



# Murray-Darling Basin Metering Report Card

01 July 2023 - 30 June 2024

Data as at 30 June 2024

#### © Commonwealth of Australia 2025

#### Ownership of intellectual property rights

Unless otherwise noted, copyright (and any other intellectual property rights) in this publication is owned by the Commonwealth of Australia (referred to as the Commonwealth).

#### **Creative Commons licence**

All material in this publication is licensed under a Creative Commons Attribution 4.0 International Licence, except for content supplied by third parties, logos and the Commonwealth Coat of Arms.

Inquiries about the licence and any use of this document should be emailed to copyright@dcceew.gov.au.



#### Cataloguing data

This publication (and any material sourced from it) should be attributed as: Inspector-General of Water Compliance 2025, *Metering Report Card 2023 - 2024*, the Australian Government, Canberra, September 2025. CC BY 4.0.

This publication is available at: <a href="https://www.igwc.gov.au/what-we-do/reviews-and-reports">https://www.igwc.gov.au/what-we-do/reviews-and-reports</a>

Inspector-General of Water Compliance GPO Box 3090 Canberra ACT 2601

#### **Disclaimer**

The Australian Government represented by the Inspector-General of Water Compliance, has exercised due care and skill in preparing and compiling the information and data in this publication. Notwithstanding, the Inspector-General of Water Compliance, the Australian Government's employees disclaim all liability, including liability for negligence and for any loss, damage, injury, expense or cost incurred by any person as a result of accessing, using or relying on any of the information or data in this publication to the maximum extent permitted by law.

#### Acknowledgement of the Traditional Owners of the Murray-Darling Basin

We pay our respects to the Traditional Owners and their Nations of the Murray-Darling Basin. We acknowledge their deep cultural, social, environmental, spiritual and economic connection to their lands and waters.

Aboriginal people should be aware that this publication may contain images, names or quotations of deceased persons.

#### Accessibility

The document and information is available in accessible formats. On some occasions the highly technical nature of the document means that we cannot make some sections fully accessible. If you encounter accessibility problems or the document is in a format that you cannot access, please contact us at <a href="mailto:contact@igwc.gov.au">contact@igwc.gov.au</a>.

### **Glossary**

**Accurate** Up to +/-5% MPE in-situ operation as per Compliance Compact and MAF2 requirements.

**All other meters** A category used in the metering accuracy and meter count metrics. This category represents non-urban meters that are not AS4747-compliant or grandfathered and includes meters that require upgrading, meters that are exempt from metering standards (such as a meter for domestic and stock use) or meters with other exemptions as defined under the relevant Basin State policy.

**AS4747-compliant meter** A non-urban water meter that has met the requirements of AS4747 and has been issued with a Pattern Approval certificate.

**Australian Standard 4747-2025 (AS4747)** The Australian standard which covers meters for non-urban water supply, and by which said meters are tested and Pattern Approved. This standard was updated in June 2025 with the revision currently in force.

**Certified Person; Certified Meter Installer** A person certified by an accredited organisation to undertake meter installation, maintenance and validation activities in accordance with codified industry practices and Australian Standards.

**Closed Conduit meters** Meters intended for the metering of water in full flowing pipes.

**Entitlement** The amount of water authorised to be taken and used by an irrigator or water authority, up to a certain volume of water in a year.

**Floodplain harvesting/Overland flow take** A form of take prevalent in New South Wales and Queensland. It involves the take of water from floodplain areas, normally using purpose-built structures for capturing water. Generally occurs after periods of heavy rain.

**Grandfathered or Contemporary meter** A meter that is not pattern-approved but has been approved for continued use with compliance processes in effect to ensure ongoing accuracy. The state regulator must have an acceptable level of confidence that grandfathered meters have a  $\pm 5\%$  accuracy range and have a manufacturer's certificate of accuracy of  $\pm 2.5\%$  and has been installed to manufacturer's specifications. Full details may be found in chapter 11.1 of the MAF2. Please note the acceptance of grandfathered meters varies across jurisdictions, resulting in different definitions of grandfathered/contemporary meters across the Basin.

**Murray–Darling Basin Compliance Compact (Compliance Compact)** The 2018 agreement between the Australian Government and the Murray-Darling Basin States, setting priorities and obligations on the governments for water compliance effort and for the integrity of Murray–Darling Basin water management.

**Metrological Assurance Framework 2 (MAF2)** Rules and guidance for the use and regulation of non-urban water meters

https://www.agriculture.gov.au/sites/default/files/documents/metrological-assurance-framework-2.pdf

**Meterable take** Licensed water take, as defined at clause 7 of the best practice guidelines for minimum metering thresholds as agreed by Basin States. Note – exemptions are defined in Clause 8. See:

https://www.agriculture.gov.au/sites/default/files/documents/metrological-assurance-framework-2.pdf

**National Measurement Institute (NMI)** The National Measurement Institute (NMI) is Australia's peak measurement body responsible for biological, chemical, legal and physical measurement.

**Open-Channel meters** Meters intended for the metering of water in open channels and partially filled pipes.

**Pattern Approval** Evaluation of a design of a measuring instrument (such as a water meter) by an impartial body which examines the pattern of an instrument against a set of national or international metrological specifications, which determine whether an instrument manufactured in accordance with that design is capable of retaining its calibration over a range of conditions.

**Pattern approval certificate** A certificate, published by the NMI, which describes the design (including type and size) of the meter, which is Pattern Approved, and any conditions for the installation, maintenance and use of the meter.

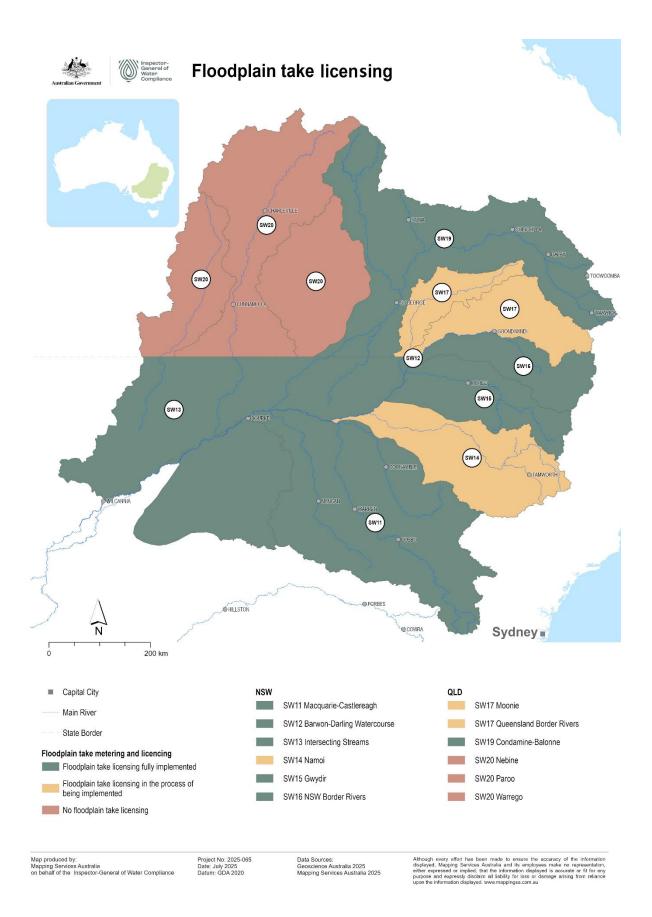
**Telemetry** Involves automatically recording data and sending it electronically from the meter to another place for monitoring and analysis

## Murray-Darling Basin Metering Report Card Floodplain Harvesting

1 July 2023 - 30 June 2024

Floodplain harvesting (FPH) licensing and measurement is progressing unevenly across New South Wales and Queensland, with rates of licensing greatly exceeding rates of metering. In New South Wales, full licensing is in place across most northern catchments, with the exception of the Namoi where licensing is in the process of being implemented. For Queensland, full licensing has been implemented in the Lower Balonne and parts of the Border Rivers and Moonie catchments.

Metering has not kept pace with licensing. 76% of FPH take is licensed in New South Wales and 47% in Queensland. However, only 13% of FPH take in Queensland is metered, and an estimated 23.8% of FPH storages in New South Wales are equipped with meters. The imbalance between licensing and metering raises serious questions about the risks New South Wales and Queensland are taking by rolling out FPH licensing without comprehensive metering already in place. Most concerning is the absence of a clear pathway or timeline to complete the rollout of licensing and on-ground measurement.



### Murray-Darling Basin Floodplain Harvesting New South Wales Metering Report Card

1 July 2023 - 30 June 2024.

### Percentage of floodplain take that is licensed



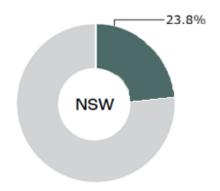
This measure is reported to highlight the volumetric proportion of floodplain take that is licensed as of 30 June 2024. The total of floodplain take was calculated from sustainable diversion limit reporting for both NSW and Queensland. Both NSW and Queensland are in the process of implementing frameworks for licensing of floodplain take. Data source/owners: Basin jurisdictions

### Percentage of floodplain take that is metered



This measure is reported to highlight the proportion of actual floodplain take that is metered as of 30 June 2024. The total of floodplain take was calculated from sustainable diversion limit reporting for both NSW and Queensland. This measure does not include secondary measurement devices such as gauge boards. Data source/owners: Basin jurisdictions

#### Percentage of licensed floodplain storages with meters



This measure represents the percentage of floodplain harvesting storages that are equipped with meters. Data is based on figures provided by NSW DCCEEW, indicating that 122 meters are installed to monitor 513 licensed floodplain storages. It is important to note that each meter is located at the point of intake and may service multiple storages, meaning this figure is a minimum estimate. Data source/owners: Basin jurisdictions

#### **NSW** provided narrative

Floodplain harvesting measurement rules became law on 1 July 2022. These rules are being rolled out in stages as floodplain harvesting access licences are granted. The floodplain harvesting measurement rules apply to water supply work approvals nominated by a floodplain harvesting access licence, and require all water take to be measured using accurate, auditable and tamper proof metering equipment.

Floodplain harvesting water users have 12 months from water being credited to their floodplain harvesting access licence account to have primary measurement equipment installed. During that first 12 months, water can only be taken if either primary or secondary measurement equipment is installed.

Primary measurement equipment can be either point-of-intake or storage measurement equipment and must be telemetered to be compliant. Secondary measurement equipment must be approved by the Minister and is not required to be telemetered, for example, a gauge board. Past the first 12 months, secondary metering equipment can only be used if the primary metering equipment has failed, and the works approval holder has reported the faulty meter to the regulator and is having the primary metering equipment repaired.

Floodplain harvesting access licences have now been granted for the NSW Border Rivers, Gwydir, Macquarie, and Barwon-Darling valleys, which means measurement rules are now in place for these valleys. The compliance dates for primary measurement equipment were 15 August 2023 for NSW Border Rivers and Gwydir, 1 March 2024 for Macquarie and 1 April 2024 for Barwon-Darling. The process for determining floodplain harvesting access licences to be issued in the Namoi valley is ongoing and expected to be completed in early 2025. Until these licences are issued, NSW is managing to Water Sharing Plan extraction limits. NSW is using modelled numbers aligned with s.71 reporting requirements to report floodplain harvesting take.

#### Murray-Darling Basin Floodplain Harvesting Queensland Metering Report Card

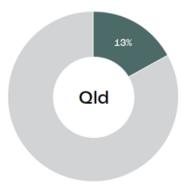
1 July 2023 – 30 June 2024. Progress from 2022-23 metering report card indicated in brackets

### Percentage of floodplain take that is licensed



This measure is reported to highlight the volumetric proportion of floodplain take that is licensed as of 30 June 2024. The total of floodplain take was calculated from sustainable diversion limit reporting for both NSW and Queensland. Both NSW and Queensland are in the process of implementing frameworks for licensing of floodplain take. Data source/owners: Basin jurisdictions

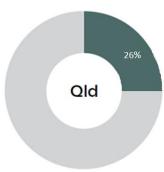
### Percentage of floodplain take that is metered



215.4 GL

This measure is reported to highlight the proportion of actual floodplain take that is metered as of 30 June 2024. The total of floodplain take was calculated from sustainable diversion limit reporting for both NSW and Queensland. This measure does not include secondary measurement devices such as gauge boards. Data source/owners: Basin jurisdictions

#### Percentage of floodplain take entitlements that are metered



This measure is reported to highlight the proportion of floodplain take entitlements that are metered as of 30 June 2024. This measure does not include secondary measurement devices such as gauge boards. Data source/owners: Basin jurisdictions

#### Queensland provided narrative

Queensland currently manages the take of overland flow water in the Queensland Murray-Darling Basin (QMDB) by regulating works that take overland flow, licensing take through eligible works and having water level stations installed in on-farm storages. Where the risk of overland flow development is low, regulating works through notification processes is required. Where risk becomes higher, licensing and storage measurement is required.

Licensing and storage measurement has been implemented in the Lower Balonne water management area (in the Condamine-Balonne water plan area) and licensing is progressively being implemented in the Border Rivers and Moonie water plan area. Once licensing has been completed in the Border Rivers and Moonie water plan area, measurement requirements can be applied to these entitlements, such as the installation of water level stations in overland flow storages. These are the two high risk water plan areas for overland flow development.

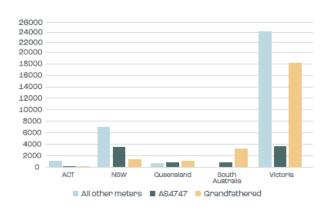
To improve the measurement and compliance of overland flow water take, Queensland has developed a new method for determining and reporting the take of overland flow water. The method involves developing an on-farm water balance that accounts for water level changes in overland flow storages. On-farm trials will be run in 2025 to test whether the method provides a practical and cost-effective way of improving the measurement of overland flow take. If successful, the approach would be implemented in the Lower Balonne water management area and in the Border Rivers and Moonie water plan area.

#### Murray-Darling Basin Metering Report Card

1 July 2023 - 30 June 2024

Data as at 30 June 2024. Progress from 2022-23 metering report card indicated in brackets

### Number of non-urban meters

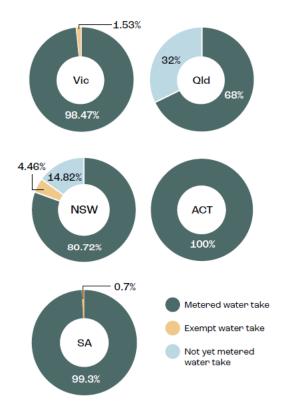


This measure is reported to identify the number of AS4747 and grandfathered meters across the Murray-Darling Basin. The objective of this measure is to give context to the scale of metering reform in each Basin State. Data owner/sources: Basin jurisdictions.

### Count of active, qualified meter installers

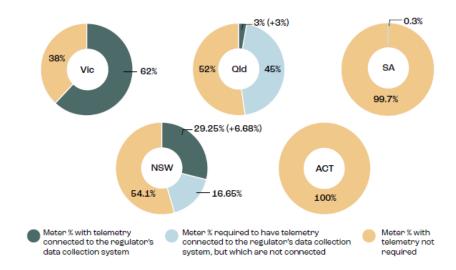


### Percentage of water take metered by state



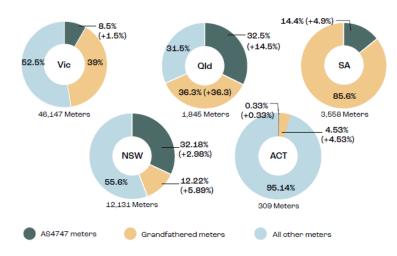
This measure is reported to highlight percentage of actual, meterable water take across the Murray-Darling Basin by each State that is metered. As this metric is influenced by water user behaviour, year-on-year change is not displayed in brackets. Please note, for Queensland the proportion of unmetered water take also includes take that is exempt from metering requirements. Refer to individual State Report Cards for detailed explanation. Data owner/sources: Basin jurisdictions.

#### Telemetry coverage by state



This measure is reported to identify the percentage of meters with telemetry connected to the Basin jurisdictions' data system across the Murray-Darling Basin. Refer to individual State Report Cards for detailed explanation. Data owner/sources: Basin jurisdictions.

#### Metering accuracy by state



This measure is reported to understand the percentages of meters that comply with the State's metering policy and are therefore deemed accurate (including AS4747 and grandfathered meters). The percentage of AS4747 meters in the measure is intended to show progress Basin States are making in the roll-out of AS4747 metering. Please note that the 'all other meters' category may include meters that are not required to be AS4747 compliant or grandfathered. Data owner/sources: Basin jurisdictions

#### **Metering in the Murray-Darling Basin**

The 2023-24 Metering report card marks the fourth edition released by the Inspector–General of Water Compliance (IGWC). Over the 2023-2024 period, notable developments occurred in metering across the Murray-Darling Basin as New South Wales conducted a review of their metering framework, Queensland began the installation of meter telemetry, and ACT started the roll out of AS4747 compliant meters and the grandfathering of existing meters. As per the Compliance Compact (2018) all Basin States must have frameworks in place to ensure non-urban meters comply with the Australian Standard 4747-2025 (AS4747) or have suitable exemptions or grandfathering arrangements, the IGWC has continued to monitor the progress of each Basin State's metering policy implementation.

Although all Basin States have frameworks for metering reform in place, there is no enforceable timeline for completing the rollout of AS4747-compliant meters, grandfathering of existing meters, or implementing telemetry. The Compliance Compact only requires frameworks to be in place and does not define a deadline for full delivery. The IGWC is concerned not only with the slow progress of on-ground metering reform, but also with the lack of any mechanism beyond the Compliance Compact to ensure completion of metering reform. This highlights the need for a clear, enforceable timeline for Basin States to complete meter accuracy and telemetry rollouts, ensuring consistency and a level playing field across the Basin.

#### **Metering accuracy**

During 2023–2024, the rollout of AS4747-compliant meters and the grandfathering of existing meters progressed across the Murray-Darling Basin. New South Wales advanced in AS4747 and grandfathered meters but still has many installations to complete to meet the requirements of their metering framework. The ACT began installations, with 166 entitlements remaining to be addressed. Victoria grew its AS4747 count and leads the Basin in number of compliant meters. Queensland saw the largest growth in proportion of grandfathered and AS4747 meters aided partly by the Basin States improved reporting capability. South Australia remains the only Basin State with all meters being AS4747 compliant or grandfathered.

The New South Wales Department of Climate Change, Energy, the Environment and Water (New South Wales DCCEEW) has acknowledged that its metering framework is behind schedule and has conducted a review of its non-urban metering reform framework to examine at how to accelerate implementation of the reforms and identify practical changes to the rules to improve compliance. In August 2024, the New South Wales DCCEEW released a report with recommendations to accelerate meter installation rates. Key actions include prioritising meter installations in the Murray-Darling Basin, simplifying measurement methods for smaller, low-risk users, and providing more affordable and practical measurement options for them. The Inspector–General welcomes these measures and will continue to track metering reform in New South Wales to measure their effectiveness.

#### **Telemetry**

Telemetry is a key focus of metering reform, improving the timeliness and reliability of water data for users, river managers, and regulators. Despite progress, greater uptake is needed, particularly in New South Wales, Queensland, and South Australia to fully realise these benefits.

To support this, the Commonwealth Government has launched the Murray-Darling Basin Telemetry Uplift Program, a \$22.6 million initiative running until June 2027. The program targets the installation of at least 2,515 telemetry-enabled meters in New South Wales, 1,230 in Queensland, 695 in Victoria, and 610 in South Australia.

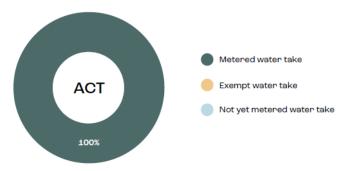
#### **Water Resource Plans and Metering**

Water Resource Plans (WRPs) are vital for defining the methods, technologies, and standards used to license, monitor, and accurately measure water take in the Basin, including floodplain harvesting. WRPs for the Namoi and Gwydir, which are key plans for NSW as high risk take such as FPH occurs in these areas, are subject to metering requirements under the New South Wales Floodplain Harvesting Measurement Policy, remain unaccredited. Although Barwon-Darling, Macquarie, and NSW Border River plans are accredited, metered data won't fully replace models until all relevant storages are licensed and metered under the New South Wales Floodplain Harvesting policy. Without accredited WRPs in place, verified metering, enforceable reporting, Sustainable Diversion Limit (SDL) compliance and public trust in Murray-Darling water management and accounting are at risk.

### Murray-Darling Basin Australian Capital Territory Metering Report Card

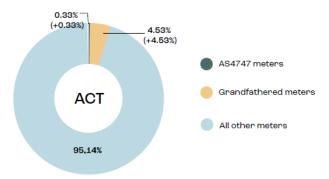
1 July 2023 – 30 June 2024. Progress from 2022-23 metering report card indicated in brackets

#### Percentage of water take metered in the ACT



This measure is reported to highlight percentage of actual, meterable water take across the Murray-Darling Basin by each State that is metered. As this metric is influenced by water user behaviour, year-on-year change is not displayed in brackets. Data owner/ sources: Basin jurisdictions

#### Metering accuracy in the ACT



This measure is reported to understand the percentages of meters that comply with the State's metering policy and are therefore deemed accurate (including AS4747 and grandfathered meters). The percentage of AS4747 meters in the measure is intended to show progress Basin States are making in the roll-out of AS4747 metering. Please note that the 'all other meters' category may include meters that are not required to be AS4747 compliant or grandfathered. Data owner/sources: Basin jurisdictions

#### **Telemetry coverage by state**



This measure is reported to identify the percentage of meters with telemetry connected to the Basin jurisdiction's data system. Data owner/ sources: Basin jurisdictions

#### How is meter data collected where telemetry is not used

Licence holders submit manual meter readings to the Environment Protection Authority (EPA) upon request. A risk assessment based on licensed volume of water, compliance history and other factors is used to set the frequency of meter readings. The frequency can range from monthly to annual meter readings. The meter readings are verified by the EPA through routine and proactive inspections.

This measure is reported to identify how meter data is collected and how often when telemetry is not being used. Data owner/sources: Basin jurisdictions

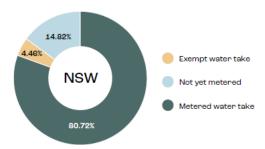
#### **ACT** provided narrative

The ACT is currently progressing the implementation of its Non-Urban Metering Policy (the policy), based on the MAF2 and AS4747 compliance framework. Current projects associated with this work include education and engagement with licence holders, amendments to licence conditions, as well as proactive inspections. There were some delays in progressing the implementation of the policy due to ongoing resourcing issues, required legislative amendments for compliance, as well as a shortage of certified persons in the ACT. However, the ACT has a planned work schedule which aims to fulfil requirements of the new policy. Reporting against the metrics in the Metering Report Card will improve as the ACT continues to implement its policy over the coming 12 months.

#### **Murray-Darling Basin New South Wales Metering Report Card**

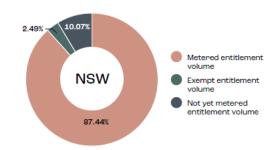
1 July 2023 – 30 June 2024. Progress from 2022-23 metering report card indicated in brackets

#### Percentage of water take metered in New South Wales



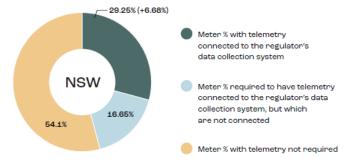
This measure is reported to highlight percentage of actual, meterable water take across the Murray-Darling Basin by each State that is metered. As this metric is influenced by water user behaviour, year-on-year change is not displayed in brackets. Data owner/sources: Basin jurisdictions

#### Percentage of entitlement volume metered in NSW



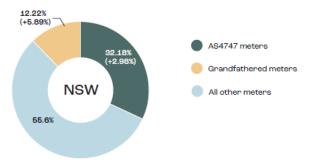
This measure is reported to highlight percentage of entitlement volume across the Murray-Darling Basin by each State that is metered, assuming a 100% utilisation of entitlement. Data provision for this metric was optional by States. Data owner/sources: Basin jurisdictions

#### **Telemetry coverage by state**



This measure is reported to identify the percentage of meters with telemetry connected to the Basin jurisdiction's data system. Data owner/sources: Basin jurisdictions

#### **Metering accuracy in New South Wales**



This measure is reported to understand the percentages of meters that comply with the State's metering policy and are therefore deemed accurate (including AS4747 and grandfathered meters). The percentage of AS4747 meters in the measure is intended to show progress Basin States are making in the roll-out of AS4747 metering. Please note that the 'all other meters' category may include meters that are not required to be AS4747 compliant or grandfathered. Data owner/sources: Basin jurisdictions

#### How is meter data collected where telemetry is not used:

Approval holders submit meter reads to WaterNSW as per the schedule below. When submitting meter reads, if no water is taken that also needs to be declared. Non-telemetered meters have their data loggers annually downloaded by WaterNSW. Logbooks with meter records must also be kept for five years.

	Recording frequency	Report monthly	Report annually
Works required to meter <u>before</u> the metering reform compliance date	The water user manually records licensed water take in a logbook each time water is taken.	NA	WaterNSW reads the meter at least annually (and in some cases meters are read quarterly, such as for regulated rivers)
	Some exemptions apply in some areas where an operational meter and data logger is installed.		
Works required to meter <u>after</u> the metering reform compliance date	Licensed water take is automatically recorded by Local Intelligence Device (logged hourly)	Approval holder submits a meter read	WaterNSW downloads Local Intelligence Device data annually

This measure is reported to identify how meter data is collected and how often when telemetry is not being used. Data owner/sources: Basin jurisdictions

#### **NSW** provided narrative

Metering requirements were introduced in NSW in the early 1980s for regulated rivers and in 2003 for major inland alluvial groundwater sources.

In December 2018, the NSW Government introduced a new non-urban water metering framework to ensure robust and fair water management across the state. The framework requires all water supply works to have metering equipment that complies with the Australian Standard (AS4747), unless an exemption applies. Existing meters can be retained provided they are validated as accurate to AS4747 requirements (+/-5% field accuracy).

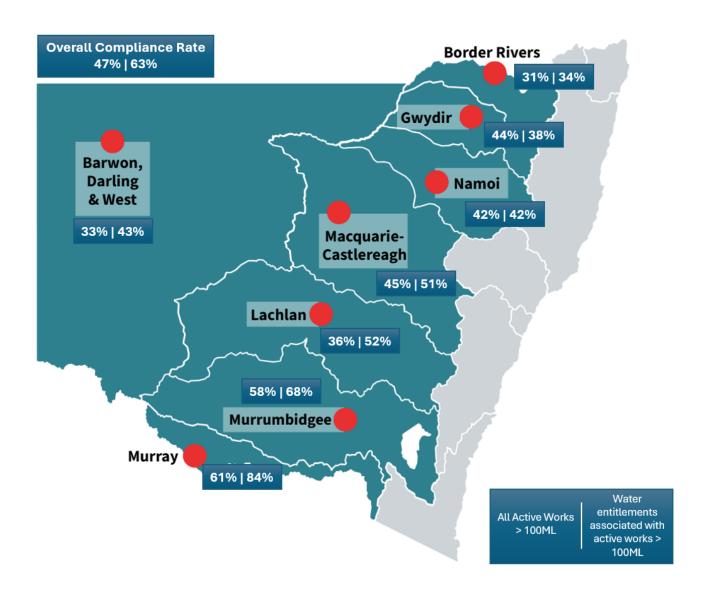
The new water metering framework has been rolled out in 4 stages, commencing 2020 and planned to finish in 2024. The purpose of the staged approach is to ensure all water users have enough time to comply with the new rules and the focus is on the highest risk categories first. For this report period, the new water metering framework has commenced for all areas in the Murray-Darling Basin.

For the volume of water take, metered usage data was used where available, and entitlement was used where metered usage data was not available. The volume of metered water take has increased over the reporting period, as has the count of AS4747 meters and telemetry as NSW has continued the roll out of the new water metering framework.

While the meter and telemetry rate has continued to increase, rates are still considered to be too low. The NSW Government has recently completed its review of the non-urban metering framework and has released the 'Recommendations report – Review of the NSW non-urban metering framework'.

The recommendations from the report will assist in speeding up implementation by making it quicker, easier and cheaper for many water users to comply with the non-urban metering rules. Over the next 12 months, the most important actions to accelerate compliance will be prioritised. These priorities will be reviewed and updated yearly in response to performance data and feedback from stakeholders.

#### **New South Wales compliance rates by catchment**



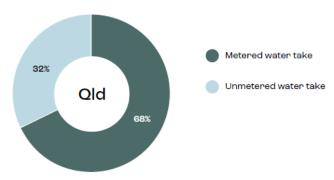
Metering compliance in Murray-Darling Basin New South Wales (figure and metering compliance rates sourced from NSW NRAR website, and current as of December 2024)

"All Active Works >100ML" (figure on the left) refers to the proportion of compliant, eligible infrastructure works, with entitlements greater than 100ML and excludes works likely to be inactive or unable to take water. "Licensed water entitlement associated with active works" (figure on the right) refers to the proportion of licensed water entitlement associated with these active works that is accurately metered. See the NSW NRAR website for latest data.

#### **Murray-Darling Basin Queensland Metering Report Card**

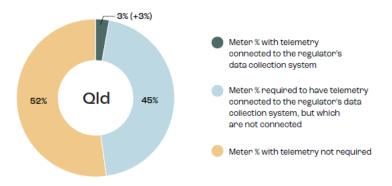
1 July 2023 – 30 June 2024. Progress from 2022-23 metering report card indicated in brackets

#### Percentage of water take metered in Queensland



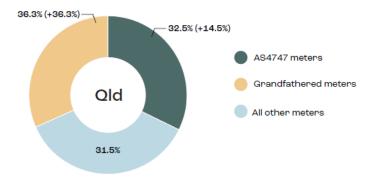
This measure is reported to highlight percentage of actual, meterable water take across the Murray-Darling Basin by each State that is metered. As this metric is influenced by water user behaviour, year-on-year change is not displayed in brackets. Please note, for Queensland the proportion of unmetered water take also includes take that is exempt from metering requirements. Data owner/sources: Basin jurisdictions

#### **Telemetry coverage by state**



This measure is reported to identify the percentage of meters with telemetry connected to the Basin jurisdiction's data system. Data owner/sources: Basin jurisdictions

#### **Metering accuracy in Queensland**



This measure is reported to understand the percentages of meters that comply with the State's metering policy and are therefore deemed accurate (including AS4747 and grandfathered meters). The percentage of AS4747 meters in the measure is intended to show progress Basin States are making in the rollout of AS4747 metering. Please note that the 'all other meters' category may include meters that are not required to be AS4747 compliant or grandfathered. Data owner/sources: Basin jurisdictions

#### How is meter data collected where telemetry is not used

Self-meter reads provided to the department at the following intervals for identified take:

- · Groundwater meters read six monthly;
- Supplemented water meters read monthly or quarterly
- · Unsupplemented water meters read annually
- Overland flow and water harvesting measured throughout take events

This measure is reported to identify how meter data is collected and how often when telemetry is not being used. Data owner/sources: Basin jurisdictions

#### Queensland provided narrative

In 2023-24, Queensland (QLD) made significant progress implementing its non-urban water measurement policy in the Queensland Murray-Darling Basin (QMDB). Legislation establishing the policy's water measurement framework was passed by the Queensland Parliament in September 2023. This legislation along with complimentary amendments to Queensland's water regulation to establish the operational requirements for improved water measurement commenced in July 2024.

Meter revalidation activities to ensure meters continue to meet Queensland's water measurement standards continued across the QMDB. Meter revalidations were completed in nine surface water and underground water management areas across the Condamine and Balonne, Border Rivers and Moonie and Warrego, Paroo, Bulloo and Nebine water plan areas. The next phase of revalidations commenced in one underground water management area in the Border Rivers and Moonie water plan area in December 2023 and were due for completion by 30 November 2024.

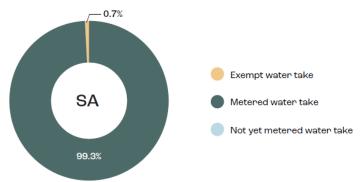
New metering activities also commenced in late 2023 in thirteen surface and underground water management areas in parts of the Border Rivers and Moonie, and Condamine and Balonne water plan areas, with meters required to be installed by October 2024 and April 2025 respectively.

The installation of telemetry devices on surface water meters, in line with Queensland's water measurement policy, also commenced in six water management areas under Queensland's Telemetry Subsidy Program. This program fully subsidises the cost of supply, installation and one year of data for each device and is supported by a combination of Australian and Queensland Government funding.

#### Murray-Darling Basin South Australia Metering Report Card

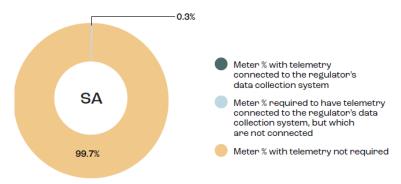
1 July 2023 – 30 June 2024. Progress from 2022-23 metering report card indicated in brackets

#### Percentage of water take metered in South Australia



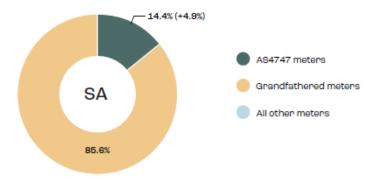
This measure is reported to highlight percentage of actual, meterable water take across the Murray-Darling Basin by each State that is metered. As this metric is influenced by water user behaviour, year-on-year change is not displayed in brackets. Data owner/sources: Basin jurisdictions

#### Telemetry coverage by state



This measure is reported to identify the percentage of meters with telemetry connected to the Basin jurisdiction's data system. Data owner/sources: Basin jurisdictions

#### Metering accuracy by state



This measure is reported to understand the percentages of meters that comply with the State's metering policy and are therefore deemed accurate (including AS4747 and grandfathered meters). The percentage of AS4747 meters in the measure is intended to show progress Basin States are making in the roll-out of AS4747 metering. Please note that the 'all other meters' category may include meters that are not required to be AS4747 compliant or grandfathered. Data owner/sources: Basin jurisdictions

#### How is meter data collected where telemetry is not used

AREA	DATA COLLECTION FREQUENCY	
Angas Bremer	Annually	
Eastern Mount Lofty Ranges	Annually	
Marne Saunders	Annually	
Mallee	Annually	
Peake Roby Sherlock	Annually	
River Murray	Quarterly	

This measure is reported to identify how meter data is collected and how often when telemetry is not being used. Data owner/sources: Basin jurisdictions

#### **South Australia provided narrative**

In South Australia, metering of all licensed water take is mandatory, with the exception of low-risk water use (e.g., stock and domestic and as outlined in regional Metering Implementation Plans). In 2023-24, metered water take (530 gigalitres) accounted for 99.3% of the volume of water taken from the South Australian portion of the Murray-Darling Basin (MDB).

A large proportion of South Australia's meters are grandfathered due to South Australia's early adoption of metering over 50 years ago. South Australia introduced legislation in 2019, prescribing that all replacement meters must be compliant with Australian Standard AS4747 (AS4747). In 2023-24, the proportion of AS4747 compliant meters in South Australia's MDB meter fleet increased from 9.5% to 14.4%. All meters in South Australia are compliant with the state's metering policy (i.e., being either grandfathered or AS4747 compliant). Review of South Australia's metering framework is ongoing, noting that the revision of the MAF2 will commence in 2025.

Meter reading reporting frequency remained unchanged in 2023-24, with the volume of water used by each licence holder being accounted for via meter reads quarterly in the River Murray and annually for other areas of the MDB. Compliance rates continue to reach 98-99% across the state, supported by legislated financial penalties for every kilolitre of unauthorised water take and a minimum of 10% of licensed sites being compliance visited each year.

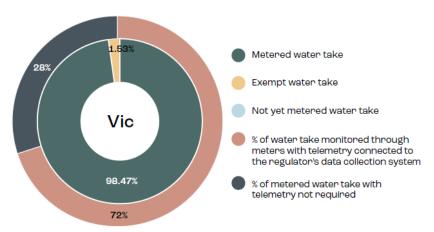
In the first half of 2024, South Australia undertook a meter audit program on approximately 800 high priority meters on the River Murray and in the Mallee Prescribed Wells Area. Data gathered during the audit will inform meter management and telemetry policies. In 2023-24, South Australia extended telemetry trials to continue assessing the costs and benefits of telemetry. South Australia also worked closely with the Department for Climate Change, Energy, Environment and Water (DCCEEW) to access funding from the Australian Government's Telemetry Uplift Program. South Australia successfully secured funding for program delivery over two years from 2025.

In 2023-24, South Australia launched a new water register, mywater. mywater is a portal that enables online management of water instruments, smart meter read lodgement and monitoring, online applications to buy and sell water and reduced trading and processing times. The Department for Environment and Water is working with water users throughout 2025 to introduce them to mywater and support them to take full advantage of mywater's capabilities.

#### **Murray-Darling Basin Victoria Metering Report Card**

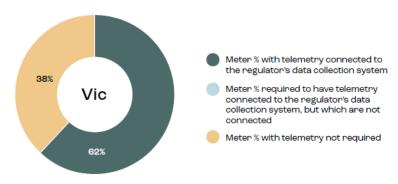
1 July 2023 – 30 June 2024. Progress from 2022-23 metering report card indicated in brackets

#### Percentage of water take metered and telemetered in Victoria



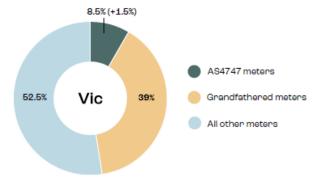
The inner graph highlights percentage of actual, meterable water take across the Murray-Darling Basin by each State that is metered. As this metric is influenced by water user behaviour, year-on-year change is not displayed in brackets. The outer graph represents percentage of water take monitored through meters equipped with telemetry. Data owner/sources: Basin jurisdictions

#### Telemetry coverage by state



This measure is reported to identify the percentage of meters with telemetry connected to the Basin jurisdiction's data system. Data owner/sources: Basin jurisdictions

#### Metering accuracy in Victoria



This measure is reported to understand the percentages of meters that comply with the State's metering policy and are therefore deemed accurate (including AS4747 and grandfathered meters). The percentage of AS4747 meters in the measure is intended to show progress Basin States are making in the roll-out of AS4747 metering. Please note that the 'all other meters' category may include meters that are not required to be AS4747 compliant or grandfathered. Data owner/sources: Basin jurisdictions

#### How meter data is collected where telemetry is not used

The Victorian Government's Non-urban Water Metering Policy (2020) requires water corporations to read meters at least once a year for low volume low-risk meters, more frequently for higher-risk volumes, and at least twice a year for surface water winter-fill licences or where there is a history of usage breaches. Victoria's Rural Water Corporations (RWC) own meter assets and are responsible for manually reading meters where telemetry is not available.

Under Victoria's Policy RWCs determine the most appropriate meter read frequencies within their service areas based on risk, provided they meet minimum standards set by the Policy. Minimum standards are meter read frequencies of at least once a year on low volume or low risk customers, and at least two times per year for surface water winter-fill licences. High-risk meters are read automatically through telemetry.

This measure is reported to identify how meter data is collected and how often when telemetry is not being used. Data owner/sources: Basin jurisdictions

#### Victoria provided narrative

Victoria has a high coverage of meters and extensive telemetry across northern Victoria.

In 2023-24, 98.5 per cent of water taken in the Victorian part of the Murray-Darling Basin was metered and 85 per cent of total take was through meters that conform with AS4747 standards or contemporary (grandfathered) standard accurate to +/-5% in accordance with Victorian policy. Victoria has been an early adopter of telemetry and automated control systems. 71 per cent of total water take in northern Victoria was telemetered. Victoria is further uplifting telemetry to target highest compliance risks. This includes more telemetry in the Victorian Murray trading zone 7 - one of Victoria's most active trading zones.

As of 30 June 2024, Northern Victorian RWCs have more than 46,147 meters installed, approximately 28,750 of which have telemetry. 44,856 meter reads were conducted in Northern Victoria in 2023-24, as reported by the four Northern RWCs. 24,370 additional inspections were conducted, to ensure that meters were maintained and functioning efficiently.

In 2023-24, RWCs continued to invest in installing new meters, telemetry on meters and database management systems to enable better monitoring of water take, increase greater scrutiny of potential breaches, and more comprehensive compliance reporting.

The Victorian Government's Non-Urban Water Metering Policy (2020) is consistent with the Compliance Compact. The policy has been reviewed against MAF2 (2021) requirements and found to broadly align with these. In 2023-24 the policy was updated to strengthen alignment with MAF2 requirements and was published on the DEECA website in January 2025.