


What we heard report

Non-urban metering framework

Stage one proposed amendments to the metering rules and floodplain harvesting measurement in the Water Management (General) Regulation 2018

June 2025





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 we show our respect for Elders past, present and emerging 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.

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Executive summary

In 2018, the NSW Government introduced the non-urban metering framework to accurately measure and meter non-urban water take aimed at improving water management across the state. The framework was rolled out in stages, with the first compliance deadline set for 1 December 2020, requiring the state's largest water users with surface water pumps over 500mm in diameter to comply. Since then, the metering rollout has continued for water users in both the northern and southern inland regions of NSW.

Despite ongoing efforts, compliance rates have remained low, with several barriers affecting water users' ability to meet requirements. In response, the NSW Government conducted the 2024 [Review of the non-urban metering framework](#) (the review) which resulted in the [Recommendations report](#) outlining 23 recommendations to improve compliance. These recommendations have been adopted and will be implemented across NSW according to the review's implementation plan, with priority given to those most critical for accelerating compliance.

Key amendments were made to the Water Management (General) Regulation 2018 (the regulation) as part of this effort to accelerate compliance and improve flexibility of floodplain harvesting measurement rules, while ensuring all take is appropriately measured. In addition, other recommendations unrelated to the regulation amendments are being addressed and can be tracked through the Quarterly reports found on the department's non-urban metering [website](#).

The proposed regulation amendments were publicly exhibited from 11 November to 8 December 2024. During this consultation period, feedback was gathered from a range of stakeholders including water users, community members and industry bodies through a survey which included written submissions and live webinars held on 21 November and 3 December 2024.

The feedback highlighted varying levels of support for the amendments, as well as suggestions for further policy considerations. A summary of these insights has been consolidated in this *What we heard* report, which provides a comprehensive overview of community responses. The key issues raised in feedback included:

- confusion around metering requirement and pump size allowance
- concerns regarding meter installation quality and verification
- costs and installation challenges for small water users
- ongoing issues with telemetry technology (installation, configuration, connection, and data output)

- ongoing practical metering issues such as debris accumulation, wire dislodgement, heat damage, and flood impacts
- support for extending validation and concerns around revalidation requirements
- accuracy and undermeasuring concerns related to auditing
- concerns around compliance deadline extensions and specific water user exemptions
- volume-based thresholds and metering requirement exemptions
- support for mandatory metering for all works, regardless of entitlement or size
- requests to allow voluntary telemetry connections and standardise telemetry systems
- insufficient information on potential future criteria for requiring all constructed works to be metered in a water source, classification of water supply works, buffer zones, measurement periods, and point-of-intake measurements
- concerns over inactive works and illegal extractions
- stricter reporting and compliance for faulty equipment
- requests for separate rules for faulty metering provisions
- concerns about workload of duly qualified persons (DQP) and business viability
- uncertainty regarding DQP service supply
- shortages of qualified personnel in regional areas.

During the consultation period the Department of Climate Change, Energy, the Environment and Water (the department) received 22 survey responses, 130 public submissions and had 171 attendees at the two public webinars. This feedback is directly informing the amendments to the regulation to make it easier for water users to comply and ensure water take is measured and managed fairly and sustainably. A robust non-urban metering framework is essential to managing water resources effectively — we can't manage what we can't measure — and ensuring sustainable water management is critical to the future of NSW.

About this report

This report provides an overview of what we heard from stakeholders on the amendments to the Water Management (General) Regulation 2018. It is intended to provide the community with an understanding of the range of feedback we received and to assure community and stakeholders that we have heard the concerns and issues they raised in their feedback.

The report consists of:

- an overview of the engagement process and participation by community members
- a summary of key feedback received in response to the proposed amendments and the departmental response
- detailed feedback received about the issues and possible options and questions asked in the online survey
- a feedback summary from the two webinars
- next steps for the non-urban metering framework.

Introduction

Background

The purpose of amending the non-urban metering framework is to accelerate implementation of the necessary reforms to improve compliance. The discussion paper, *Review of the non-urban metering framework – Issues and options paper*, provided an overview of what we understand to be the most significant barriers to implementing the rules and describes potential options to address the key issues, based on feedback received over several years of working with water users, metering suppliers and installers to implement the rules.

A public consultation period spanning 30 October to 26 November 2023 allowed water users, DQPs, water user groups and peak stakeholders and community members to provide feedback on the options paper. This consultation feedback was captured in the What we heard report – Review of the non-urban metering framework.

Following this, the Recommendations report – Non-urban metering review was produced based on the findings and insights gathered during the review process. Implementation of the recommendations was separated into two stages, with stage 1 which included amendment of the regulation to be delivered in early 2025.

Engagement overview

Public consultation on the non-urban metering stage one proposed amendments to the regulation commenced on 11 November and closed on 3 December 2024. The department released fact sheets for the proposed amendments to the metering rules and floodplain harvesting measurement in the regulation along with a draft amendment order and sought feedback from the public and stakeholders during this period using a range of consultation methods, including through:

- online public information sessions – 21 November and 3 December 2024
- an online submission form
- written submissions.

The consultation was promoted in print, radio and social media ads, and by email to the department's Water e-Newsletter subscribers and peak bodies. Figure 1 provides an overview of engagement statistics during the consultation period.

Figure 1. Summary of non-urban metering stage one proposed amendments engagement statistics



What we heard

Feedback received through the various channels reflected support for efforts to improve metering and measurement of non-urban water use. Feedback also confirmed that there are ongoing barriers to meeting the compliance requirements. Many of the stage one proposed amendments were supported and additional actions or policy settings were identified for government to consider.

Key feedback

Table 1 Key feedback from stakeholders and department response

Theme	Feedback	Departmental Response
Industry concerns about metering exemptions	<ul style="list-style-type: none">• Peak bodies were generally supportive of the new thresholds for metering requirements• Concerns were raised that the introduction of an entitlement threshold is confusing and that the proposed exemptions do not go far enough.• Metering exemptions for users with historically low usage were suggested.• Concerns stem from the cost of installing and maintaining meters.	<ul style="list-style-type: none">• No change to the proposed regulation.• The proposed metering exemptions in the Non-urban metering review have been designed to achieve the policy's primary objective of having the vast majority of licensed water take across the state being metered. Broadening these exemptions would undermine this policy objective.• Having exemptions based on the size of works and licenced entitlement adds to the complexity. The publicly exhibited regulation included proposed amendments to the regulation to simplify drafting of the exemptions. The proposed water supply work classification system will also assist by more clearly identifying specific works that are not required to be metered.

Theme	Feedback	Departmental Response
		<ul style="list-style-type: none"> The department will undertake further analysis of this issue as part of the broader suite of initiatives currently being progressed to implement the review recommendations. These include improved recording and reporting and development of a prescribed method to calculate volume of take.
Environmental concerns about metering exemptions	<ul style="list-style-type: none"> 125 submissions from the DoGood Nature Conservation Council of NSW campaign opposed the meter exemption for 100 mm surface water pumps and 200 mm groundwater bores and called for all pumps regardless of size to be metered. 	<ul style="list-style-type: none"> No change to the proposed regulation. Retain the 100 mm and 200 mm exemption in the regulation but commit to undertake further analysis of this issue as part of the broader suite of initiatives currently being progressed to implement the review recommendations. These include improved recording and reporting and development of a prescribed method to calculate volume of take.
Telemetry	<ul style="list-style-type: none"> The proposed amendments were generally supported, however there is concern that the amendments do not address foundational issues. Problems with telemetry installation, configuration, connection and data output problems persist. Decoupling telemetry requirements from meter installation requirements to allow time for IT system improvements and the development of user guides was suggested 	<ul style="list-style-type: none"> No change to the proposed regulation. The review included a commitment to a telemetry review which is currently underway. The telemetry review will identify broad systemic improvements with the aim of enabling telemetry installation to be easier to undertake whilst ensuring the integrity of telemetered data and will also explore potential support for third party telemetry systems in the future.

Theme	Feedback	Departmental Response
	<ul style="list-style-type: none"> • One respondent recommended a higher threshold for telemetry connection (300 mm pump size) or making telemetry connection voluntary. • Another respondent recommended the Government procure a standard telemetry system and roll it out to users at cost depending on pump size. • Concerns stem from the cost of installing and maintaining telemetry. 	
Revalidation	<ul style="list-style-type: none"> • Extending revalidation requirements was supported. • Multiple respondents requested that revalidation post initial revalidation be extended from five years to ten years or only required if an issue with the meter was detected. • Concerns stem from the cost of revalidation. 	<ul style="list-style-type: none"> • No change to the proposed regulation. • The one-off ‘initial’ extension of revalidation requirements for AS4747 compliant meters aims to ensure revalidation requirements do not create unnecessary barriers to ongoing compliance and exacerbate market constraints by enabling the limited DQP workforce to prioritise new installations. This will improve the overall meter installation and validation rate. The removal of in-situ accuracy testing as a standard revalidation requirement aligns with broader national standards, further simplifying compliance. • However, it is not appropriate to provide further extension as it is critical once we are metering the vast majority of licensed water take across the state, we maintain that coverage which is best achieved through regular maintenance of the meters that are

Theme	Feedback	Departmental Response
		<p>installed. The average life of the telemetry battery unit which is attached to the meter is 5 years, which will necessitate a visit by the DQP in this time window.</p>
<p>Schedule 9 water sources requiring metering equipment for small water supply works</p>	<ul style="list-style-type: none"> • Removing Schedule 9 from the regulation was strongly supported as it reduces the financial burden for smaller and low-risk water users. • Respondents requested more information about whether there would be development in the future of new criteria for identifying locations where small water supply works would require metering. • One respondent suggested that metering should be required for all users, including sleeper access licences and inactive works. • There was also concern from one stakeholder about how risks to water sources may change during droughts and the need for continued monitoring and metering. 	<ul style="list-style-type: none"> • No change to the proposed regulation. • The development of any future criteria that could apply to small water supply works can be considered once better metered and non-metered extraction data is obtained through implementation of other review recommendations.
<p>Work classification system</p>	<ul style="list-style-type: none"> • The introduction of a classification system was supported overall, although respondents requested support and information to implement the system. • Two respondents suggested that inactive works should be modified to prevent water extraction or have regular unannounced site checks. 	<ul style="list-style-type: none"> • No change to the proposed regulation. • The department will develop detailed fact sheets and make them publicly available once sufficient work has progressed to implement this new classification system.

Theme	Feedback	Departmental Response
Faulty meters	<ul style="list-style-type: none"> • There was concern that amendments add extra regulatory burden without addressing all practical issues (such as debris accumulation, wire dislodgement, heat damage and flood impacts due to poor meter design). • Requests were made for separate rules for floodplain harvesting and to provide a process to let water users clarify the length of extension requested and the estimated date the equipment will be repaired/replaced. • Two respondents requested more stringent reporting timelines, including requiring faulty equipment to be reported within 24 hours and that pumping should cease until all repairs are made. 	<ul style="list-style-type: none"> • No change to the proposed regulation. • The regulation amendments being implemented through this current process are to accelerate metering implementation. • The proposed regulation clarifies the reporting requirements in relation to faulty metering by: • Only requiring WaterNSW to be notified if telemetry connection is lost for 72 hours or more (currently no timeframe is specified), • Only requiring recording and reporting of take if telemetry connection is lost for 72 hours or more (currently no timeframe is specified) • Allowing holders to repair or replace faulty equipment (currently only allows repair). • These amendments provide a clearer framework to manage equipment issues while balancing practicality and compliance.
Duly qualified persons (DQPs)	<ul style="list-style-type: none"> • The amendments were seen as a step in the right direction, but concerns were raised about the effectiveness of the changes to meet the intended goals. • There are already skilled worker shortages in regional NSW. 	<ul style="list-style-type: none"> • No change to the proposed regulation. • A DQP concierge service to support DQPs with administrative activities will be established and DQP training courses modified. Further support of DQPs can be provided outside of the regulation amendments.

Theme	Feedback	Departmental Response
	<ul style="list-style-type: none"> Financially supporting DQPs with training and setup costs, streamlining administrative processes and easing reaccreditation requirements were suggested. Some respondents suggested that the government should provide qualified personnel in areas where DQPs are lacking. 	
Floodplain harvesting	<ul style="list-style-type: none"> Peak irrigator industry bodies supported the proposed floodplain harvesting amendments. One respondent requested clarification on buffer zones, measurement periods and point-of-intake measurements. Another respondent expressed concerns regarding the proposed DQPs who can assess a property's suitability for point-of-intake measurement. 	<ul style="list-style-type: none"> The department agreed that the draft regulation that was publicly exhibited needed further clarification in relation to buffer zones, measurement periods, point-of-intake measurement and controlling infrastructure. The regulation has been amended from the publicly exhibited version to address these issues.
Alternate measurement options	<ul style="list-style-type: none"> There was support from peak irrigator industry bodies to allow unregulated river access licence holders that take overland flow to access storage metering. One peak body recommended amending the regulation to allow approval of alternative metering methods, subject to certification and guidelines to enable greater flexibility and provide more explicit guidance. Many respondents raised that all water take should be metered and regulated, including floodplain harvesting, to protect future water allocations, manage cease-to-pump 	<ul style="list-style-type: none"> No change to the proposed regulation. The regulation (s.233) already provides the Minister with the power to approve an exemption from the metering requirements and require alternate metering conditions as part of that approval in particular circumstances (there are factsheets and guidelines on the website). Amending the regulation to enable bespoke metering arrangements more broadly would introduce further complexity for water users, and cause problems in

Theme	Feedback	Departmental Response
	<p>events and ensure transparency and environmental protection.</p>	<p>achieving effective compliance and enforcement. It would also be a disproportionately costly exercise.</p> <ul style="list-style-type: none"> • It is unlikely a certification and guideline-based system would be legally permissible.

Feedback on survey questions

This section outlines feedback received from the survey responses, questions and comments made in webinars, and submissions received.

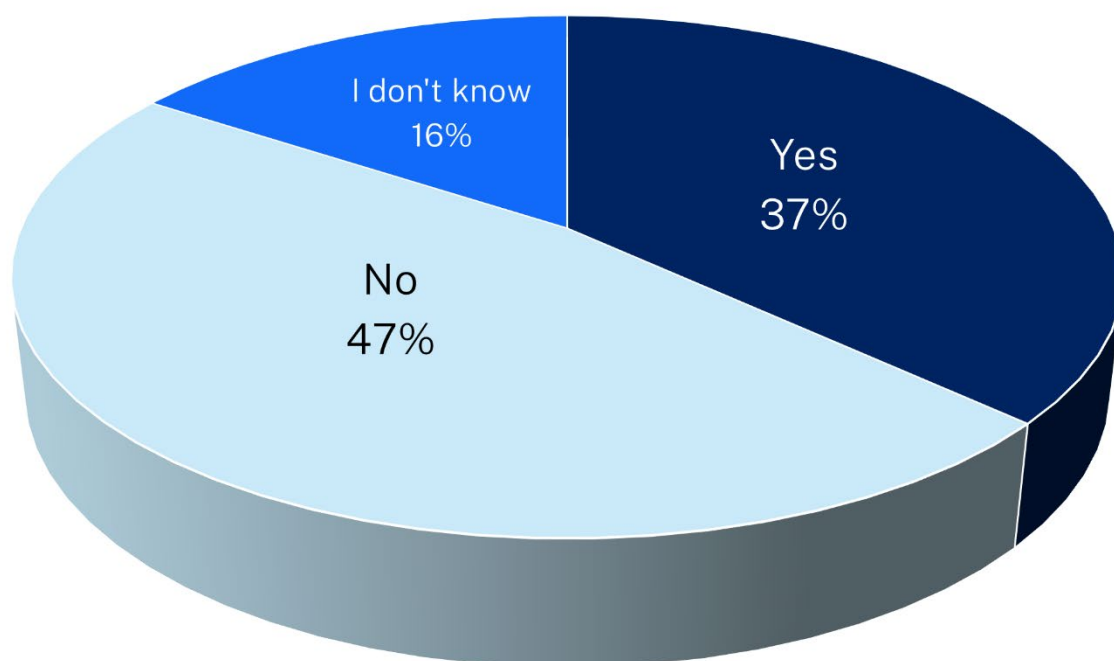
Topic 1: Changing metering requirements to target risk more effectively

Survey responses

Survey question (Figure 2): Do the draft amendments to the Water Management (General) Regulation 2018 provide a good balance between making metering obligations more practical and minimising undue costs for small water users while upholding the policy's goal to accurately meter the vast majority of licensed water entitlement?

- 47% (n=9) of respondents felt the draft amendments do not balance practical metering obligations, cost minimisation for small water users and the policy's goal
- 37% (n=7) of respondents said yes
- 16% (n=3) of respondents said they didn't know

Figure 2. Summary of survey responses on whether the draft amendments balance metering practicality, cost minimisation and policy goals.



Observations from surveys and submissions

Metering requirements and pump size allowance confusion: An individual called for metering requirements and all metering related staff to be removed as metering does not benefit the environment or farmers. Three individuals highlighted the confusion caused by having both a volume threshold and existing pump size criteria. Water users found it difficult to determine if they required a meter, especially for wells over 200 mm diameter with small pumps. One individual suggested that a 300 mm pump size should be the maximum before telemetry and metering are required, regardless of allocation size.

Meter installation changes and DQP impacts: An agricultural company and one individual questioned the practicality of having non-specialists install meters as it could negatively impact experienced DQPs and meter installation quality. They also mentioned that there is no shortage of DQP availability on the South Coast and DQP changes could reduce the pool of experienced DQPs and affect their income. An individual was also concerned about how new meter installations will be tracked and verified and another individual stated that irrigation infrastructure operators should not be able to use their own staff as meter installers.

Metering conditions and policy clarity concerns: Two irrigator industry representatives recommended that specific metering conditions on existing licenses should be removed, and that new licences should be supplied with pre-existing metering conditions, to ensure practical metering obligations and that the non-urban water metering policy should be the point of truth to resolve inconsistencies between various regulatory instruments.

Metering and telemetry cost concerns for small water users: A company stated that the high cost (up to \$15,000) of upgrading meters, installing telemetry, and new controllers is a significant burden, and prohibitive for small water users with low annual water usage. Three irrigator industry representatives and an individual also expressed that the cost of complying with telemetry requirements is particularly burdensome for low-volume users (revalidation can cost between \$1,200 to \$1,500 for an individual meter). The high cost (\$1,200 – \$11,000) of pattern-approved meters remains a concern, especially for users with entitlements between 15 ML and 100 ML but they supported allowing meters to be installed without immediate telemetry connections.

Validation extension support and revalidation concerns: Four irrigator industry representatives supported extending the initial revalidation timeframe to 10 years to reduce costs and demand on DQPs. They also suggested that no further validation should be required if initial requirements are met unless modifications or errors occur, with maintenance logs ensuring accountability. One irrigation industry submission requested clarification on whether the purpose of revalidation is only to certify no tampering has occurred. Another recommended amending the regulation to require subsequent revalidation every 10 years, rather than the proposed 5 years.

Auditing accuracy and undermeasuring concerns: An agricultural company and two individuals raised concerns about the lack of discussion on measurement accuracy, auditing methodologies, and safeguards for accurate reporting and one of the individuals was also concerned about incremental under-measuring by small users being cumulatively significant.

Compliance deadline and water user exemption concerns: An individual did not support extending the compliance date and called for consistency in metering requirements across different user types. Another individual's submission argued against exemptions for certain users, such as irrigation infrastructure operators, to prevent unfair advantages and potential water theft. An individual supported the risk-based approach but recommended that water volume within the <15 ML and 15 – 100 ML ranges should be available for each catchment.

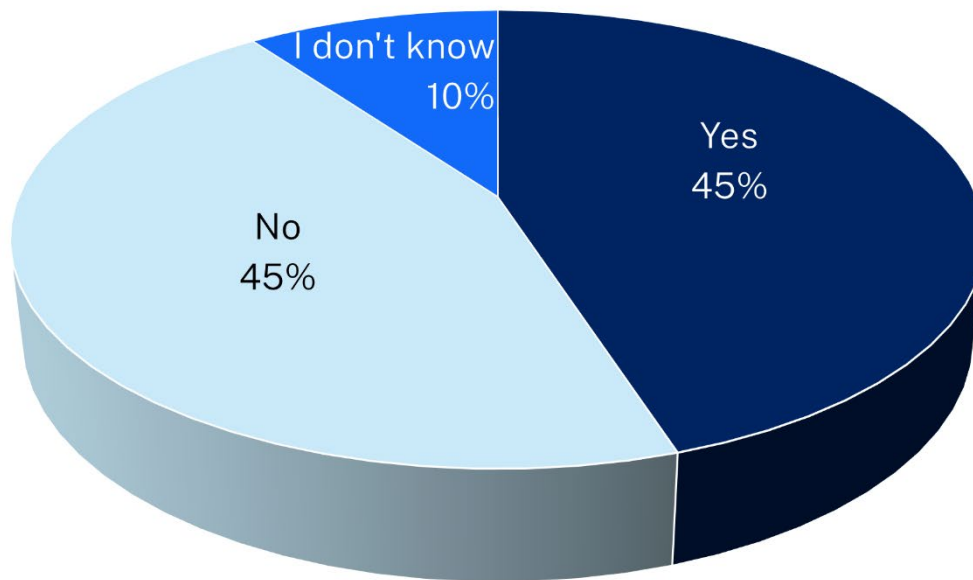
Overall feedback summary: Overall, while there is support for making metering obligations more practical and reducing costs, there are concerns about the complexity, cost, and fairness of the proposed amendments. The submissions suggest that while the policy's goal to accurately meter water usage is important, the implementation needs to be more user-friendly and cost-effective.

Survey responses

Survey question (Figure 3): Do the draft amendments to the Water Management (General) Regulation 2018 address key issues identified in the feedback from the Review of the Non-urban metering framework to better align metering requirements with the volume of water take, effectively reflecting the risk posed to the water source while meeting the policy objective of accurately metering the vast majority of licensed entitlement?

- 45% (n=9) of respondents said the draft amendments fail to align metering requirements with water take volume to better reflect risk and meet policy objectives
- 45% (n=9) said yes
- 10% (n=2) said they didn't know

Figure 3. Summary of survey responses on whether the draft amendments address key issues from the review, aligning metering with water take, risk, and accurate measurement of licensed entitlements



Observations from surveys and submissions

Volume-based thresholds for exemptions from metering requirements: Four irrigator industry representatives supported the introduction of volume-based thresholds, in addition to size-based thresholds which they saw as a balanced approach to align metering requirements with the volume of water take and the associated risks. An individual irrigator suggested that take should be based on usage rather than entitlement. Other individual's responses suggested that the threshold for mandatory metering should be higher (for example 50 ML instead of 15 ML) and that requirements should be simplified to one set of rules rather than both pump size and megalitres. Three irrigator industry representatives supported the exemption of single small pumps and bores but called for groundwater wells and spearpoints to be included in the same exemption framework as small bores, as the pump size affects water uptake.

Support for metering all water take: Three individuals, a local council and 125 nature conservation submissions stated strong support for metering all water takes, regardless of size, to ensure accurate water take records and address potential issues such as impacts on the environment, threatened species and neighbouring bores/users.

Support for changes to compliance dates: Three irrigator industry representatives considered the revised compliance dates fair, providing water users with adequate time to understand and comply with new metering rules noting that coastal water users have received a minimum 24-month extension. An irrigator industry representative suggested those with compliant metering and functional telemetry should share in regulator cost savings via reduced fixed charges.

Support for education and guidance tools: Three irrigator industry representatives commended the department's plans to support water users through education initiatives and updated guidance and recommended updating the NSW Water Metering Guidance Tool to reflect the amended regulations.

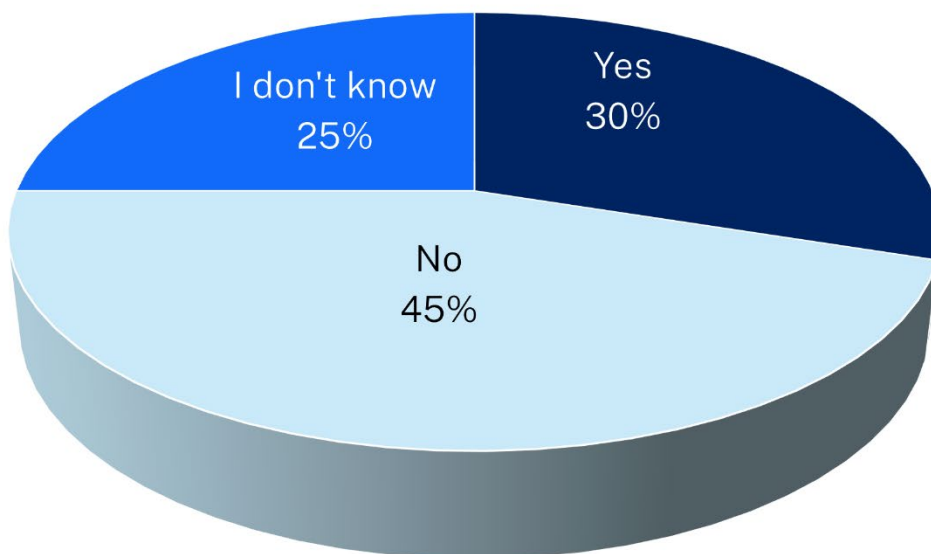
Overall feedback summary: Overall, the draft amendments are seen as a positive step towards improving metering, monitoring, and measurement actions, with the goal of accurately metering the vast majority of licensed water entitlements in NSW.

Survey responses

Survey question (Figure 4): Do the draft amendments to the Water Management (General) Regulation 2018 represent a more consistent and comprehensive approach to telemetry requirements, aligning with the intent to enhance clarity and effectiveness in water resource management?

- 45% (n=9) of respondents said the draft do not provide a more consistent and comprehensive approach to telemetry requirements, nor do they fully align with the intent to enhance clarity and effectiveness in water resource management
- 30% (n=6) of respondents agreed
- 25% (n=5) were unsure

Figure 4. Summary of survey responses on whether the draft amendments improve telemetry consistency and clarity in water management



Observations from surveys and submissions

Ongoing telemetry technology issues: Four irrigator industry representatives mentioned ongoing issues with telemetry technology and local intelligence devices both on farms and interfacing with the Water NSW database, including installation, configuration, connection, and data output problems, which have led to additional costs and challenges for water users. Three of the representatives believed the allowance for up to 72-hour telemetry outages reduces administrative burdens but does not address foundational issues. They recommended replacing the 72-hour timeframe with reporting on issues with telemetry as soon as identified/discovered and that a broader expert review is necessary to resolve the technical issues.

Telemetry installation and connection changes: Three irrigator industry representatives supported the idea of decoupling telemetry from meter installation requirements to make it quicker and easier to comply with metering requirements and allow time for IT system improvements and the development of clear user guides. They also suggested that voluntary telemetry connections should be allowed as a more flexible and user-friendly approach and along with another individual suggested that the NSW government should procure a standard telemetry system and roll it out to users at cost, depending on pump size. Three irrigator industry representatives recommended that the department's quarterly reports that monitor the resolution of telemetry issues, and decoupling of telemetry from measurement requirements remain an option for discussion. Two individuals expressed that trading should always be allowed, regardless of whether new telemetry is installed, provided there is an existing meter.

Small users and DQP support: A company called for more flexibility in the regulations to accommodate small users, particularly those in regions with limited access to skilled installers and programmers. Three irrigator industry representatives suggested that the department should continue to improve DQP support and training, with step-by-step guides by the end of 2024.

Overall feedback summary: Overall, while the draft amendments aim to provide a more consistent and comprehensive approach to telemetry requirements, significant unresolved issues remain. Allowing for voluntary telemetry connections, decoupling telemetry from installation requirements and rolling out a standard telemetry system are seen as potential ways to improve compliance and effectiveness.

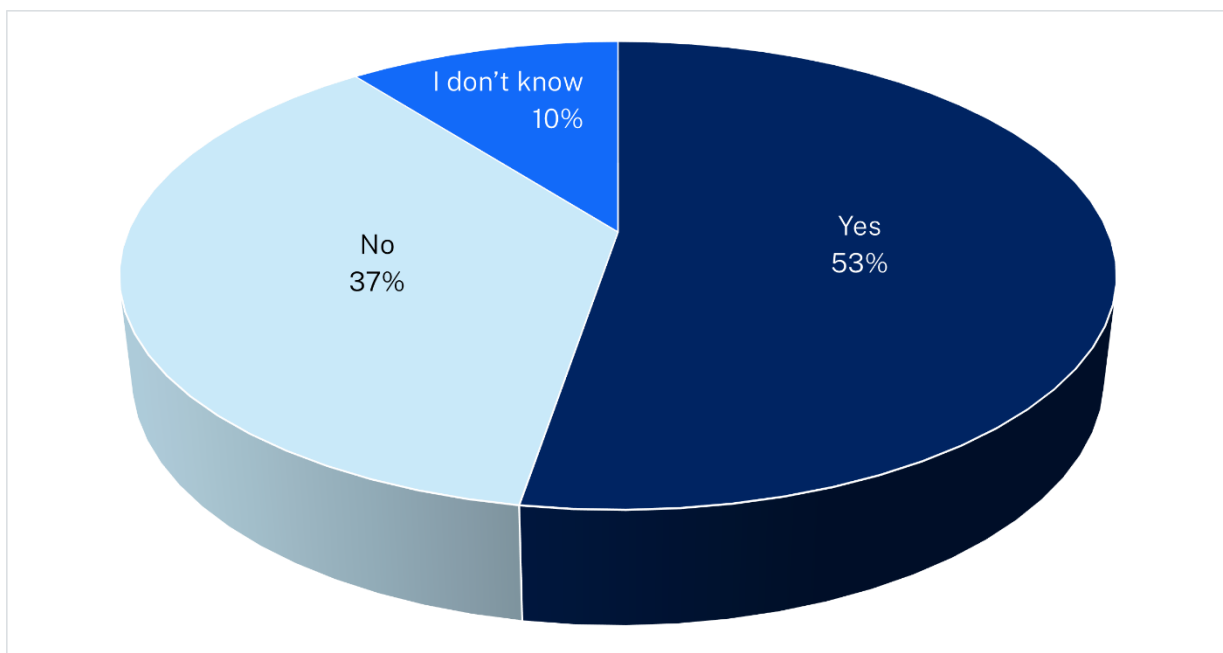
Topic 2: Reviewing Schedule 9 water sources

Survey responses

Survey question (Figure 5): Do the draft amendments to the Water Management (General) Regulation 2018 address key issues identified in the feedback and provide greater clarity by removing universal metering requirements for smaller and low-risk water users to better align metering requirements with risk?

- 53% (n=10) of respondents felt the draft amendments addressed key issues from the feedback and improved clarity by removing universal metering requirements for smaller and low-risk water users
- 37% (n=7) of respondents felt the draft amendments do not
- 10% (n=2) of respondents said they were unsure

Figure 5. Summary of survey responses on whether the draft amendments address key issues and improve clarity by removing universal metering for smaller, low-risk users



Observations from surveys and submissions

Support for removing Schedule 9: Four irrigator industry representatives and a company supported the removal of Schedule 9 as it will reduce the financial burden on smaller and low-risk water users.

Support for retaining universal metering requirements: Four individuals and 125 nature conservation submissions argued that metering should still be required for all users, (the four individuals included metering sleeper and inactive sources), to ensure proper monitoring and

management of water resources. An irrigator suggested that new telemetry should not be compulsory for water users with low average usage over five years.

Concerns about changing risk: An individual raised concerns about risk to water during droughts, emphasising the need for continued monitoring and metering.

Need for greater clarity: Two irrigator industry representatives requested more information on whether and how any new criteria for identifying small works that may be subject to metering would be developed and applied.

Overall feedback summary: Overall, while there is strong support for the amendments, particularly in reducing financial burdens, there is also a clear demand for more detailed information and continued metering to manage water resources effectively.

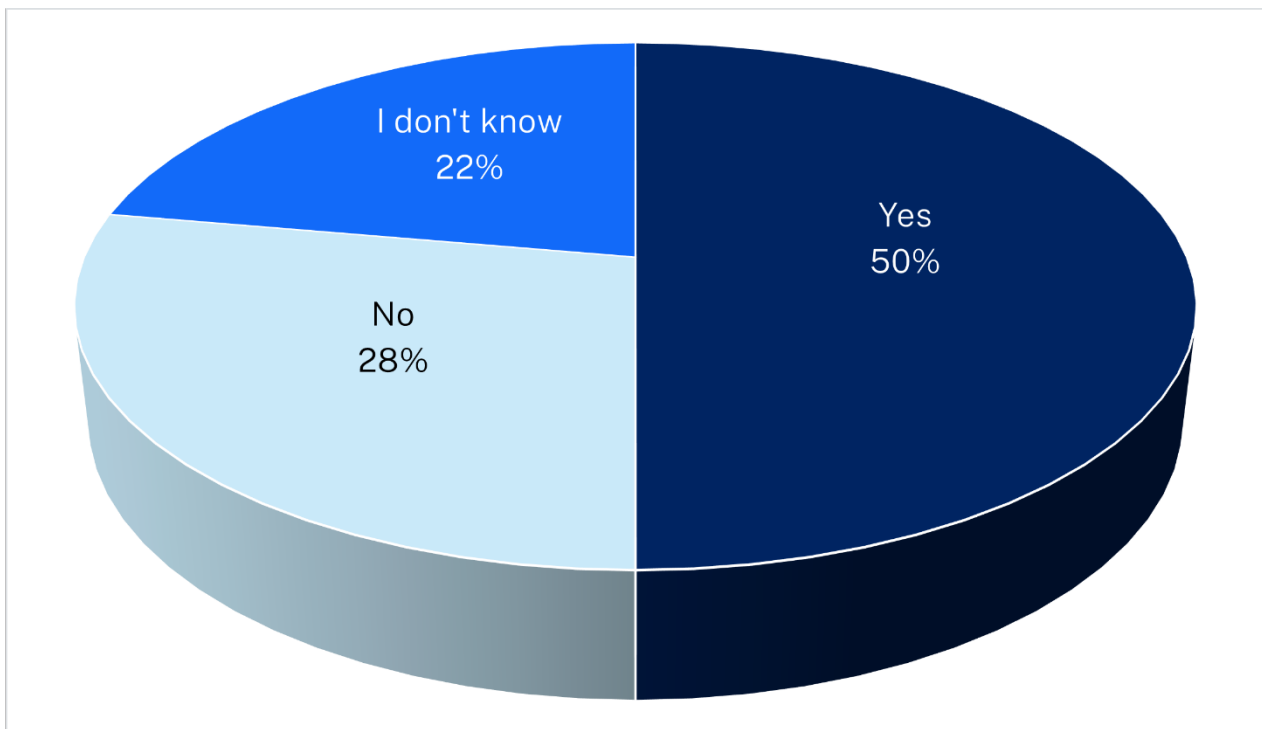
Topic 3: Implementing a water supply work classification system

Survey responses

Survey question (Figure 6): Do the draft changes to the Water Management (General) Regulation 2018 align with the intent to ensure metering requirements apply only to works that actively take licensed water by introducing a classification system to accurately identify these works in government data systems?

- 50% (n=9) of respondents felt the draft amendments align with the intent to apply metering only to works actively taking licensed water using a classification system
- 28% (n=5) of respondents felt they did not
- 22% (n=4) of respondents were unsure

Figure 6. Summary of survey responses on whether the draft amendments ensure metering applies only to works actively taking licensed water through a classification system



Observations from surveys and submissions

Online form and customer service: An irrigator industry representative suggested that a simple online form be developed with adequate phone support to help users identify their pumps and licenses, check compliance, and determine meter requirements.

Inactive works: Two individuals raised concerns about inactive works still being used to extract water, suggesting that genuinely inactive works should be modified to prevent water extraction or have regular, unannounced site checks.

Classification system: Three irrigator industry representatives recommended introducing a free classification system for water supply works to streamline and reduce costs in identifying the use of water supply work approvals.

Definition of 'constructed' water supply work: Three irrigator industry representatives requested further information to ensure the definition is correctly interpreted by all users.

Overall feedback summary: The draft changes align with the intent to ensure metering requirements apply only to works actively taking licensed water by introducing a classification system to accurately identify these works in government databases. However, there is a need for more support to implement the classification system and clarity on what each work classification means.

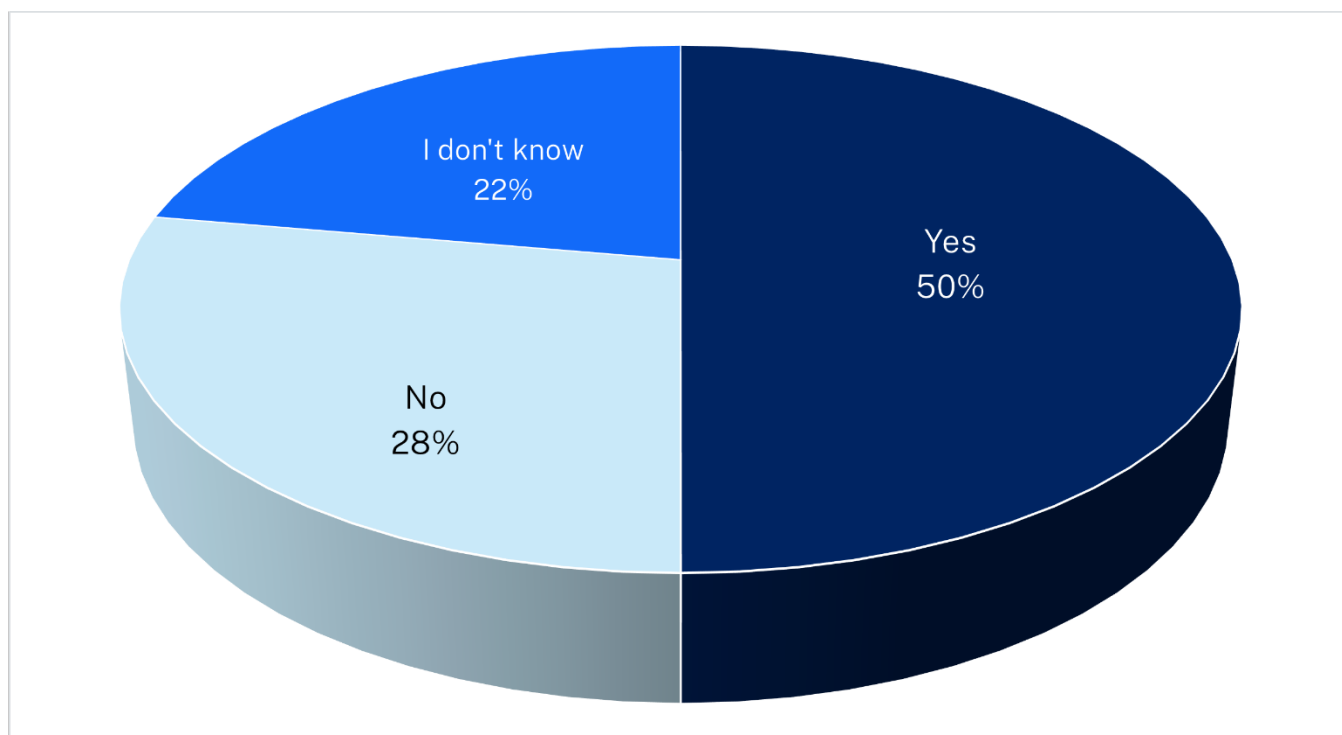
Topic 4: Clarifying faulty metering provisions

Survey responses

Survey question (Figure 7): Do the proposed draft amendments to the Water Management (General) Regulation 2018 reflect the intent to clarify and improve provisions in relation to faulty metering equipment?

- 50% (n=9) of respondents felt the draft amendments clarify and improve provisions related to faulty metering equipment
- 28% (n=5) of respondents felt they did not
- 22% (n=4) of respondents were unsure

Figure 7 Summary of survey responses on whether the draft amendments clarify and improve provisions for faulty metering equipment



Observations from surveys and submissions

Irrigator industry concerns:

- Suggested that the amendments add extra regulatory burdens without addressing all practical issues such as debris accumulation, wire dislodgement, heat damage, and flood impacts due to poor meter design.
- Noted numerical capacity errors in local intelligence devices (LIDs) that create additional administrative burdens for early reform adopters.
- Recommended separate rules for floodplain harvesting due to its unique challenges.
- Recommended a process for extending repair/replacement timelines to reduce administrative burdens on water users and WaterNSW.
- A company was concerned about individual users within the Irrigation Association not being considered.

Extension form amendment: One irrigator industry representative recommended amending Schedule 1 clause 243 (4) to provide a process associated with the s91i extension form where water users can clarify the length of extension requested and the estimated date equipment will be repaired/replaced.

Stricter faulty equipment reporting and compliance: An irrigator industry representative asked to what extent has faulty equipment been found with meters that have already been installed. Two individuals called for stricter reporting timelines, suggesting that faulty equipment should be reported within 24 hours and that pumping should cease until repairs are made. They also considered the current 72-hour reporting window as too lenient and potentially allowing unmonitored water take periods. Three irrigator industry representatives requested better design and maintenance of metering equipment to ensure compliance and functionality.

Overall feedback summary: These responses reflect a mix of support for the amendments' intent to improve clarity and practicality, alongside concerns about unresolved practical issues and the need for more stringent reporting and compliance measures.

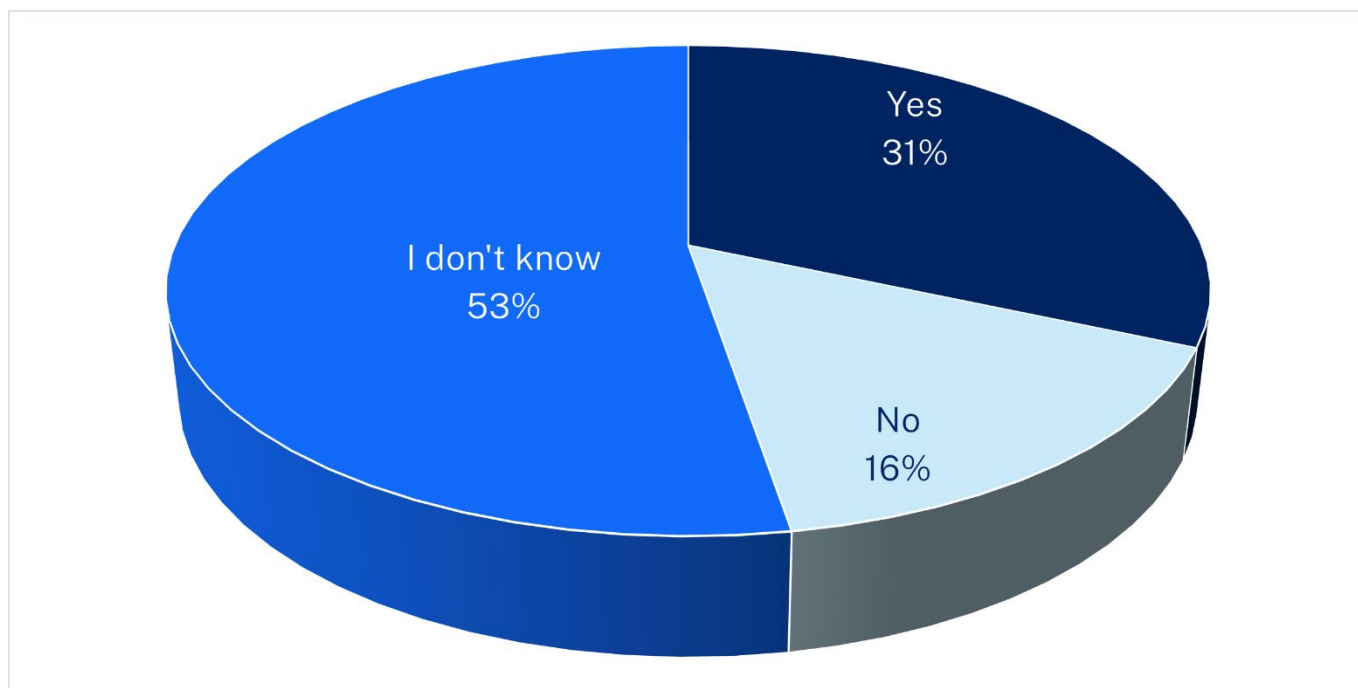
Topic 5: Alternative measurement options for unregulated river access licence holders who take overland flow

Survey responses

Survey question (Figure 8): Do the proposed draft amendments to the Water Management (General) Regulation 2018 to extend floodplain harvesting measurement rules to overland flow taken under unregulated river access licenses, reflect the intent to make these rules more practical and effective?

- 53% (n=10) were unsure if extending floodplain harvesting rules to overland flow under unregulated river access licenses improves practicality and effectiveness
- 31% (n=6) of respondents said yes
- 16% (n=3) of respondents felt they did not

Figure 8. Summary of survey responses on whether extending floodplain harvesting rules to overland flow under unregulated river access licenses enhances practicality and effectiveness



Observations from surveys and submissions

Concerns about unregulated water take: A company considered that the amendments do not address the issue of large amounts of contaminated water being taken without metering, rules, or accounting. A company, three individuals and 125 nature conservation submissions raised that all water take, including floodplain harvesting, should be regulated, metered, licensed, and reported to regulate future water allocations, manage cease-to-pump events, and ensure transparency and environmental protection.

Landholder communication: An individual stated that clear communication to landholders about metering requirements is essential including identifying the correct water measurement methods for both storage and extraction.

Support for alternative measurement options: Two irrigator industry representatives supported the alternative measurement options and considered them a practical and positive solution.

Calls for further amendments: An irrigator industry representatives recommended amending Schedule 2 and adding a clause to allow the Minister to approve alternative metering methods, subject to certification and guidelines to provide more explicit guidance.

Overall feedback summary: the responses highlight the need for comprehensive metering and regulation of all water take, clear communication to stakeholders, and support for practical and flexible measurement solutions.

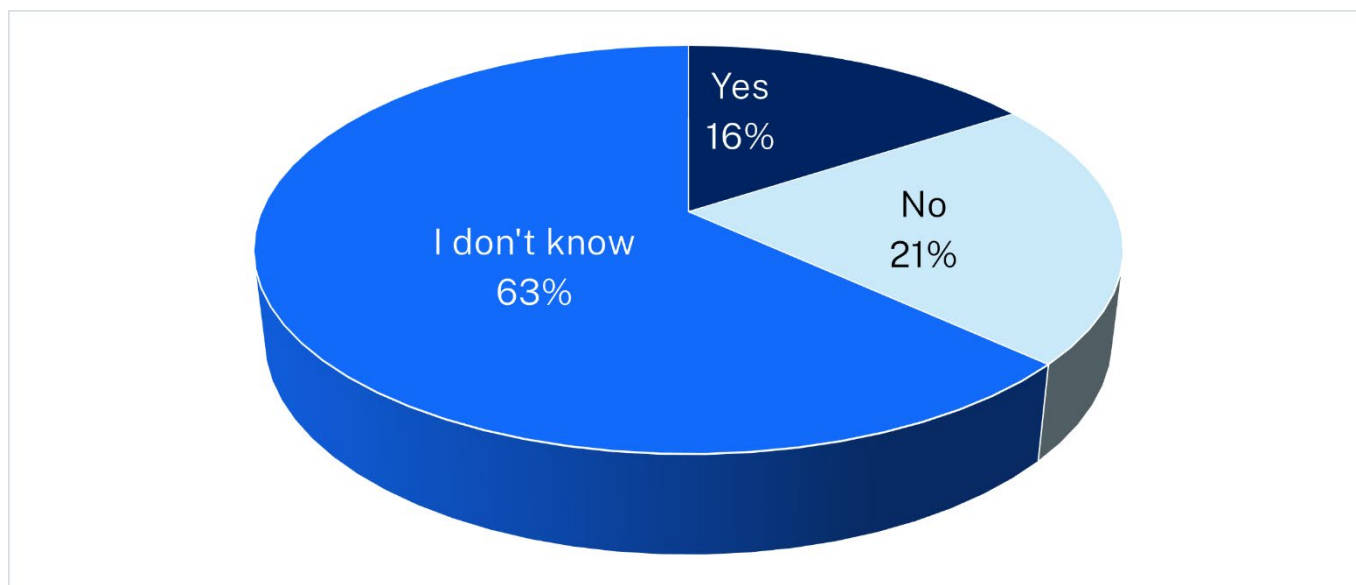
Topic 6: Floodplain Harvesting Measurement

Survey responses

Survey question (Figure 9): Do the amendments reflect the intent to make floodplain harvesting rules more flexible, practical and effective for landholders?

- 63% (n=12) of respondents were unsure whether the amendments make floodplain harvesting rules more flexible and practical
- 21% (n=4) of respondents said no
- 16% (n=3) of respondents said yes

Figure 9. Summary of survey responses on whether the amendments make floodplain harvesting rules more flexible, practical for landholders.



Observations from surveys and submissions

Comprehensive water measurement: A company responded saying all water take in NSW should be measured for effective water resource management. An individual stated that floodplain harvesting should be included in data collection and subject to stringent metering and reporting requirements.

Point-of-intake measurement clarification and concerns: An individual conveyed that buffer zones, measurement periods, and the assessment of point-of-intake measurements require clarification. An environmental consultant shared their concern about unqualified DQPs assessing point-of-intake measurements, calling for the assessments to be carried out by chartered engineers.

Metering equipment concerns: An individual responded that expanding the lifespan of metering equipment to ten years will not improve water take accuracy.

Irrigation industry concerns: Two irrigator industry representatives supported the proposed floodplain harvesting amendments but proposed separate rules for faulty metering provisions. They suggested revising implementation timeframes to account for market failures, recommended addressing ongoing issues with secondary devices and the capability of the Data Acquisition Service (DAS) to display storage meter data, and mentioned that water users have a preference to identify a LID in a storage within a works approval to achieve the same outcome, without the requirement to subdivide the work approval which is time consuming and costly.

Overall feedback summary: There was support for the proposed floodplain harvesting amendments but also a call for floodplain harvesting to be subject to stringent metering and reporting requirements. Clarity on buffer zones, measurement periods, and the assessment of point-of-intake measurements is still required. Expanding metering equipment lifespans is not expected to improve water take accuracy and chartered engineers should carry out point-of-intake measurement assessments. Separate rules for faulty metering provisions, revising implementation timeframes to account for market failures, and addressing ongoing issues with secondary devices and the DAS were also recommended.

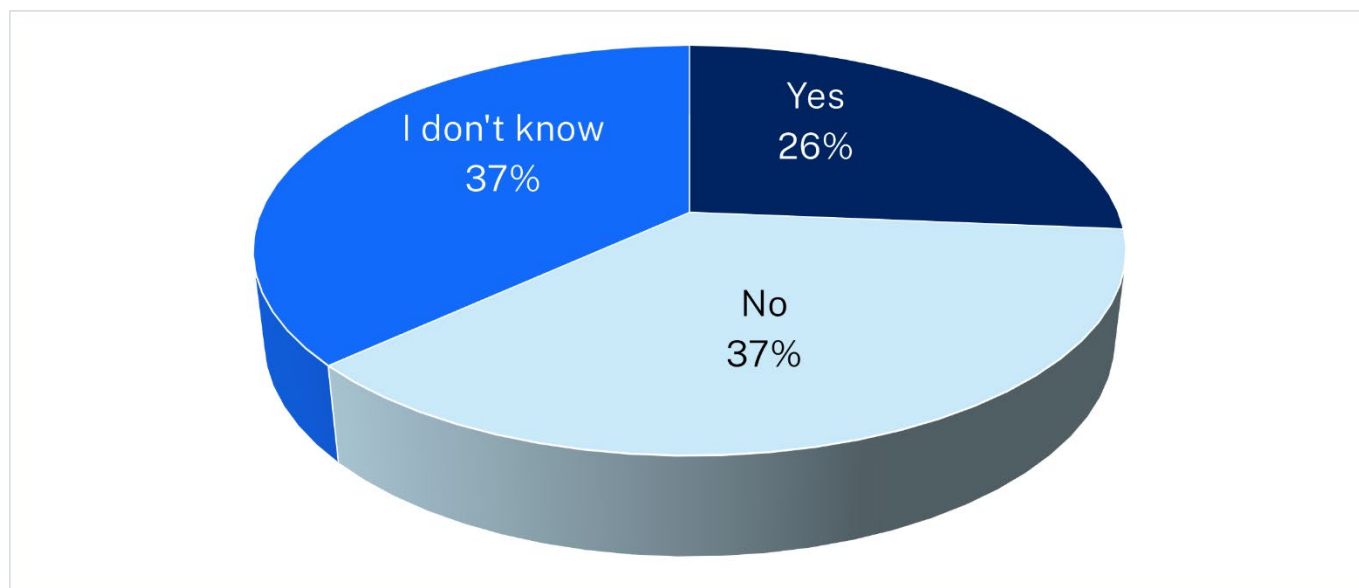
Topic 7: Broadening the definition of duly qualified persons

Survey responses

Survey question (Figure 10): Do the proposed amendments to the Water Management (General) Regulation 2018 reflect the intent to address the current shortage of DQPs and enhance their capacity and ability to meet the demands of metering installation and maintenance?

- 37% (n=7) were unsure if the amendments address the DQP shortage and enhance their capacity for metering installation and maintenance
- 37% (n=7) of respondents said no
- 26% (n=5) of respondents said yes

Figure 10. Summary of survey responses on whether the proposed amendments address the DQP shortage and enhance their capacity to meet demand



Observations from surveys and submissions

Expansion of DQP definition support and concern: Four irrigator industry representatives and a local council generally supported the expansion of the DQP definition as a practical solution to increase the pool of qualified professionals. One individual's response agreed with removing metering for under 15 ML but strongly disagreed with removing the requirement to utilise a DQP between 15 – 100 ML. Another individual shared concerns that broadening DQP competency may not attract enough professionals due to existing high demand in other trades.

Revalidation period extension: Two irrigator industry representatives supported extending the revalidation period to 10 years, but one individual did not. The coastal user's extension was also supported by an irrigator industry representative but not supported by one individual. One individual also considered regular checks are still necessary to ensure accurate water metering. An individual

also stated that losing MACE meters as a suitable measurement device has meant meters are expensive and unreliable.

Meter installation compliance concerns and suggestions: An individual suggested penalties for non-compliance to encourage timely meter installations. One irrigator industry representative and an individual raised concerns that extending compliance deadlines may reduce immediate DQP demand. An individual also suggested the use of pre-qualified systems from a range of suppliers rather than each installation being a one-off.

Impact on regional areas: Two irrigator industry representatives shared concerns about worker shortages in regional NSW, with long wait times for services. One representative and two individuals doubted whether the proposed changes will attract enough new professionals to the field.

DQP workload and business viability: Two individuals stated that some DQPs report insufficient work to sustain full-time employment. Two irrigator industry representatives raised that the business model for DQPs is challenging due to limited control over the products they install and maintain. Three individuals also raised that the DQP is not profitable with significant costs in business setup, including insurance, tools, and travel.

DQP administrative and regulatory burden: An individual recommended streamlining administrative processes to make DQPs more productive. An irrigator industry representative recommended easing the reaccreditation requirement, suggesting DQPs should maintain industry standards without needing continuous professional development points.

Government role: A company suggested that government should provide qualified personnel in areas lacking DQPs and one individual proposed that the government should fund initial installations with cost recovery from users.

Overall feedback summary: While the proposed amendments are seen as a step towards addressing the DQP shortage, there are significant concerns about their effectiveness and a need for additional support and incentives to ensure they meet their intended goals.

Other submission comments

Nature Conservation Council (NCC) submissions: The new metering amendments were supported but concerns were expressed about the exemption for small pumps (below 100 mm for rivers and 200 mm for groundwater). The exemption could lead to significant unmonitored water extraction, particularly in coastal catchments, affecting rivers, wetlands, and threatened species. The proposed threshold would still allow 40% of pumps to continue extracting water completely unchecked making cumulative extraction impossible to accurately measure or estimate, particularly in smaller coastal catchments. Licence compliance was considered unenforceable, and low-accuracy cumulative extraction data makes evidence-based management difficult. The submissions urged the

NSW government to include all pumps with water access licences in the 'No Meter, No Pump' policy to ensure comprehensive water management and compliance.

A council submission: Given the proposed changes to the regulation will make compliance easier, they are supported. However, magnetic flow meters are not listed on the policy approved list but are more accurate than those on the approved list. Magnetic flow meters can also be connected to Supervisory Control and Data Acquisition (SCADA) systems. SCADA systems could be used to transmit data to the regulator's DAS.

Webinar feedback

An individual asked about subsidised pricing for metered water use under the *Native Title Act 1993*. For more detailed webinar feedback and responses please see Appendix 1.

Local councils enquired about:

- the definition of low-risk users and their metering requirements,
- whether Magflow meter verification certificates are sufficient to prove meter accuracy,
- accessing local water utility logged meter data that is already available via Application Programming Interfaces (APIs)
- metering and reporting requirement updates for town water supply water extraction,
- whether the 72-hour requirement for faulty metering reporting is inclusive of the 49 hours before the LID sends an alarm,
- whether LIDs with satellite or radio frequency will be permitted
- and a Local Creeks Association questioned the timing and brevity of the exhibition period

Technology/engineering companies enquired about:

- whether the number of users still requiring metering/telemetry installation had changed,
- how many floodplain storage users are expected to be exempted,
- the total number of water storage (non-pump) monitoring users,
- the cost and time of the DQP certification process
- whether vendors are still required to meet their meter requirement prior to sale

An agricultural peak body and natural resource management groups enquired about:

- whether users now under the threshold still require their existing LIDs
- irrigation metering and notification requirements in relation to basic landholder rights
- constructed works classification/definition
- DQP availability, course length, and responsibilities

- potential future criteria for small works that may require metering given the removal of Schedule 9

Irrigator industry representatives enquired about:

- DQP; concierge service costs, lack of availability, ethics, and reaccreditation
- meter verification frequency if installed by DQP, has SCADA feed, and LID connected to DAS.

Next steps

During the public consultation period, hundreds of people – including water users and industry groups – engaged with the department to attend webinars, complete the online survey and provide written submissions.

The feedback outlined in this report has been taken on board and will be used to help make it easier for water users to become compliant and to ensure water use is being measured and managed fairly and sustainably in NSW. Where appropriate, amendments will be made in line with feedback to the regulation (Table 1 Key feedback from stakeholders and department response). Following the amendment of the regulation, the NSW Non-Urban Water Metering Policy, 2020 will be updated to reflect the relevant policy changes from the stage one amendments and communicated to water users.

The stage two amendments to the metering rules and floodplain harvesting measurement in the regulation will continue in late 2025 following the Water Management (General) Regulation remake.

Appendix 1 – Feedback from Webinars

Respondent	Question	Departmental response
Local council	Are local water utilities (LWUs) considered low-risk users?	No, no specific water user or group is automatically classified as low risk. Low-risk users are determined based on the volume of entitlement associated with the works or the size of the works. If a local water utility meets these thresholds, it could be considered a low-risk user.
Local council	If LWUs are considered low-risk users, can existing patented (uncertified) meters continue to be used with installed LIDs/telemetry until they need replacement due to age, condition, or performance? This approach would allow for more data to be collected and leverage existing infrastructure.	Low-risk users are not required to install meters, however, if they do have meters in place then we would encourage them to retain and maintain these so that they can be used to assist in fulfilling the mandatory recording and reporting requirements for these water users.
Local council	Could the revalidation of Magflow meters, with verification certificates produced under ISO standards, be considered as meeting the meter validation requirements under the regulations? Magflow meter verification confirms that the key internal parameters remain within factory tolerances, and this verification is standard practice in both the process and water industries.	The verification certificate for a Magflow meter confirms that the meter is within its factory tolerances, ensuring its accuracy. The regulation also requires that the meter be installed in accordance with the Australian Standards for non-urban metering.

Respondent	Question	Departmental response
Local council	For low-risk users (e.g., LWUs), could the department access logged meter data already available through APIs into the LWUs' telemetry or data depository systems? This would be an efficient way to leverage existing systems to access available meter data, saving time and costs.	As an outcome of the review, the department has commissioned a broader expert review to identify systemic improvements to data logging, telemetry requirements and associated data systems. Included in the scope of this review is how the department might access other data sources.
Local council	Is the 72 hours for faulty metering inclusive of the 49 hours before a LID sends an alarm?	Faulty meters must still be reported within 24 hours of becoming aware of the issue. The proposed amendment requires that a person report metering equipment as faulty within 24 hours if the telemetry component has been faulty or not reporting data for 72 hours. This change is specifically designed to address telemetry connection issues, acknowledging that service may intermittently drop in regional and remote areas.
Local council	Is Council required to upgrade its metering, recording or reporting of dam water extraction for town water supply as a result of these amendments?	We are unable to provide advice for specific cases today, but we would encourage you to email water enquiries at metering.reform@dpie.nsw.gov.au to discuss your specific circumstances and what the requirements mean for you.
Local council	Are there any plans to expand the LIDs to use other connectivity options such as satellite or radio frequency?	The department is currently undertaking a telemetry review as part of the action items from the Non-urban metering review. This review, scheduled to report in June 2025 includes exploring alternative technologies as part of its terms of reference.

Respondent	Question	Departmental response
Local Creeks Association	Why is there such a short exhibition time to consider this new legislation? This is not enough time to consider it reasonably to avoid any issues and pitfalls that may be associated with the legislation. This is also an extremely busy time of year for a variety of agricultural activities.	The review ran over the last 12 months and there were multiple opportunities for people to respond. This consultation is about taking the recommendations which stakeholders had already supplied feedback on and amending the regulation to implement those recommendations.
Technology company	Will there be a significant change in the total number of properties yet to be instrumented? If so, what is the expected change in the number of LIDFS+ sensor units required, and how will they be split between water pipe flow monitoring and water storage level monitoring, such as radars?	Overall, the review recommendations require around 10,000 less authorised works to install LIDs, but of those remaining works which require LIDs around 6,000 more will be required to enable telemetry on their LIDs.
Technology company	Given the proposed changes, how many floodplain storage users do you expect to be exempt? What is the total number of water storage (non-pump) monitoring users now included after these changes?	There are no new exemptions proposed for floodplain harvesting storages.
Technology company	What will the DQP certification process look like now, in terms of cost and time required?	There are two ways you will be able to become a duly qualified person. You can become a DQP by undertaking Certified Meter Installer training with Irrigation Australia (2-day course), or you could be one of a number of approved professions and then undertake a shorter course to become a DQP. We're developing that training now and will have it ready by the middle of the year.

Respondent	Question	Departmental response
Engineering company	We've received many inquiries from real estate agents. Are vendors required to meet metering requirements before selling, such as ensuring their water licence is compliant?	Generally, the department recommends that purchasers of a property with a works approval check the applicable conditions before completing the sale. This can be done by accessing the Water Register online and confirming the details with the vendor.
Agriculture peak body	What happens to those who've already invested in LIDs but now fall below the threshold for requiring one? Can they simply remove them?	If you are not required to install telemetry (small water users), you will still have recording and reporting obligations which the installed LID can help you comply with.
Natural resource company	If you have an active work approval and a water access licence >100 ML for irrigation, but you only plan to use it for basic landholder rights (BLR), do you still need to meter?	The current regulation exempts works used solely for BLR from metering. Under the new classification system, metering is not required for BLR-only works, but if also used for irrigation, metering is mandatory.
Natural resource company	How can we notify the classification of our water approval, such as BLR? Can this be done through iWAS?	A BLR user can currently claim an exemption. Our goal is to pre-populate this information and notify users in writing. Over time, WaterNSW will update its systems to enable self-service. iWAS already allows users to indicate BLR use when reporting water take. If you use a work for BLR, we encourage you to indicate this in iWAS to support the pre-population process.

Respondent	Question	Departmental response
Water and natural resource management peak body	Can you elaborate on the classification of constructed works?	<p>Currently, metering rules apply at the works approval level, meaning the mandatory metering condition applies to all works under a work approval. The classification system introduces categories to clearly identify works that do not require metering.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • Works that are not yet constructed • Works that have been declared as not taking water • Works used solely for BLR • Constructed works that do not take water • For instance, some dams may not be classified as water-taking works unless they are involved in floodplain harvesting or capturing diffuse overland flow. In such cases, they would be identified as ‘constructed, not water-taking’ and would not be subject to mandatory metering conditions.
Water and natural resource management peak body	When will this regulation be adopted?	<p>Following this public exhibition period, it is intended to take effect in early 2025, somewhere in the February/March timeframe.</p>

Respondent	Question	Departmental response
Water and natural resource management peak body	When are more DQPs (such as plumbers) expected to become active?	Once the regulation amendments are made, we'll be reaching out and working with those organisations who represent those different tradespeople. We would expect they would be available sometimes after that but before the middle of the year.
Water and natural resource management peak body	How long is the DQP course?	The current certified meter installer course, open to anyone, is a three-day program run by Irrigation Australia. Our goal is to introduce a streamlined course for other tradespeople, lasting less than a day, that provides essential information on telemetry, the NSW regulatory framework, and licensing requirements.
Water and natural resource management peak body	Have the rules around DQP responsibilities been relaxed? I thought they had ongoing responsibilities for a job.	A DQP is responsible for working with the customer to ensure the meter is installed, operational, and validated. Once the meter is validated, their work with the customer is complete unless they have ongoing commitments.

Respondent	Question	Departmental response
Water and natural resource management peak body	Could you elaborate on what developing criteria to require all works to be metered in a water source would entail?	<p>The previous Schedule 9 identified groundwater sources where metering was required on all water supply works, primarily to inform water sharing plan long-term extraction limit compliance assessments.</p> <p>The regulation will impose metering and telemetry requirements typically covering more than 95% of groundwater entitlement in the water sources previously specified in Schedule 9. The remaining groundwater entitlement will be required to record and report their water extractions.</p> <p>The metering and telemetry roll out will provide insights into whether any additional requirements, beyond requirements to record and report, may need to be considered in respect of small water supply works.</p>
Individual	Is metered water use subject to any subsidy in pricing regarding the Native Title Act 1993?	These amendments focus on how water is measured and metered in NSW, and do not propose any changes to water pricing. Water pricing in NSW is regulated by the Independent Pricing and Regulatory Tribunal (IPART), which is currently conducting water pricing reviews. For more information or to make a submission, visit www.ipart.nsw.gov.au .
Irrigator industry	Does the DQP concierge service incur a cost for WaterNSW, and is it expected that these costs will be passed on to water users?	The service is covered by the existing budget until June 30, 2025. WaterNSW has planned for the service to continue within WAMC, subject to the ongoing IPART review.

Respondent	Question	Departmental response
Irrigator industry	There are long waits for tradespeople in some regional areas. How are these amendments going to help improve access to DQPs where I live in Moree?	<p>The regulation amendments will achieve two key outcomes.</p> <p>First, by introducing a category of users who only need to install a pattern-approved meter, fewer resources will be required from DQPs, helping to free up capacity.</p> <p>Second, extending the validation window from five years to ten years will further reduce pressure on DQPs.</p> <p>Additionally, while expanding the DQP pathway to other workgroups may help identify more qualified individuals, some areas – such as Moree – may still require additional interventions.</p>
Irrigator industry	I would have an ethical issue if an irrigator was a DQP and did their own work	An irrigator can qualify as a DQP, but they must declare their status. While they are still accountable, they can perform work on their own works approval, provided they declare their interest.
Irrigator industry	An irrigation organisation has an open channel meter verified by a DQP, with a real-time SCADA feed to WaterNSW River Operations and LID connected to DAS. Meter verification is required once a year. When should this be done?	Meter verification is required annually, within 12 months of the previous validation.
Irrigator industry	Will re-accreditation still be required every 5 years?	A meter installed and validated by a DQP will need to be revalidated by a DQP after ten years, and then every five years after that.