggered 31 October and 28 February if dam inflows are below the dry inflow trigger (below 75<sup>th</sup> percentile for 30 days).
  - EWA provided for up to 2 large releases (20GL) from each valley
- Connectivity EWA -Bourke flow trigger
  - releases triggered when flow at Bourke are below baseflow (450ML/day for 120 days)
  - EWA provided for up to 1 smaller release (10 GL) from each valley

## How the rule would work



## Where the rule applies:

- Border Rivers, Gwydir and Namoi regulated valleys

# Connectivity EWA–flow and diversion changes



Aims to use storage releases to reconnect pools to provide for critical needs during dry times

## Flow changes

- Connectivity EWA is intended to be used to break up dry periods
- The amount of time that the resumption of flow dry trigger at Bourke was reduced by
  - 38 % for connectivity EWA –dam inflow trigger
  - 52% for the connectivity EWA –Bourke flow trigger

*Comparison of time the Bourke resumption of flow dry trigger was met (<450ML/d for 120 days) under the base case, connectivity EWA – dam inflow and Bourke triggers (1895-2023)*

Approach modelled	Total days in restrictions	Number of restriction events	Average length of restriction period
Base case	3,426	34	101
Connectivity EWA – dam inflow trigger	2,123	25	85
Connectivity EWA – Bourke flow trigger	1,639	32	51

## Diversion changes

- Reduction in diversions are 3-4 times higher for the connectivity EWA – dam inflow trigger than connectivity EWA-Bourke flow trigger
- Average impact across 3 northern valleys is
  - 8% (3.2-12.6%) for EWA –dam inflow trigger
  - 2% (0.8 to 3.2%) for EWA –Bourke flow trigger

*Long-term change in diversions (1895-2023) for connectivity EWA dam inflow trigger and Bourke flow trigger. Includes absolute (GL/y) and relative change (%) from the base case*

Valley	Base case	EWA –dam inflow		EWA –Bourke flow	
	GL/y	GL/y	%	GL/y	%
Border Rivers	214.2	-27.0	-12.8	-6.8	-3.2
Gwydir	446.2	-14.2	-3.2	-3.6	-0.8
Namoi	252.6	-19.9	-7.9	-5.7	-2.3

# Combination of approaches

Aims to provide an example of how Panel's recommendations might work together

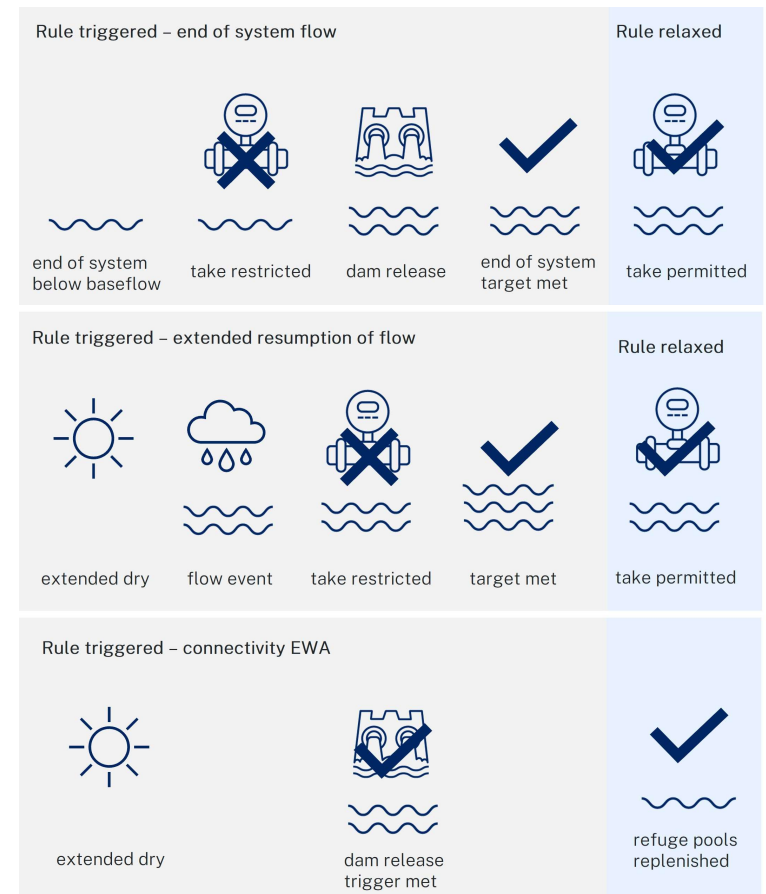
## Panel's recommendation

- Future connectivity impact analysis should seek to examine the suite of proposals as a package to fully estimate the overall and combined effects of water access restrictions to improve connectivity

## What was modelled

We modelled applying the following approaches together

- Extended resumption of flow
- End of system flow -translucency
- Connectivity EWA -Bourke flow trigger



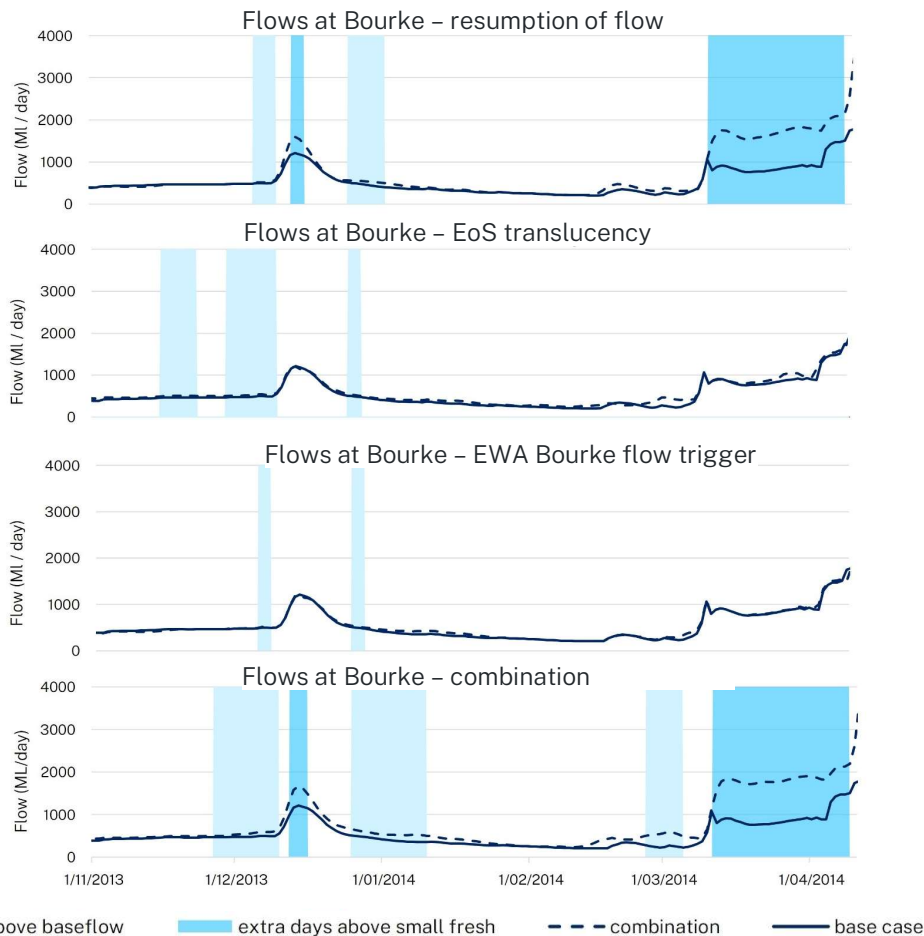
# Combination–flow and diversion changes



Aims to provide an example of how Panel’s recommendations might work together

## Flow changes

Example of change in flows at Bourke when Panel’s recommendations are applied individually and in combination. Nov 2013-April 2014



## Diversion changes

The combination of rules modelled changed average diversion by

- 8-9% in Border Rivers, Gwydir and Namoi
- 0.8 % in Macquarie
- 2.1% in Barwon-Darling

Long-term average change in diversions (1895-2023) for combination (EoS – translucency, extended RoF, connectivity EWA - Bourke flow trigger). Includes absolute (GL/y) and relative change (%) from the base case.

Valley	Base case	Combination	
	GL/y	GL/y	%
Border Rivers	214.2	-18.3	-8.5
Gwydir	446.2	-37.4	-8.4
Namoi	252.6	-22.9	-9.1
Macquarie	330.2	-2.6	-0.8
Barwon-Darling	171.3	-3.6	-2.1

# Economic changes for water users and communities



To estimate the implications for water users we used hydrologic modelling to measure change in allocations

- The value of that change was estimated using the ABARES\* water trading model. This measures the change in economic value being generated by water users
- The regional consequences were assessed by using input-output model

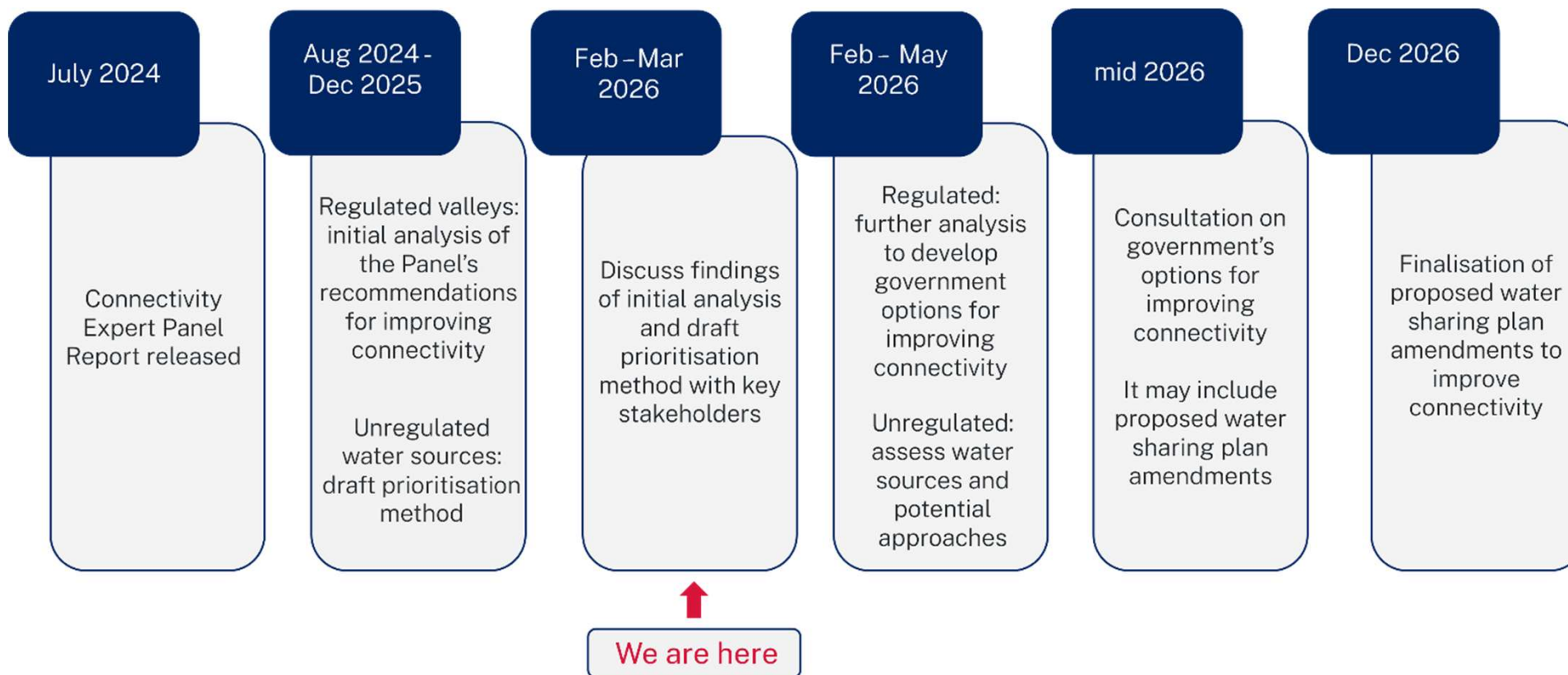
*Key economic consequences for water users and regional communities of the Panel's recommendations, average annual impacts. Note reduction in regional jobs are a on-off*

Approach assessed	Impact on water use	Increase water trading price	Impact on water users	Impact on regional economies	Reduction in regional jobs
	GL/y	%	\$m/y	\$m/y	number
End of system - translucency	-22.9	0.9	-\$9.7	-\$2.0	28
Extended resumption of flow	-55.3	1.1	-\$16.3	-\$3.3	46
Connectivity EWA – Bourke flow trigger	-15.2	3.5	-\$5.6	-\$1.2	17
Combination**	-84.8	5.8	-\$27.1	-\$5.6	79

\* Australian Bureau of Agricultural and Resource Economics and Sciences

\*\*Combination approach modelled the extended resumption of flow, end of system - translucency and connectivity EWA – Bourke flow trigger.

# Next steps – Northern Basin Connectivity



# Minimum Inflows

# Minimum Inflows project

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*Incorporating risk of climate change and variability into water allocations*

The Minimum inflows project will:

- review the water that will flow into dams during drought
- adjust the storage reserve to ensure high priority requirements can be met under future climate scenarios

# Key outcomes and objectives

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Improved capacity to manage water availability under a more variable climate → *more certainty for water users and environment*

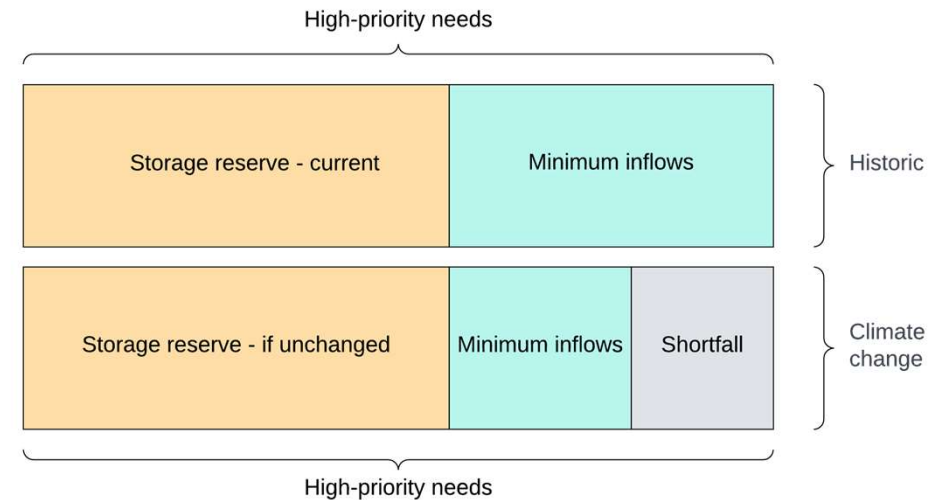


Establishing an agreed likelihood of the Extreme Events Policy being triggered/WSP suspensions → *agreed level of risk for water users and environment*

# Why minimum inflows matter

Past droughts (Millennium, Tinderbox) saw record low inflows into dams. This triggered:

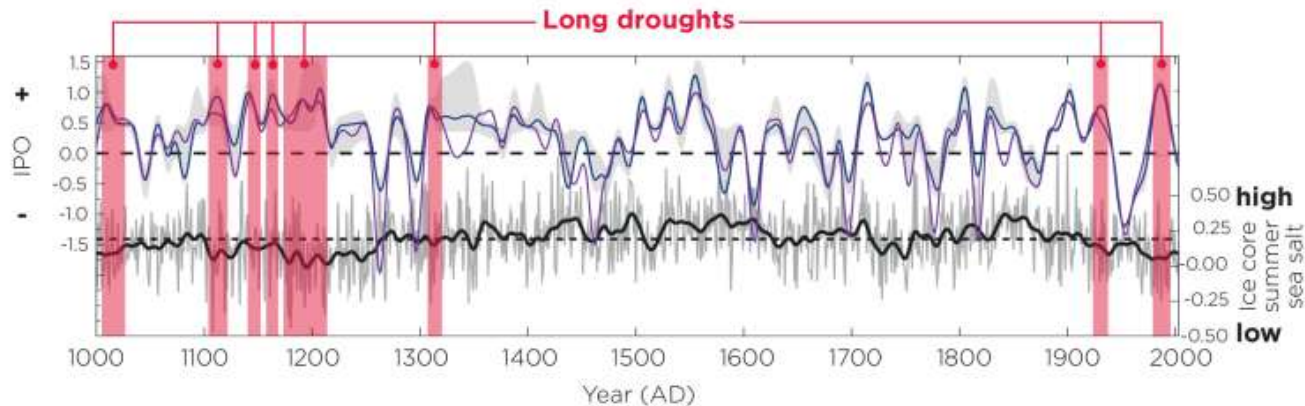
- Extreme Events Policy and Emergency drought measures
- Suspension of water sharing plans
- Reduced allocations for high-priority licences
- Issues delivering water to towns
- Suspension of environmental water to meet critical human needs



Highlighted the need for a review of the current method, particularly with climate change risk

# Current approach and new data

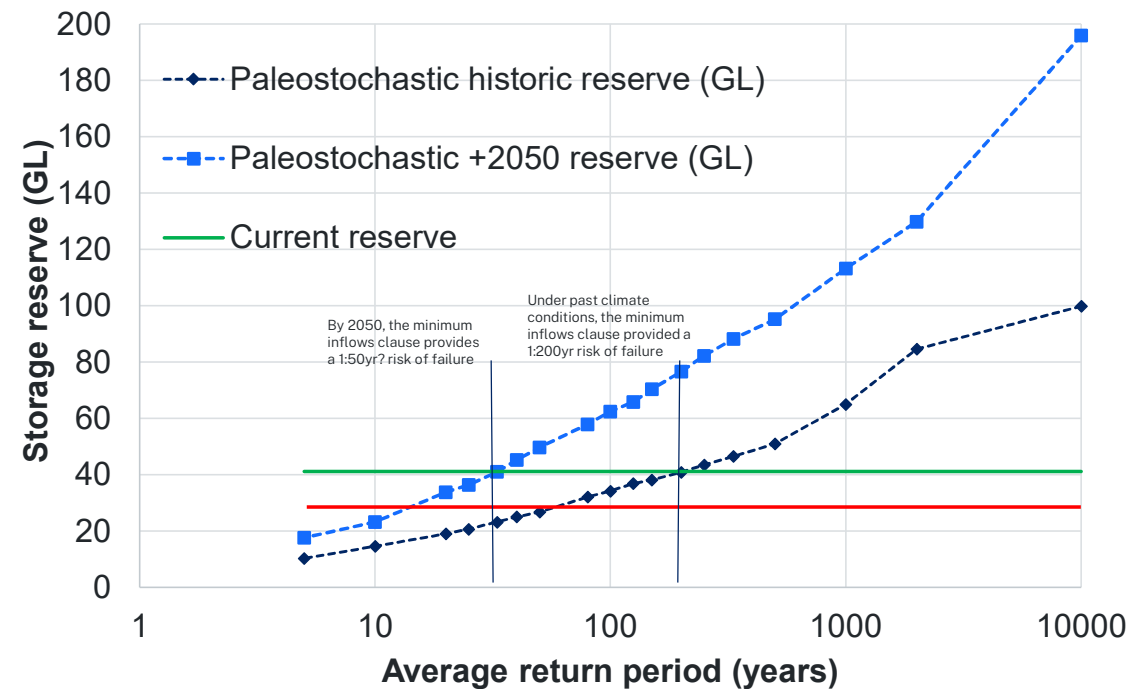
- Use of observed historical data: 1890s to (mostly) 2004 (best available information at the time)
- Excludes the Millennium and Tinderbox droughts and does not consider climate change
- We now have 10,000 years of paleo-stochastic data to better understand long term climate variability and NARClIM 2.0 to help us understand likely climate change impacts
- Picking a single ‘worst drought on record’ like we currently do is not feasible for a 10,000 yr dataset
- New data allows for more nuance in estimating risk and designing WSPs to manage those risks.



# New method

- We will need to choose an amount of water to store in the dam to meet a particular level of reliability
- The reliability of the current reserve is approx. 1 in 200 years under historic conditions –or, 1 in 50 years under the 2050 climate (Example only)
- The average stage 4 of the Extreme Events Policy changes from 1 in 75 years to 1 in 20 years.

### Comparison of Historic and 2050 projection storage reserve requirements



# Method outputs and considerations for decision making

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- Impacts and benefits to different licence entitlements/water users
  - Length and severity of expected shortfalls
  - Economic impacts
  - Environmental impacts
  - High priority needs (e.g., BLR, town water supply, high security, environmental water)
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# OCSE Expert Panel review

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- OCSE review was completed in July 2025
- Endorsement of the method with 13 recommendations across 3 categories
- Key feedback was:
  - Represents a strong conceptual framework to estimate the impact of climate change and variability on estimates of minimum inflows.
  - Use of paleo-stochastic data adjusted with climate data is transparent and an improvement compared to using historical data
- The departments response to the review and how we have and will continue to implement the recommendations was recently released.

# Where we are up to and next steps

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- The method and response to the OCSE review are available on the website:  
<https://www.water.dcceew.nsw.gov.au/our-work/projects-and-programs/minimum-inflows-project>
- Webinars will be held on 11 March and 30 March for Minimum Inflows and Northern Basin Connectivity
- Modelling and impact analysis is being finalised for northern valleys, and has just begun on southern basin valleys.
- Consultation on the results of analysis and how to apply the method will occur for the northern basin valleys starting in late April, prioritising Border Rivers, Gwydir and Namoi.

# Omnibus amendment

# Connectivity amendments: applicable plan areas

- Provisions for connectivity apply to northern inland water sharing plans



# Connectivity amendments



Update to trigger for restricting take of overland flow in northern inland regulated plans and a review of water sharing plan rules to consider connectivity in northern inland unregulated plans where they are not already included.

- We are taking action to improve water flowing across the connected catchments of the northern NSW Murray Basin at important times as part of the Northern Basin Connectivity Program.
- We are changing an existing clause that an announcement permitting the take of overland flow cannot be made if the accessible volume of water stored in Menindee Lakes Storage is less than 250 gigalitres. This volume has been changed from 195 gigalitres and applies to the Gwydir, Macquarie and Cudgegong, Border Rivers and Upper and Lower Namoi regulated rivers.
- We are reviewing the water sharing plan rules in the Castlereagh, Intersecting Streams and Border Rivers unregulated rivers to consider the flows required to support connectivity, protect the relevant water source, and enable the amendment of the plan based on the review.

# Wetlands

# WSP protections for wetlands



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## Project objectives

- Finalise policy approach and implement across all inland unregulated plans by end of 2026
- Develop a wetlands-specific Minimal Harm Guideline for assessment of new works and trades
- Meet government commitments announced 9 April 2025

## Project outcome sought

- Clear policy that articulates how WSPs help protect different wetland areas, including off-river pools
- Rationale for risks being managed, WSP rules applied and which areas are mapped vs unmapped (criteria)

# Wetlands - what's next



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## Consultation – approx. mid-2026

- 2024 plans – broad consultation on map and rule changes
  - (Intersecting Streams, Border Rivers, Castlereagh, North Western, Lower Murray Darling, Murray plans)
- 2025-6 plans – targeted consultation on FMP derived wetlands only - mapped as at March 2025
  - (Gwydir, Namoi and Peel, Macquarie/Wambuul Bogan, Lachlan, Murrumbidgee, Barwon-Darling plans)
- Current status
  - Policy finalisation in progress
  - Commencing consultation planning

Department of Climate Change, Energy, the Environment and Water

# Northern Basin - temporary water restrictions 2026

Allan Raine  
Director Water Planning Implementation

March 2026, CAG meetings



# Introduction



## Section 324 of the Water Management Act No 92:

*If satisfied that it is necessary to do so in the public interest (such as (but not limited to) to cope with a water shortage, threat to public health or safety or to manage water for environmental purposes), the Minister may, by order in writing, direct that, for a specified period, the taking of water from a specified water source is prohibited, or is subject to specified restrictions, as the case requires.*

# Why 250 GL active storage upper lakes?

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## Western Regional Water Strategy (WRWS):

- 250 GL modelled to provide up to 12-months supply for critical human and environmental needs
- Modelling at that time used minimum releases developed over a decade ago – these are insufficient
- Pamamaroo Inlet Regulator (PIR) instability – until PIR is repaired, more water required to deliver 12-months supply for critical needs. WRWS showed that without the infrastructure constraint, 195 GL active volume with water stores only in Lake Wetherell would provide up to 12-months supply.

## These s324 temporary water restrictions:

- Since 2023 mass fish deaths, we now know we need higher minimum releases in Summer, to manage the risk of mass fish deaths in the Menindee Weir 32 weir pool.
  - NRC review of the Murray and Lower Darling WSP – based on flows needed over Summer for WQ over the last 3 years, NRC recommended higher releases that align with recent management protocols.
  - Using the higher NRC proposed minimum releases, update modelling forecasts that 250 GL will last until approx Dec'26/Jan '27 ie ~10 months
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# How are the s324 restrictions in the public interest?

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There is a public interest in restricting take in accordance with the temporary water restriction:

- *“To cope with a water shortage”* - 250 GL of active storage in the upper lakes represents up to 12-months supply for critical needs downstream, under current arrangements. These needs include town water supply for Menindee and Pooncarie, BLR, and maintaining connectivity and a healthy lower Darling ecosystem.
- *“Threat to public health and safety”* - previous drought and cease to flow conditions in the lower Darling led to major water quality issues in the river from blue green algae and eutrophication in isolated pools. Thus, water was potentially unsafe for use by those required to access water along the river for BLR.
- *“Manage water for environmental purposes”* - With the exception of the March 2023 mass fish deaths, the previous successive fish deaths that occurred in 2018/19 were caused by hypoxia as a result of persistent stratification, then destratification. Similar conditions now exist within the Weir 32 weir pool. Protecting flows into Menindee to provide up to 12-months supply for critical needs will allow stratification to be managed to minimise the risk of further mass fish deaths. Before 2023 the lower Darling was a major stronghold for Murray cod within the Basin. The population crashed in 2023.

# Why a s324 when the government is already working on connectivity?

- The government is still working through the consideration of the Connectivity Panel's recommendations.
- Consultation with key stakeholders has commenced and public webinars commenced on 11 March.
- Government will develop options - these will be released for consultation later in 2026.
- Once this work is completed, there should no longer be a need for temporary water restrictions of this nature.



# When will the order come into effect? When could restrictions be lifted?

Restrictions will commence when the active storage volume of the upper Menindee Lakes falls below 250 GL and the s324 Order has been published.

- The supplementary access, relaxation triggers for allowing access are:
  - Flows in the Darling River at Bourke Town gauge are at least 1,550 ML/day for 14 consecutive days or have reached 21,700 ML over a consecutive 14-day period **OR**
  - Flows in the Darling River at Wilcannia Main Channel gauge are at least 1,400 ML/day for 14 consecutive days or have reached 19,600 ML over a consecutive 14-day period
- For FPH access, the relaxation triggers are the same as the in-valley triggers already listed in the relevant WSP

If these flow triggers are met (and water take is possible within the rules of the relevant WSP), the restrictions would reapply once flows fall below these flow levels and the upper lakes are below 250 GL active

Restrictions will be lifted when the volume in the upper lakes is above 250 GL or 31 August 2026, whichever occurs first.



# Relaxation triggers for FPH access – Border River

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The restrictions do not apply to floodplain harvesting (regulated river) access licences when flows in the Barwon River at the Mungindi gauge [416 001] are at least 3,000 ML/day.

# Restrictions- Regulated river water sources

WATER SOURCE	CATEGORIES OF ACCESS LICENCE
Gwydir Regulated River Water Source	<ul style="list-style-type: none"> <li>• floodplain harvesting (regulated river) access licences</li> <li>• supplementary water access licences</li> </ul>
Lower Namoi Regulated River Water Source	<ul style="list-style-type: none"> <li>• supplementary water access licences</li> <li>• taking of overland flow from the declared floodplain</li> </ul>
Macquarie and Cudgegong Regulated Rivers water source, where a water supply work is located downstream of Burrendong Dam	<ul style="list-style-type: none"> <li>• floodplain harvesting (regulated river) access licences</li> <li>• supplementary water access licences</li> </ul>
NSW Border Rivers Regulated River Water Source	<ul style="list-style-type: none"> <li>• floodplain harvesting (regulated river) access licences</li> <li>• supplementary water access licences</li> </ul>

# Restrictions- Unregulated river water sources



WATER SOURCE	CATEGORIES OF ACCESS LICENCE
Barwon–Darling Unregulated River Water Source	<ul style="list-style-type: none"> <li>unregulated river (B Class) access licences</li> <li>unregulated river (C Class) access licences</li> </ul>
Gingham Watercourse Water Source	<ul style="list-style-type: none"> <li>floodplain harvesting (unregulated river) access licences</li> <li>unregulated river access licences</li> </ul>
Lower Macquarie River Water Source	<ul style="list-style-type: none"> <li>floodplain harvesting (unregulated river) access licences</li> <li>unregulated river access licences</li> <li>unregulated river (special additional high flow) access licences</li> </ul>
Lower Marthaguy Creek Management Zone in the Marthaguy Creek Water Source	<ul style="list-style-type: none"> <li>floodplain harvesting (unregulated river) access licences</li> <li>unregulated river access licences</li> <li>unregulated river (special additional high flow) access licences</li> </ul>
Mallowa Creek Management Zone in the Mehi River Water Source	<ul style="list-style-type: none"> <li>floodplain harvesting (unregulated river) access licences</li> <li>unregulated river access licences</li> </ul>

# What if water moves into any of my floodplain harvesting water supply works via passive means?

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Water users are encouraged to keep accurate records of any occasion where floodplain water passively moves into their water supply works and how and when this water is being passed back to the water source and/or to demonstrate that it has not otherwise been moved into storages.

Rainfall runoff that is collected in tailwater drains when no other overland flow is being taken is exempt from licensing and not impacted by this temporary water restriction order.

Note that the application of the within-valley lifting triggers are designed to mitigate these risks

# Are there any exemptions to the restrictions?

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**Yes** -restrictions do not apply to basic landholder rights or licence exemptions, such as a landholder taking rainfall runoff from a tailwater drain.

Exemptions from these restrictions include:

- water taken for testing metering equipment, so that the prohibitions do not hamper compliance with the non-urban metering rules
- water taken by water storages such as farm dams as this cannot reasonably be avoided, and it is generally difficult or not possible for the water to be returned to the water source
- tailwater return systems, which keep potentially contaminated runoff on-farm
- water which is captured by passive means which cannot reasonably be avoided, such as below ground irrigation channels, but only if the water is substantially returned to the water source.

# What happens to the water once it reaches Menindee?

- The water resource within Menindee Lakes will likely remain under MDBA control until end May 2026 under current conditions
- The department and the Minister for Water have been working closely with the MDBA to ensure that any call-on-water from the upper lakes is strictly limited to volumes that are necessary to maintain WQ conditions to reduce the risk of mass fish deaths, and this water is conserved for critical use.

Where can we get ‘real-time’ information on triggers and storage volumes in the upper Menindee Lakes?

- You can find daily information on the Menindee Lakes storage volumes and flows at the gauges at [WaterInsights - WaterNSW](#)



# How will compliance be monitored?

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- The Natural Resources Access Regulator (NRAR) will monitor the systems using a combination of satellite imagery techniques, spatial and temporal data analysis and river flow management tools.
- NRAR also has compliance officers on the ground and will respond to reports of any suspect pumping during the restriction. Penalties for illegal pumping are high.



Department of Climate Change, Energy, the Environment and Water

# Valley specific metering performance update

## PRESENTER

Snr Project Officer – Metering Implementation

Border Rivers CAG meetings

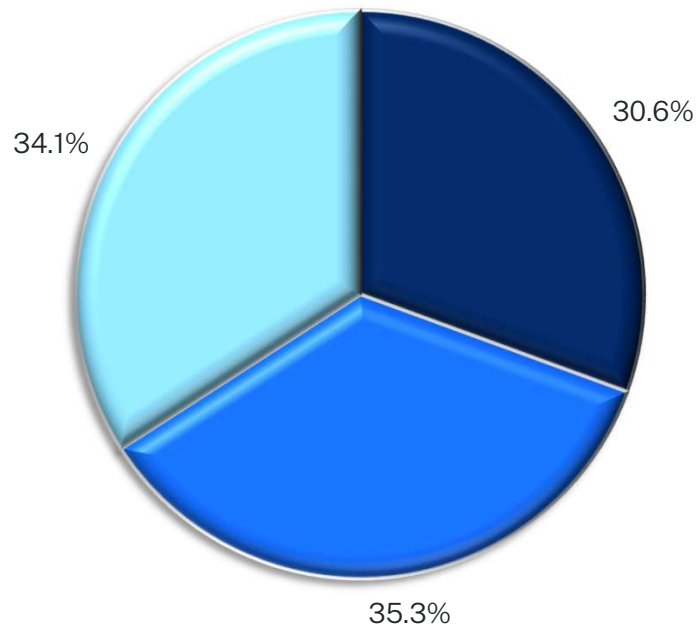
19 March 2026



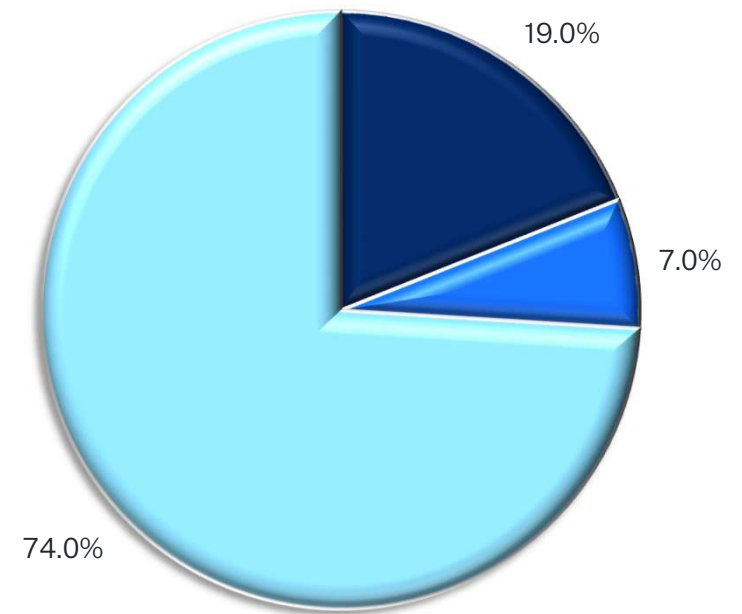
# Water user profile in the Border Rivers area



Approvals



Works

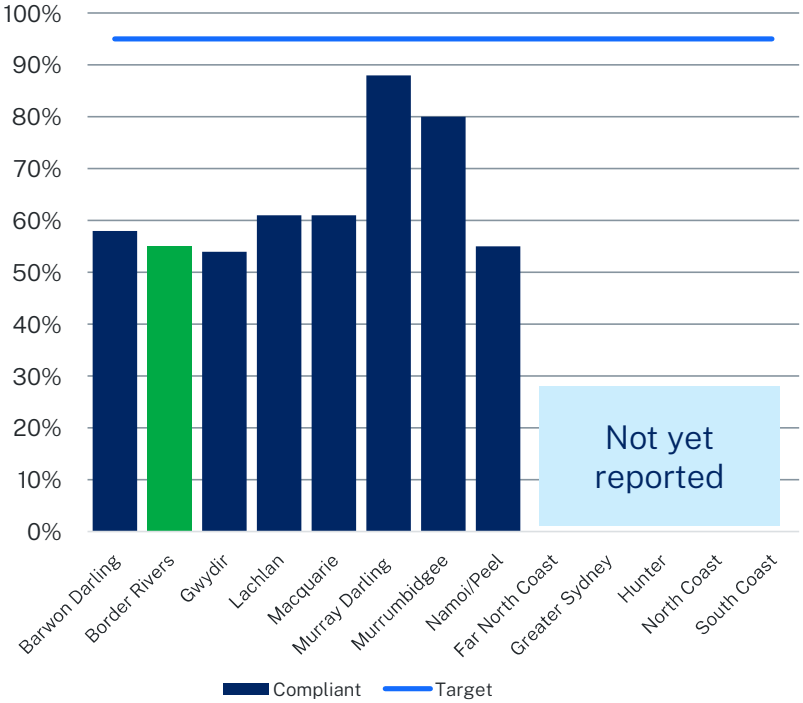
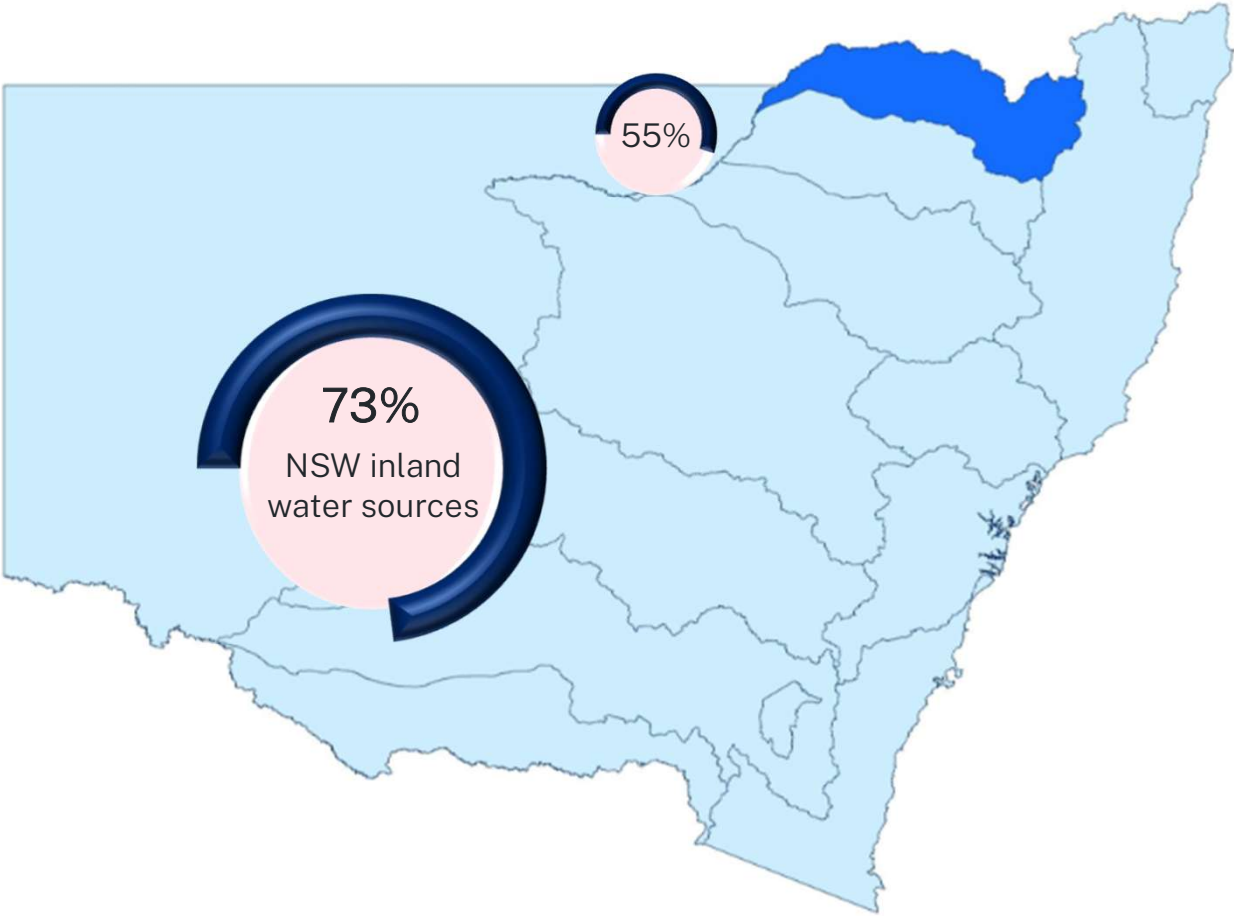


■ Require a DQP

■ Self-installation

■ Exempt

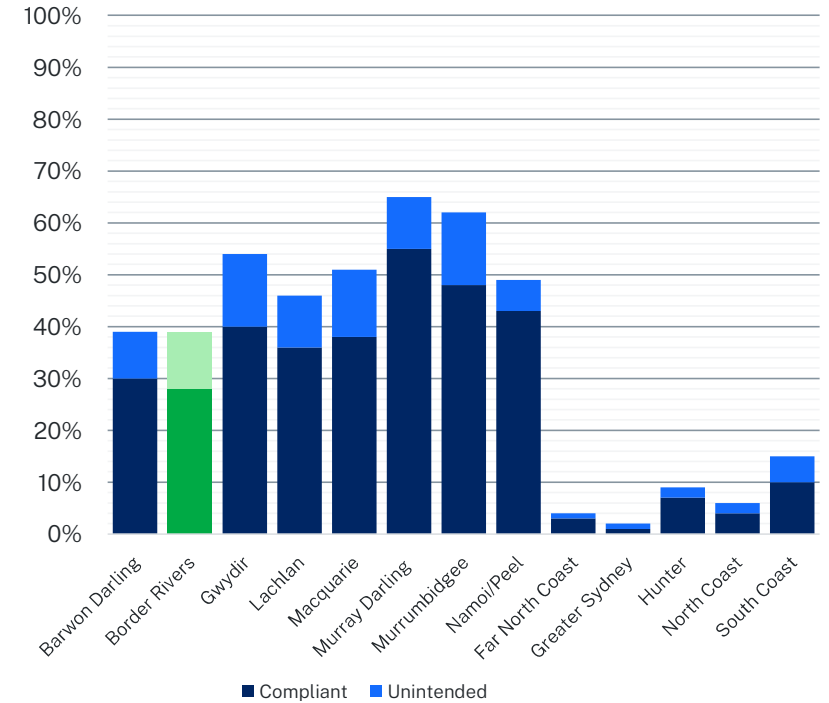
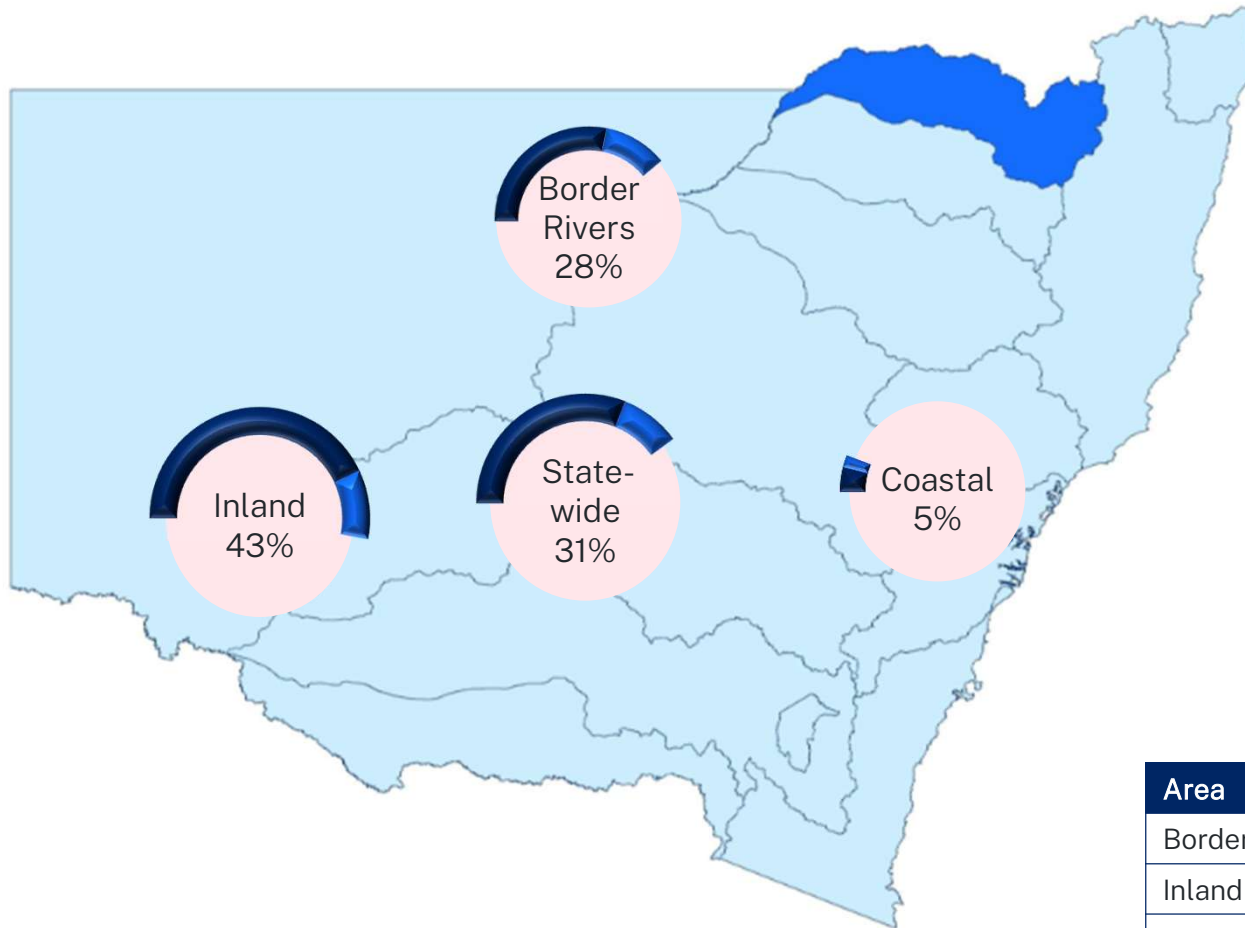
# Current compliant volume of entitlement



Area	Compliant entitlement
Border Rivers	55%
Inland	73%

Compliance rate; water users with 100 ML or more entitlement, & exclusion of unmeterable works and inactive works. All data sourced from NRAR. Current as at date 25/02/26

# Current compliance rate of works



Compliance rate; water users with 100 ML or more entitlement, & exclusion of unmeterable works and inactive works. All data sourced from NRAR  
Current as at date 24/02/2026.

Area	Compliance rate	Classification opportunity
Border rivers	28%	11%
Inland	43%	10%
Coastal	5%	2%
Statewide	31%	9%

# Floodplain Harvesting – Border Rivers

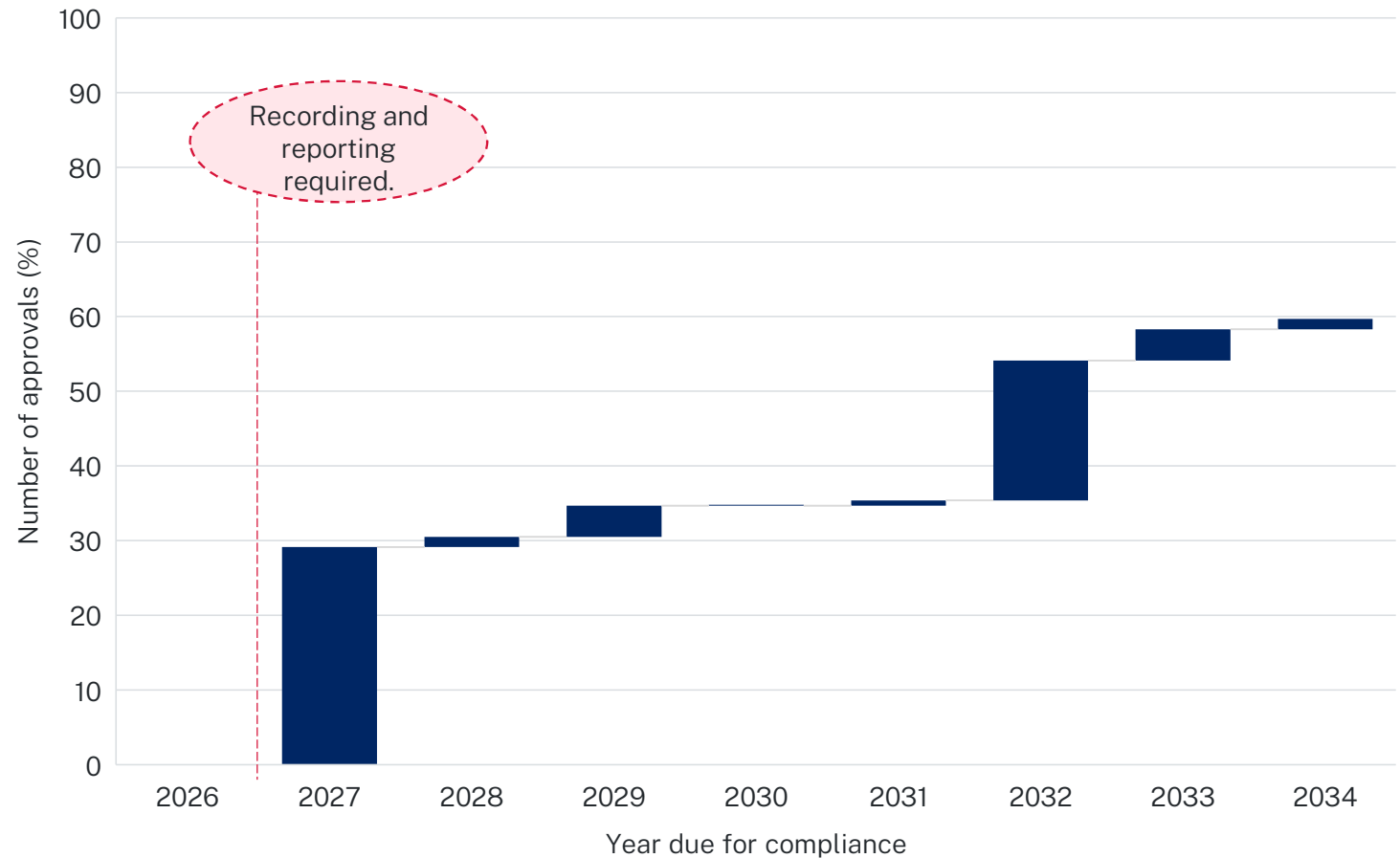


Type	Number	Compliance	Action Needed
Total Storages	103		
Storages with Primary Measurement Validated	75	Compliant	
Storages marked 'Approval Holder declared not taking'	13	Compliant	
Storages covered by Point of Intake	0	Compliant	
Storages with some work underway	6	Not yet compliant	Complete the work
Nothing recorded in the DQP Portal	9	Not compliant	Engage a DQP or if not planning to use, classify as 'Approval Holder declared not taking'.

# Smaller water user compliance dates in the Border Rivers area

Despite extension for meter installations. Recording and reporting requirements Water take commences **1 December 2026**.

Having a meter installed assists substantially with reporting and provides water account tariff options.



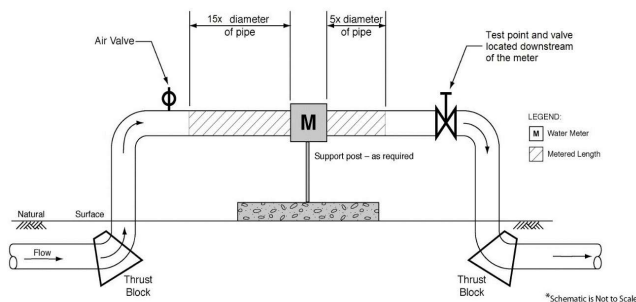
# How to approach meter self-installation

Self-installation of meters is permitted if a DQP is not required for your works. There are some key steps:

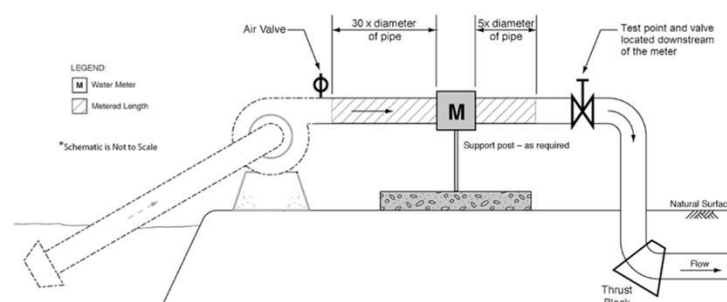
1. Buy a pattern-approved meter from your local agricultural supplier. A list of pattern-approved meters is maintained by the Commonwealth DCCEEW. Visit [dcceew.gov.au](http://dcceew.gov.au) > search 'pattern approved meters', click on Non-urban water metering framework.
2. Install the meter according to the meter instructions, the work type and extraction method
3. Register your installation with WaterNSW, [comms.watnsw.com.au/meterforms](http://comms.watnsw.com.au/meterforms)

If a water user would still like to have a DQP install their meter, that is fine, the option to self-install is just that—an option

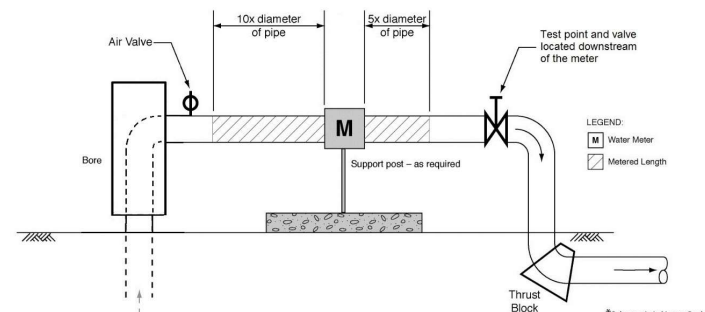
**Meter Installation Plan for Two Elbows, in Plane**



**Meter Installation Plan for Pump causing Spiral Flow**



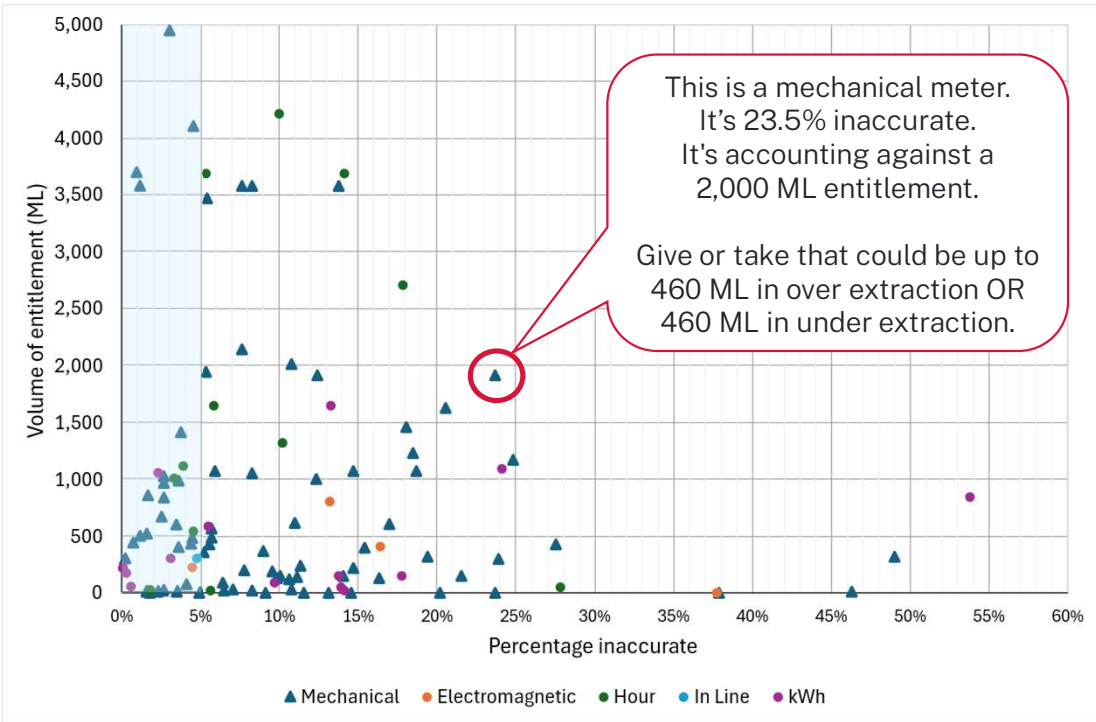
**Meter Installation Plan for Underground Bore Pump**



# Meter accuracy

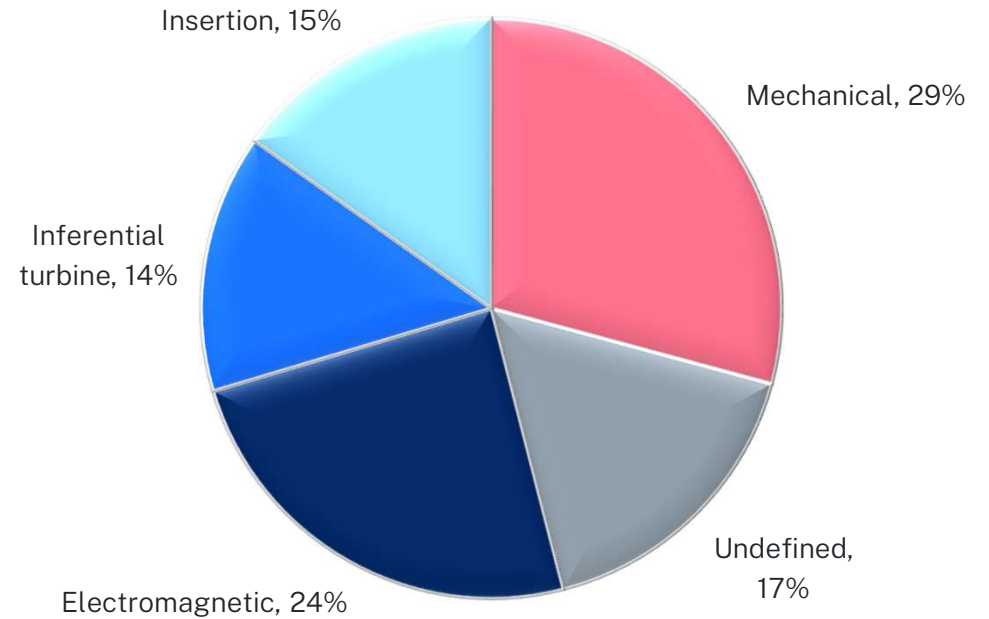


## Survey before commencement of metering reform\*










\*Graph has been limited to 5,000 ML and 50% inaccurate to improve visual

## Existing meters in the Border Rivers



29% need an upgrade  
 17% are unknown  
 54% are compliant or could be  
 250 meters currently

# Non-urban metering exemptions

-  the work is used solely to take water under a **basic landholder right**; harvestable rights, domestic & stock rights and native title rights
-  the work is not nominated by a water access licence (WAL)
-  the work is nominated by total nominated entitlement of 15 ML or less
-  the work is below the size-based exemption; single and multiple works thresholds apply
-  the work has been classified as not needing a meter
-  the work is solely nominated by a floodplain harvesting WAL
-  the work can not physically comply with the non-urban metering rules (available by application to the Minister)

Type of work	Number	Maximum size
Surface water (pumps)	1 pump	99 mm
Surface water (pumps)	2 pumps	74 mm
Surface water (pumps)	3 pumps	49 mm
Surface water (pumps)	4 pumps	39 mm
Groundwater (bores)	1 bore	199 mm
Groundwater (bores)	2 bores	159 mm
Groundwater (bores)	3 bores	129 mm
Groundwater (bores)	4 bores	119 mm

# Works classification

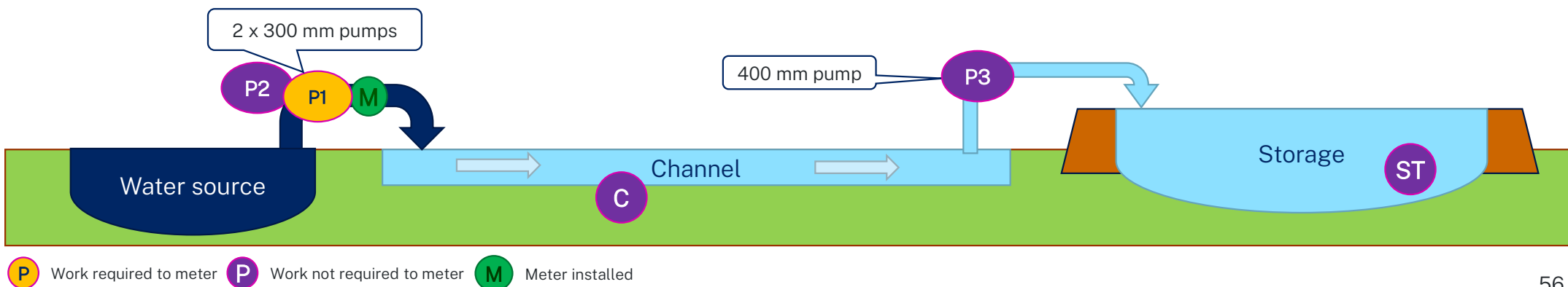
If a work is classified as:

- Constructed, non-taking work
- Constructed, basic landholder rights only
- Constructed, approval holder declared not taking water
- Not constructed
- Decommissioned

Works not classified or classified as constructed are required to be metered

The work is exempt from metering requirements, with no physical modifications required.

However, they are **conditioned not to take water** (excluding Constructed, BLR only that is permitted to take water under a basic landholder right).

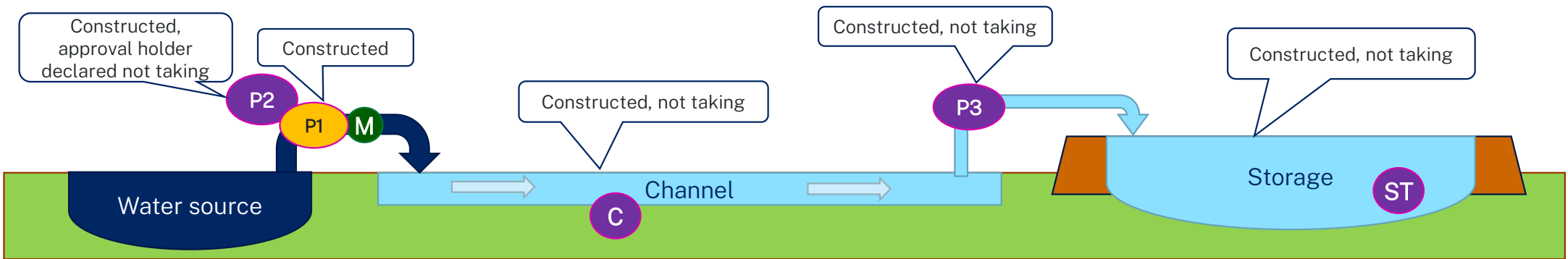


# Check your works classifications in NSW Water Register



Kind of Approval	Issue Date	Expiry Date	Approval Number	Status	Water Source
Water Supply Works And Water Use	01-JUL-2016	01-JUL-2026	90CA123456	Current	NSW Border Rivers Regulated River Water source

Work Type	Description	Diameter	Status	No. of works	Location (Lot/DP)	Suffix	Work ID	ESID	Lat/Long	Authorised / Constructed	Takes Water	BL R	Classification
Pump	300mm Axial Flow Pump	N/A	Active	1	Lot 1, DP750789	Whole lot	100023456	1234	-34.0000 145.0012	Constructed	Y	N	Constructed
Pump	300mm Axial Flow Pump	300	Active	1	Lot 1, DP750789	Whole lot	100023457	1234	-34.0012 145.0012	Constructed	Y	N	Constructed, approval holder declared not taking water
Channel		N/A	Active	1	Lot 1, 2, 3 DP750789	Whole lot	100023458	1235	-34.0034 145.0158	Constructed	N	N	Constructed, not taking
Pump	400mm Centrifugal Flow Pump	N/A	Active	1	Lot 2, DP750789	Whole lot	100023459	1234	-34.0085 145.0096	Constructed	Y	N	Constructed, not taking
Pump	200mm Centrifugal Flow Pump	200	Active	1	Lot 3, DP750789	Whole lot	100023460	1235	-34.0975 145.0123	Authorised	Y	Y	Not constructed
Storage	Storage - Off river	N/A	Active	1	Lot 1, 2, 3 DP750789	Whole lot	100023461	1364	-34.0000 145.0000	Constructed	N	N	Constructed, not taking



P Work required to meter  
 P Work not required to meter  
 M Meter installed

# What are the take homes?

The Border Rivers is not yet compliant -~28% of work have compliant metering. The Border Rivers is made up of around 216 works that need a DQP, there are still approx. 156 works that need compliant metering. There are still a lot of non-pattern-approved meters active in the valley, ~29%, these need updating.

What is being done to assist?

## Works classification

A targeted refinement that may reduce the number of works requiring metering by around 11% in the Border Rivers — helping ensure the framework is risk-based, proportionate, and efficient.

## Subsidies for telemetry

Water users in the MDB can access no-cost LIDs and installation through the Commonwealth program. With just 17% allocated, there is a major opportunity to reduce costs and fast-track compliance.

## Smaller water users <100 ML

Extensions on metering deadlines give smaller approval holders more time to plan upgrades and manage costs — while still ensuring they are captured within the metering framework.

## Act Now

1. Register for WaterNSW customer portal, and complete your works classification  
[waternsw.com.au/customer-portal](http://waternsw.com.au/customer-portal)
2. Register for telemetry subsidies, known as the Telemetry Uplift program (or TUP)  
[water.nsw.gov.au/telemetry-uplift-program](http://water.nsw.gov.au/telemetry-uplift-program)

# Questions



For metering and licensing enquiries contact WaterNSW

- 1300 662 077 (Monday to Friday 8am-5pm)
- [Customer.Helpdesk@waternsw.com.au](mailto:Customer.Helpdesk@waternsw.com.au)
- Make an online appointment with a metering expert



For more information about metering policy please contact Water Enquiries

- 1300 081 047 (business hours)
- [water.enquiries@dcceew.nsw.gov.au](mailto:water.enquiries@dcceew.nsw.gov.au)

# Subsidies for telemetry – the NSW Telemetry Uplift Program



## INSTALLATION

- ✓ We do it all for you
- ✓ Installation by a government contractor
- ✓ No out-of-pocket costs for LID installation

### Which water users are eligible?

- ✓ In the Murray Darling Basin
- ✓ With a combined water entitlement of 100ML or more, or who have used 100ML or more in any one year since 2023
- ✓ Who have a pattern-approved meter installed by a DQP to meet AS4747
- ✓ Who have telemetry coverage



## UP TO \$2,000 CASHBACK

- ✓ Use your own DQP
- ✓ **\$1,000 cashback** for LIDs installed between 1 July 2024 and 31 January 2025
- ✓ **\$2,000 cashback** for LIDs installed from 1 February 2025

### Which water users are eligible?

- ✓ In the Murray Darling Basin
- ✓ With a combined water entitlement of 100ML or more, or who have used 100ML or more in any one year since 2023
- ✓ Who have installed a telemetry device between 1 July 2024 and 31 January 2025 - **\$1,000 cashback**
- ✓ Who have installed a telemetry device from 1 February 2025 - **\$2,000 cashback**

# Discussion



Peter Hansen  
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