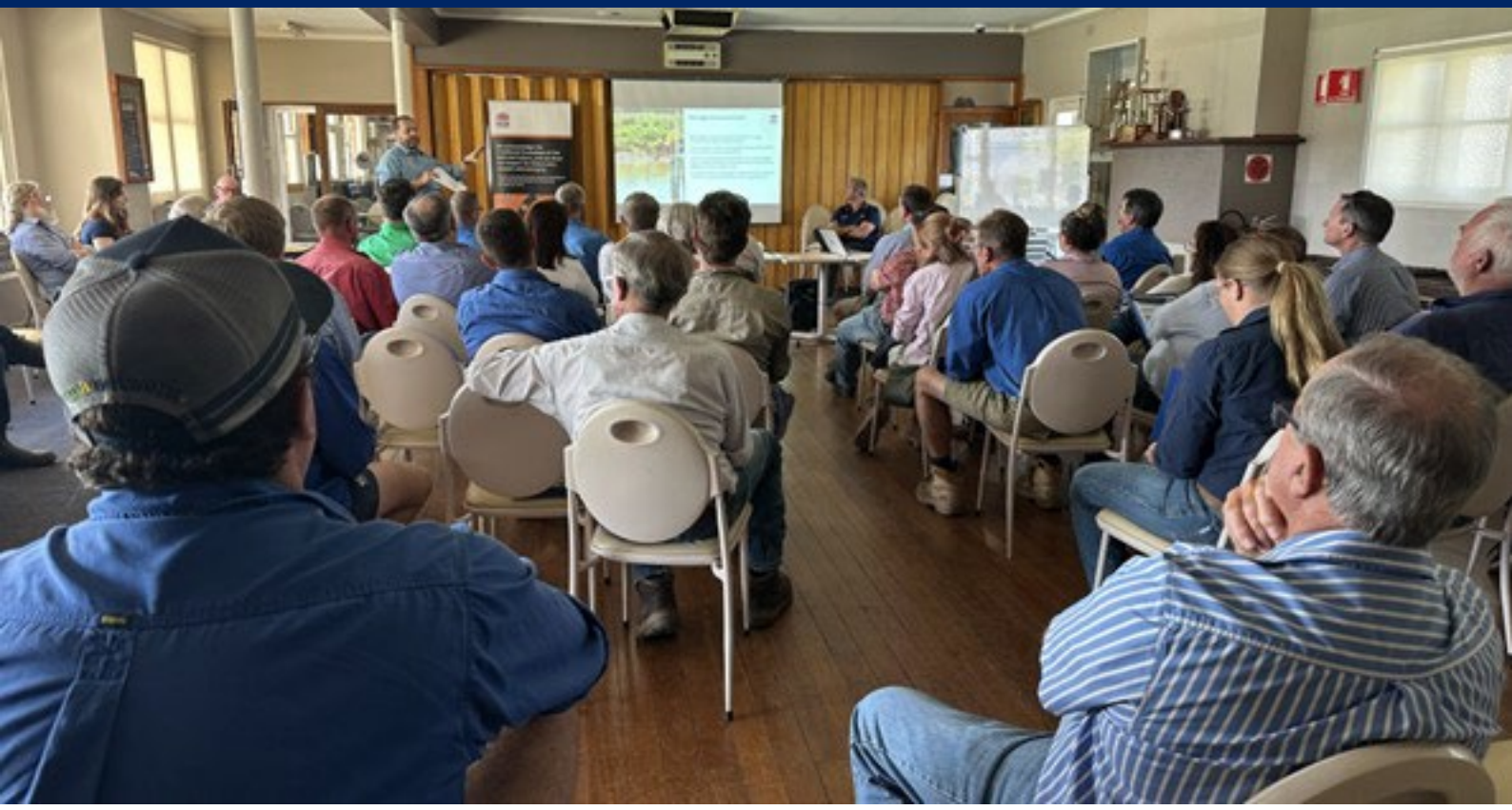
Department of Climate Change, Energy, the Environment and Water

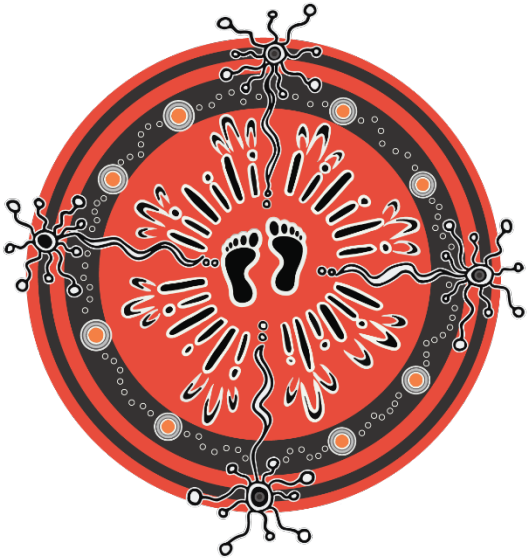
# Floodplain harvesting licensing and measurement framework

## Namoi Valley landholder engagement

November 2025



# Acknowledgement of Country



Department of Climate Change, Energy, the Environment and Water acknowledges the traditional custodians of the land and pays respect to Elders past, present and future.

We recognise Australian Aboriginal and Torres Strait Islander peoples' unique cultural and spiritual relationships to place and their rich contribution to society.

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

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# 1 Overview

In March 2025, the Water Group in the NSW Department of Climate Change, Energy, the Environment and Water (the department), in conjunction with the Natural Resources Access Regulator (NRAR) and WaterNSW, delivered engagement sessions for floodplain harvesting water users in the Namoi Valley.

Two sessions were held on 18 and 19 March 2025 in Wee Waa and Gunnedah respectively. The sessions were designed to assist in preparing water users for the licensing and measurement of floodplain harvesting activities in the Namoi Valley. At the time of these sessions, floodplain harvesting (unregulated river) access licences had been issued to eligible Namoi Valley landholders on 24 February 2025. Water allocations were credited to their water accounts on 18 March 2025.

These sessions are part of the NSW Government's commitment to implement the NSW Floodplain Harvesting Policy (the policy). Water taken through floodplain harvesting activities is the last major form of water to be integrated into the water licensing framework. The Namoi Valley is the last of the 5 northern Basin valleys where the department is implementing the policy. Licensing provides the mechanism for regulating water take activities and ensures take occurs within the set limits of the relevant water sharing plan and the Murray Darling Basin Plan. The floodplain harvesting licensing framework won't be fully implemented until floodplain harvesting (regulated river) access licences are issued in the Namoi Valley. This is expected to occur in 2026.

Water sharing plans are a statutory obligation under the *Water Management Act 2000*. They set out rules for a water source or group of water sources, as well as the rules by which water is distributed to various users. These include limits on the volume of water that water users can take under a floodplain harvesting licence.

This report summarises the outcomes of the two engagement sessions, held for floodplain harvesting water users in the Namoi Valley that hold unregulated river access licenses.

# 2 Consultation process

The 2 engagement sessions conducted with landholders in Wee Waa and Gunnedah on 18 and 19 March 2025 followed the same format. The agenda for each session was as follows:

1. Licensing floodplain harvesting activities – an overview of the implementation process and expected timeline. Presented by Alastair McKenzie-McHarg, Director Floodplain Management and Geoff Cameron, Manager Floodplain Licensing, Water Group
2. Measurement methods and metering equipment – overview of the measurement framework and property management plans. Presented by Wayne Andrews, Senior Project Officer, Metering Implementation, Water Group
3. Water allocation process. Presented by Veronica Silberschneider, Implementation Co-ordinator, Water Group
4. Approvals, dealings, and billing. Presented by Tracey Lawson, Manager Water Regulation North, WaterNSW

5. Determining compliance, Namoi Valley floodplain harvesting compliance, and wet weather events. Presented by Keeley Reynolds, Director Education and Engagement, NRAR.

Time was allocated for questions and answers after each presentation and at the end of the day, which provided participants with the opportunity to liaise with each agency representative. ATX Consulting facilitated the sessions and were responsible for recording and reporting.

# 3 Key issues

Common themes emerged at both sessions. The following sections address the key issues that were raised or identified as areas of concern that require further consideration in future sessions. Please note, the following issues are not listed in order of priority.

## 3.1 Connectivity and the Menindee Lakes trigger

Participants at both sessions expressed concerns about the 250 GL Menindee Lakes trigger for access to floodplain harvesting in the Water Sharing Plan for the Upper and Lower Namoi Regulated River Water Sources 2016. Questions focused on why the trigger was required and the inconsistent application of the trigger in other water sharing plans in the northern Basin.

Staff from the department explained that the limit is stipulated in the water sharing plan and was included as part of the concurrence process with the Minister for the Environment. This trigger was informed by the Western Regional Water Strategy. Stakeholder consultation and analysis were carried out during the development of the strategy to determine the target Menindee Lakes storage volume required to ensure that sufficient water is held to meet 12 months of critical supply for the Lower Darling.

Participants in each session questioned the reasoning behind the trigger and felt that the limits did not fairly reflect the critical water needs in the Namoi Valley. They also noted that during times of drought, Menindee Lakes received greater media coverage and government attention than the Namoi Valley, despite facing similar challenges.

Participants expressed frustration that stricter requirements and limits were introduced due to issues with an unstable inlet regulator (Pamamaroo inlet regulator); something they argued WaterNSW is responsible for maintaining. The department's representative explained that WaterNSW has a project plan to repair the regulator, however substantially less water needs to be in the Lakes to undertake that work. It was further explained that if the regulator were repaired, less water would need to be stored to ensure up to 12-months of water supply was available for critical needs but that any changes to the trigger, potentially made possible through repairs to the regulator, would be subject to further assessment.

The objective of the Northern Basin Connectivity program was questioned by participants in both workshops. Department staff noted that the Water Group is currently assessing the impact of the Connectivity Expert Panel's recommendations on the critical dry conditions and proposed higher flow targets. For more information on this program, visit water.dpie.nsw.gov.au/our-work/projects-and-programs/northern-basin-connectivity-program

## 3.2 Measurement framework not aligning with water use on farm

### Concern about the lack of licensing requirement flexibility

Participants expressed concerns that licensing requirements for measurement did not sufficiently reflect or respond to the complexity of water use on farms. They felt strongly that the licensing framework needs to allow irrigators to take more than one form of water at one time and provide a measurement system that allows for multiple sources of water to be present on a property at the same time, including water collected in tailwater return drains.

Participants felt they were being forced into making farm management decisions to choose between sacrificing crop yield or putting water in storage. They felt they were forced to either irrigate, even if a field was flooded, or take water for fear of missing out.

It was suggested by participants at the Wee Waa session that a calculation could be estimated based on:

- pipe size based on works approvals
- standardised flow rates
- timing of pumping (opening and closing) to determine what percentage of water entering a storage was floodplain harvesting water.

If storage increased, then a fair and reasonable flow rate estimate to determine what percentage of that increase was floodplain harvesting should be an option, including the General Security % and Supplementary Water %. A similar approach was proposed at the Gunnedah session, where it was suggested that a formula should be developed to identify the percentage of run-off, tailwater, and overland flow that applied during a flood event.

Staff from the Water Group acknowledged the proposed solutions and indicated they would consider and respond regarding the viability of each suggestion.

### Department response

Measurement rules for floodplain harvesting have been developed to meet the requirements of the Murray Darling Basin Compliance Compact, which states that metering must be accurate, verifiable and auditable. These objectives are unable to be met using estimated rates of flow or take. The recent Water Management (General) Amendment (Metering) Regulation 2025 made several changes to the floodplain harvesting metering rules to increase flexibility in measurement during flood events.

### Concern about equity

Multiple issues raised in the sessions related to equity, or the perceived inequity, of different aspects of the floodplain harvesting policy and licensing process. The following concerns were raised by participants.

1. Participants perceived inequity for water users that were unsuccessful in their application for an floodplain harvesting licence and take overland flow under an unregulated river access licence.

2. Participants expressed frustration about the inconsistency in rules between floodplain harvesting licence holders and unregulated river access licence holders. While floodplain harvesting licence holders were granted a 12-month transition period to become compliant, unregulated river access licence holders were required to comply immediately, which was viewed as unfair.
3. People required to comply immediately (or before they could lawfully take overland flow) felt uncertain regarding the reliability and durability of the measurement equipment they were required to install.
4. Participants were concerned about what changes would occur when the telemetry review is completed.
5. At the Gunnedah session, participants sought information on the total amount of water allocated through floodplain harvesting licences in the latest allocation. Participants suggested the department over-allocated by 89% and were concerned that high allocation levels meant water users could only access 20% of their floodplain harvesting licence allocation. They strongly cautioned against over-allocation, emphasising the detrimental impact it would have on all water users. Department staff queried participants about their calculations, but they were unable to provide clarity on these.

## 3.3 Complexity and cost of compliance

Participants reported that when floodplain harvesting was first introduced, it was presented as a straightforward process requiring only a gauge board and storage meter. They expressed frustration that the compliance requirements have since become increasingly complex, technical, and costly. Specific concerns raised included:

- the significant expense involved in purchasing and installing AS4747-compliant metering equipment
- low confidence in the quality and durability of the required equipment, particularly its ability to withstand harsh conditions, such as high temperatures
- additional ongoing costs associated with equipment repairs
- a shortage of Duly Qualified Persons (DQPs) available in the Namoi region, creating further delays and access issues.

Participants provided examples of equipment failures, particularly with metering and Local Intelligence Devices (LIDs) manufactured by department-approved suppliers. Some reported that equipment failed in temperatures above 40°C, leaving them non-compliant despite following official guidance and incurring further costs to remain operational.

A request was made for further information about the reliability and user experience of the required metering and LID equipment in other regions, such as the Gwydir, where implementation is more advanced. In response, the department advised they would investigate and provide relevant information to Namoi water users. Preliminary feedback from other regions on floodplain harvesting storage measurement devices and telemetry-enabled LIDs has been positive, with no reported concerns about reliability or durability.

To support implementation and address these concerns, the department advised that the following actions are underway:

- improving meter installation and validation rates through a dedicated DQP Concierge service
- developing new training programs to expand and support the DQP workforce
- conducting a review of telemetry and data logging specifications.

## 3.4 Modelled data

### Concern about the use of modelled data

Participants expressed strong concerns about the modelled data used to determine the Long-Term Average Annual Extraction Limit (LTAAEL). Participants also stressed their dissatisfaction with the decision-making process, saying they felt ignored. They believed the department had allowed modelled assumptions to dictate terms instead of using real time data-take information.

Water users felt the LTAAEL was a critical limit that directly impacts irrigation capacity and farm viability. Many felt the LTAAEL was too important to rely so heavily on modelling and called for a more robust, transparent process. It was suggested that actual pump data should be used to determine the LTAAEL, or at a minimum, be given greater weight in its calculation.

Participants also raised concerns that the model in use was originally designed for river systems and not appropriate for estimating floodplain harvesting. They felt that applying river-based models to the floodplain context was problematic, particularly as the system is calibrated using river gauge data that may not accurately reflect floodplain dynamics.

### Clarification provided by the department

At the Gunnedah session, the department clarified how models are applied in determining the LTAAEL and related compliance measures. They confirmed that while modelling is used, it is also grounded in real-world data. Staff provided the following example: if actual diversion data shows 20ML and the model estimates 120ML, the model is adjusted to align with the measured value. Real data is used to inform the source model, cap modelling, and the permitted take model.

The LTAAEL itself is not a direct measure of use, but a comparison between two modelled representations – one of the conditions of the valley at the start of the water sharing plan, and one reflecting current conditions. By contrast, cap and Sustainable Diversion Limit (SDL) compliance compares recorded annual use (e.g. metered pumping) against what the model predicts that use should have been, to assess long-term compliance. All model scenarios used go through a detailed calibration process, adjusting parameters incrementally until they best match recorded data, including pump data and river gauge flows. While actual pump data plays a key role, it is considered alongside multiple data sources.

### Rationale for retaining the LTAAEL

The department had considered removing LTAAEL compliance from water sharing plans when SDL compliance was introduced under the Basin Plan. However, it was retained to allow ongoing monitoring of growth in water use by environmentally held entitlements, which are explicitly

excluded from the SDL framework. It was noted that these entitlements are not subject to the same physical constraints (such as pump capacity, developed area, or on-farm storage) as irrigation businesses, meaning unchecked growth could reduce water availability for irrigators.

### Concern: underestimated productivity

Further concerns were raised about the model potentially underestimating irrigated productivity in the Namoi Valley by up to 30%. Participants noted that cotton-only production in the Namoi may be significantly higher than model assumptions suggest. This was seen as problematic, as these modelled figures influence available water determinations (AWDs) and floodplain harvesting licence volumes.

This concern has been raised extensively by Mr Bernie Martin (Tahlee Consulting Services) and has been closely investigated by the department's modelling team. In some cases, the model was updated in response. The same issue has also been raised in other northern valleys. Mr Martin's proposal relies heavily on visual interpretation of satellite imagery, which can identify that vegetation is present, but cannot reliably determine crop type or the volume of irrigation applied.

Department investigations confirmed that if all green areas were assumed to be fully irrigated cotton, the model would indeed show a 30% discrepancy, but that assumption is not considered valid. While it is acknowledged that the model may over- or under-estimate crop areas in some instances, there is no evidence of a systematic 30% error. Such a significant inaccuracy would cause other discrepancies to appear across the model, and this has not been observed.

### Department position and future improvements

The department does not support wholesale changes to the model as proposed by Mr Martin. However, the modelling team remain open to working with individual water users to supplement remote-sensing data with on-farm information, and to make refinements where warranted.

Looking forward, the next opportunities to improve this area include:

- building a record of actual take under floodplain harvesting entitlements, and
- integrating remote-sensing tools, such as those being developed by CSIRO, which may offer improved insights into evapotranspiration from individual fields.

This issue also relates closely to Mr Martin's broader concern that the department underestimates rainfall runoff collection, which remains a topic of further investigation.

## 3.5 Respect

Participants expressed concern that while they were expected to treat departmental staff with respect during engagement, they did not always feel that this courtesy was reciprocated. Some were particularly uncomfortable with the use of language such as "legal limits", which they felt implied water users had acted illegally or were seeking to circumvent the rules. This feedback was acknowledged, and the presentation materials were updated to refer to water sharing plan (WSP) limits rather than "legal limits".

Water users stressed that they attend these meetings because they **want** to comply. However, they believed there are still barriers that make compliance unnecessarily difficult. In some cases,

participants felt that following compliance requirements left them at a disadvantage in ways that were unintended and avoidable.

## 3.6 Engagement

Both departmental staff and stakeholder representatives emphasised the importance of face-to-face engagement on the floodplain harvesting licensing framework. Participants acknowledged that the Water Group's approach to engagement has improved and welcomed its commitment to continued direct engagement, describing it as essential to building trust and understanding.

As part of this approach, the upcoming one-on-one meetings with the Measurement and Metering team were highlighted as especially important. These sessions will focus on property-specific issues and individual Property Measurement Plans, recognising the complexity and unique circumstances of on-farm water management.

# 4 Summary of key themes

The department acknowledges that floodplain harvesting is among the most complex areas of water management for government to regulate. Both landholder sessions, like others held previously, highlighted the significant challenges involved in aligning regulation and compliance with the reality of on-farm water use.

Key issues raised included:

- the complexity of on-farm water management, and the difficulty of designing a licensing framework that fits sophisticated and intricate on-farm practices
- the cost and technical burden of compliance, particularly concerns about the suitability, durability, and reliability of mandated equipment
- perceived inequities for those without successful floodplain harvesting licence applications, who must rely on unregulated access licences. These participants felt disadvantaged by the absence of a 12-month transition period and by different rules around carryover
- a broader questioning of the underlying data and rationale that inform key decisions around water allocations, caps, and limits — particularly in light of the cost and effort required to comply.

A recurring concern across both sessions was a lack of confidence in the modelling that underpins allocation and licensing decisions. While this may be partly due to gaps in understanding of how the models work, it is also tied to a perceived lack of transparency in how model inputs are selected and how decisions are made. Participants called for clearer explanations of the assumptions behind the modelling and expressed a strong desire for more direct involvement in the process, particularly in decisions about model inputs and allocation rules.

### Improving engagement

Engagement in the modelling process was one of several areas where water users requested greater involvement. Participants acknowledged recent department efforts to strengthen engagement, particularly the value of face-to-face meetings. While tensions remain and

disagreements occur, these in-person sessions were consistently described as invaluable for building mutual understanding and trust.

One of the key positives to emerge from this round of consultation was the recognition that the diversity and complexity of water use — particularly across the regulated and unregulated Namoi systems — often cannot be fully understood without individualised conversations. Given the highly specific nature of many farm operations, participants emphasised the need for one-on-one meetings to help clarify how licensing requirements apply in practice.

Although individual meetings will not resolve all the broader challenges raised, they were seen as a practical and effective way to address property-specific issues that make compliance difficult. Importantly, they represent an opportunity to build on water users' willingness to comply by acknowledging and responding to their local circumstances.

# 5 Question and answer summary

The following section summarises the questions raised by participants and the responses provided by the department. Some responses were given during the sessions, while others were taken on notice and are provided below.

## General metering and measurement

Table 1. Questions and answers relating to metering and measurement

| Question | Response |
|---|---|
| **If I have multiple storages on an approval and only one has a metered outlet, can I still use the others, or do they need to be subdivided or altered?** | Yes. During a nominated measurement period, you can irrigate from the storage with a metered outlet, and the measured volume will be counted as floodplain harvesting take for that storage. If other works on the approval do not have a metered outlet, they cannot be used for irrigation during a floodplain harvesting measurement period unless they are nominated as inactive storages (constructed – approval holder declared not taking water). Inactive storages may not receive floodplain harvesting water and can only be used within their designated subdivision. |
| **Do floodplain harvesting licence restrictions reduce allocations for other licence types?** | No. Floodplain harvesting access licences are managed within the extraction limits set by the relevant Water Sharing Plans for the Upper and Lower Namoi Regulated Rivers and the Namoi and Peel Unregulated Rivers. These limits apply specifically to floodplain harvesting and do not reduce allocations for other types of access licences. |

| Question | Response |
| --- | --- |
| **Can point-of-intake metering equipment be used to measure water taken under other access licence types, or is it only allowed for floodplain harvesting?** | **This question was taken on notice.**<br>In principle, using the same point-of-take metering equipment for multiple licence types may be possible, as floodplain harvesting take is measured only during an active measurement period. However, there are considerations when the same work is authorised for multiple purposes, which requires further review before the department can form a position on whether this aligns with the principles of accurate, auditable and tamper proof measurement. |
| **Can secondary measurement equipment be used when taking overland flow under an unregulated river access licence?** | Yes. Secondary measurement equipment can be used as a backup if the primary device fails during an event, consistent with floodplain harvesting rules that also apply to unregulated overland flow.<br>However, unlike floodplain harvesting licences, unregulated river access licences do not have a 12-month transition period. A primary storage measurement device must be installed before taking overland flow under an unregulated river access licence. |
| **If I have an unregulated access licence and take overland flow, do I still need to nominate the start of the measurement period?** | Yes. If your works are authorised to take overland flow under an unregulated water access licence, you must comply with the floodplain harvesting rules, including nominating the start of the measurement period. |
| **Do I need to nominate at the start of an event in iWAS and also record when it ends?** | Yes. You must nominate the start of the measurement period in iWAS within 24 hours of starting it and record the end of the period within 24 hours of finishing. |
| **If I store both unregulated stream water and floodplain harvesting water in the same storage, can a single storage meter measure both?** | Storage measurement can only be used for the take of overland flow. The non-urban metering rules apply to water is taken under an unregulated river access licence from within the bed and banks of the river.<br>If the water taken under the unregulated river access licence is overland flow a storage meter can be used. A storage meter records the total volume of water entering the storage during a measurement period, and any separately metered water (for example, pumped from a river under an unregulated access licence) is debited from that total to determine the floodplain harvesting take. |

| Question | Response |
|---|---|
| **What is the difference between floodplain harvesting and overland flow, and how are they distinguished?** | Overland flow is defined in the *Water Management Act 2000* as water flowing over or lying on the ground as a result of rainfall, flooding, rainfall runoff or groundwater rising to the surface. It specifically excludes water within a river or lake (that is, within defined banks).<br><br>Floodplain harvesting refers to the licensed take of overland flow water under a floodplain harvesting access licence. In other words, floodplain harvesting is a type of overland flow take that is authorised under a specific licence. |
| **If I hold both an unregulated river licence and a floodplain harvesting licence, why can't I use unused unregulated water for floodplain harvesting when both come from the same property and infrastructure?** | **This question was taken on notice.**<br><br>Under the *Water Management Act 2000*, overland flow is specifically defined as water that is not within a river, lake or estuary.<br><br>Water pumped directly from a creek is counted against your unregulated river licence and is recorded by the meter required under the non-urban metering rules.<br><br>Overland flow can only be taken under an unregulated river access licence if it is taken via water supply works associated with an amended works approval to authorise the take of overland flow.<br><br>Overland flow take is measured either through a storage measurement device (if the pump lifts into a storage) or a point-of-intake meter (if overland flow enters at a defined intake point). Floodplain harvesting also requires you to nominate the start and end of each measurement period, and only water taken during those nominated periods is counted towards your floodplain harvesting allocation. |
| **What metering equipment is required for unregulated licence holders taking overland flow?** | Unregulated licence holders taking overland flow must use either:<br><br>• a storage meter, or<br>• a point-of-intake meter.<br><br>All mandatory floodplain harvesting conditions apply, and unregulated licence flow triggers must be met before water can be taken. All water take must be measured through compliant metering equipment. |

| Question | Response |
|---|---|
| **If I have an unregulated licence but no floodplain harvesting licence, do I need to update my Water Supply Works Approval to take overland flow?** | Yes. You can take overland flow under an unregulated licence if:<br>• your licence conditions allow the take of overland flow on a declared floodplain, and<br>• all works used to take overland flow are listed on your Water Supply Works Approval.<br>Once your works are updated on the approval, the floodplain harvesting measurement rules apply. |
| **If my Water Supply Works Approval nominates an unregulated river access licence and I want to take overland flow, do I need to amend my approval through WaterNSW before installing storage meters?** | Yes. If you plan to take overland flow under an unregulated river access licence, all works used to take overland flow must be listed on your Water Supply Works Approval.<br>You will need to contact WaterNSW to amend your approval before installing storage meters. |
| **If I identify works that take overland flow, do I need to reapply for my licence, and what will it cost?** | You do not need to reapply for your licence, but you may need to amend your Water Supply Works Approval if it does not already list all works that take overland flow. Applications to amend your approval will be subject to assessment.<br>To do this:<br>1. apply to WaterNSW to update your approval<br>2. ensure those works meet the mandatory floodplain harvesting conditions, including the installation of a telemetered storage measurement device or a point-of-intake meter<br>3. have the works installed and validated by a Duly Qualified Person (DQP).<br>If approved, you can take overland flow in accordance with the floodplain harvesting rules.<br>Refer to the WaterNSW website for amendment forms and current costs. |
| **When taking overland flow under an unregulated licence, can I choose whether to measure at the storage or at the point of intake?** | Yes. Under recent regulatory changes, you can choose to measure overland flow either at the storage or at the point of intake. |

| Question | Response |
|---|---|
| **Do meters used for taking overland flow need to meet AS4747 standards?** | Yes. If you are using a point-of-intake meter, it must meet AS4747 standards. If you are using a storage meter, it must be one of the approved models listed on the department's website and installed to the approved standards. |
| **Can I add storage to my licence for overland flow, or are there additional works required?** | All works used to capture and divert overland flow must be listed on your Water Supply Works Approval, not just the storage. You must ensure your approval reflects all relevant works. |
| **Does overland flow water have to be stored, or can it be used directly on the farm?** | Overland flow water must be measured, either at the point of intake or through a storage measurement device. If it is measured at the point of intake, you can use the water anywhere on the farm without first storing it. |
| **Can an unregulated access licence and a floodplain harvesting licence be linked to the same work approval?** | **This question was taken on notice.**<br>Dealings applications, including 71W (nomination of water supply work) are subject to assessment and must accord with the dealings rules of the relevant water sharing plan. |
| **Can I store other types of licensed water in a floodplain harvest storage during a measurement period? If so, will it be deducted from my floodplain harvesting access licence account?** | Yes. You can store water taken under other access licence types in your storage during a measurement period.<br>However, it should be noted that the take of this water must still comply with the relevant metering rules. You can enter this volume into the iWAS accounting system to ensure this water is not debited from your floodplain harvesting access licence account. |

## Measurement with multiple and concurrent water sources

Table 2. Questions and answers relating to multiple and concurrent water sources

| Question | Response |
|---|---|
| **Why isn't water collected in a tailwater return drain considered exempt during a floodplain harvesting measurement period?** | Once a floodplain harvesting measurement period has commenced, all water collected at that point is treated as overland flow. This is because different sources of water (for example, tailwater and floodplain harvesting water) mix together, making it impossible to separate and measure them individually.<br>The rainfall runoff exemption does not apply during a nominated floodplain harvesting measurement period. |

| Question | Response |
| --- | --- |
| **Tailwater return systems and stormwater from irrigated areas must legally be contained and often connect with floodplain harvesting systems. How will this mixed water be measured and audited correctly?** | All water entering the system is measured at a single point, including tailwater return flows, stormwater from irrigated areas, and floodplain harvesting water.<br><br>Under regulation changes introduced in 2022, water captured from developed areas and directed into tailwater return drains is generally exempt from measurement. However, once a floodplain harvesting measurement period is nominated, that exemption no longer applies because different water sources mix and cannot be practically separated for measurement.<br><br>As a result, when tailwater flows into a storage during a floodplain harvesting event, all water entering that storage is debited to the floodplain harvesting access licence. We acknowledge that stakeholders have expressed concerns about this approach and its practical implications. |

## Storage

Table 3. Questions and answers relating to storage status

| Question | Response |
| --- | --- |
| **Will making a storage inactive affect my licence or water allocation?** | No, making a storage inactive (constructed – approval holder declared not taking water) will not affect your licence or the water allocated to you.<br><br>If a work is authorised to take water and you choose to make it inactive on your approval, it can no longer be used to take water under a floodplain harvesting access licence during a nominated floodplain harvesting period until it is reactivated. You can reactivate it in the future, but at that point you must meet all relevant metering requirements.<br><br>This approach is simpler than removing the work entirely from your approval. If you remove it, you will need to go through the full assessment process to have it re-authorised later. |

## Exemptions

Table 4. Questions and answers relating to exemptions

| Question | Response |
|---|---|
| **Is rainfall runoff from a neighbouring property that enters my land considered exempt water or overland flow?** | Rainfall runoff from a neighbouring property is classified as overland flow, not exempt rainfall runoff water.<br>This includes water released from a neighbouring property through a blowout pipe or water that naturally moves across neighbouring land onto your property.<br>This means take of this water must be accounted for under an access licence. |
| **If a work has historically taken some floodplain water but is now only capturing rainfall runoff, how can landholders prove they are not taking unauthorised water?** | The rainfall runoff exemption only applies to the take of water from a tailwater return drain that has been collected from rainfall run-off from developed irrigated areas.<br>If a work captures overland flow from outside irrigated areas (for example, from dryland fields without tailwater drains), a licence is required to take that water.<br>This may be under:<br>• a floodplain harvesting licence (for floodplain water), or<br>• an unregulated river licence with an amended works approval to authorise taking overland flow. |

## Alternative measurement suggestions

Table 5. Questions and answers relating to alternative measurement

| Question | Response |
|---|---|
| **Could a simplified system be used, such as estimating flow rates based on works approvals and storage changes, including rainfall inputs?** | No. All water take must be measured accurately and verifiably. This can only be achieved using an approved storage measurement device or equivalent compliant metering.<br>Estimated flow rates or calculations based on storage changes and rainfall cannot meet these accuracy and verification requirements. |
| **Could a system be used that estimates take based on storage increases, pipe size, and standardised flow rates? Why wouldn't that work?** | No. All water take must be measured accurately and verifiably. This can only be achieved using approved storage measurement devices or pattern-approved meters for pipes.<br>Estimates based on pipe size, standard flow rates, or changes in storage volumes cannot meet these accuracy and verification requirements. |

## Carryover

Table 6. Questions and answers relating to carryover

| Question | Response |
|---|---|
| **Why do floodplain harvesting access licences allow three years of carryover, while unregulated river access licences only allow two? Can this be changed to make it more equitable?** | The carry-over rules of floodplain harvesting licences and unregulated river access licences in the Water Sharing Plan for the Namoi and Peel Unregulated Rivers Water Sources 2012 are the same, see cl 43(3). This means both licence types have a maximum of 3-yr carry-over.<br><br>The original floodplain harvesting access licences rules proposed allowed for a 5-yr carry-over. However, the department heard concern over this, including in relation to inequality with other access licence types. The what we heard report summarises this feedback and is available on the department's website. |
| **How does carryover work?** | Carryover is based on the actual volume of unused water remaining in your account at the end of the water year. That unused volume is carried forward and added to any new allocation in the following year. Your new allocation for that year is added on top of the carried-over amount. The relevant water sharing plan will specify the maximum permissible carry-over.<br><br>**Example:**<br>If you are allocated 100 ML for one year and only use 50 ML, you have 50 ML left over. If, in the following year, you are allocated another 100 ML, you will start that year with a total of 150 ML in your account.<br><br>Importantly, carryover is an actual number and is not recalculated against your unit share or the new year's allocation percentage. Any change to allocation percentages in the new year does not retrospectively reduce the volume you have carried over. The **exception** to this is when you reach your maximum carryover limit. |

## Allocations

Table 7. Questions and answers relating to allocations

| Question | Response |
|---|---|
| **If total diversions in the Namoi regulated river system are still likely to be non-compliant with the long-term average annual extraction limit (LTAAEL) after issuing floodplain harvesting** | **Purpose of the model**<br><br>The model shows that, at a valley scale, irrigation infrastructure has grown, such as larger pumps, expanded on-farm storages, and increased developed areas. While there isn't a direct one-to-one relationship between infrastructure development and water use, these investments are typically made to increase production capacity. |

| Question | Response |
| --- | --- |
| **licences and applying the model, what is the purpose of the model? What has it actually achieved?** | The model's role is to:<br>• identify growth in water use over the long term, across wet, dry, and average years<br>• quantify the reductions required (for example, in supplementary water allocations) to bring the valley back into compliance with the LTAAEL<br>• support decisions on floodplain harvesting entitlements so that issuing these licences does not result in overall growth in take.<br>Each year, the department uses the model to check LTAAEL compliance and adjust allocations if needed, including reducing supplementary allocation determinations (AWDs) to ensure compliance. These reductions are what make the valley legally compliant again.<br>The previous Namoi model was built nearly 20 years ago, prior to the first water sharing plan, and did not fully capture changes in infrastructure or farming practices. The floodplain harvesting licensing program required a completely new model to be built using modern data and methods, resulting in a more accurate representation of the valley. This improved model has been independently peer-reviewed and confirmed as a significant step forward in performance, which explains the apparent "step change" in compliance outcomes.<br>While more frequent model updates could smooth these changes into smaller increments, this level of ongoing work would require significantly higher department resourcing and increased water charges, which has not been supported by either government or entitlement holders.<br>If these compliance checks were not performed, the Namoi Valley could eventually breach the Australian Government's Sustainable Diversion Limit (SDL) compliance regime. Exceeding this limit by more than 20% would require even greater reductions to supplementary allocations — and potentially general security allocations — to pay back the exceedance within a few years.<br>**How the floodplain harvesting licensing process considers the water sharing plan limit**<br>Three (3) models are used when determining a replacement floodplain harvesting access licence in a regulated river system or the Barwon-Darling. These are:<br>• current conditions |

| Question | Response |
|---|---|
| | • eligible water supply works<br>• plan limit.<br>The plan limit model is used to ensure total entitlements are within the limits specified in the relevant plan. Final floodplain harvesting licence entitlements that are determined may be less than what has historically been taken to maintain compliance with the plan limit. Where this is necessary, the total reduction is equitably distributed among eligible landholders with consideration to their historic floodplain harvesting activities. |
| **If floodplain harvesting has contributed to non-compliance of the LTAAEL, will the department reduce unregulated licence allocations as a result?** | **This question was taken on notice.**<br>The Water Sharing Plan for the Namoi and Peel Unregulated Rivers Water Sources 2012 provides for reduced allocations of both unregulated river access licences where assessment demonstrated non-compliance with either the long-term average sustainable diversion limit or the long-term average annual extraction limit for the water sources.<br>However, where floodplain harvesting has contributed to non-compliance, the Minister also considers total extractions (not including floodplain harvesting) before determining to reduce allocations of unregulated river licences, see cl 33B in Division 4 of the Plan. |
| **Is there a way to find out the total number of floodplain harvesting licences that have been issued?** | Information on water access licences and approvals is available online at the NSW Water Register.<br>The total number of replacement floodplain harvesting access licences issued is provided below, noting this was based on the time of first issue.<br>**Border Rivers:** 36 floodplain harvesting (regulated river) access licences<br>**Gwydir:** 86 regulated, 12 unregulated<br>**Macquarie:** 67 regulated<br>**Barwon-Darling:** 27 unregulated<br>**Namoi (issued):** 44 unregulated<br>**Namoi (proposed):** 2 unregulated, 96 regulated |

## The Menindee trigger

Table 8. Questions and answers relating to the Menindee trigger

| Question | Response |
|---|---|
| **Why is there a requirement for 250 GL to be stored in Menindee Lakes before any access to floodplain harvesting?** | The 250 GL requirement was introduced through the concurrence process for the Water Sharing Plan with the Minister for the Environment. It builds on work by the department and government to improve river connectivity and was included as part of amendments to the Water Sharing Plan.<br><br>This trigger is based on studies completed under the Western Regional Water Strategy, which examined critical dry-conditions scenarios. The aim is to ensure enough water is available in Menindee Lakes to provide up to 12 months of critical human and environmental needs for the Lower Darling.<br><br>To meet this supply requirement, and given the issues with the inlet regulator infrastructure, about 250 GL must be stored across Wetherill, Tandou and Pamamaroo Lakes.<br><br>The Connectivity Expert Panel has also reviewed these critical dry-condition triggers and recommended higher flow targets for the northern basin. The department is assessing the impacts of these recommendations, which will be the subject of future consultation. |
| **If the inlet regulator is fixed, will the requirement return to 195 GL, or is the 250 GL limit permanent?** | If the inlet regulator is repaired, it may be possible to store the 12-month supply in Lake Wetherell alone. Because Lake Wetherell has lower evaporation losses, the amount of water needed to meet critical needs could be reduced, allowing the 195 GL limit to be reinstated.<br><br>However, any change would be subject to further assessment and require a decision by the Minister for Water, with concurrence from the Minister for the Environment, and would need to be reflected in the relevant Water Sharing Plans. |

## Equity

Table 9. Questions and answers relating to equity

| Question | Response |
|---|---|
| **Why have some water users been issued a floodplain harvesting licence, while others must rely on their unregulated licence?** | The process for determining unregulated river floodplain harvesting access licences is a continuation of the volumetric conversion process. This process assesses the amount of water required to grow the maximum crop areas between 1993 and 1999, using a crop conversion factor. A floodplain harvesting access licence was issued where historic licensed entitlement did not meet the irrigation |

| Question | Response |
|---|---|
| | requirements of the maximum irrigated area between 1993 and 1999. that could not have been met by historic licensed entitlement.<br><br>To support this assessment process, water users were asked to supply records of their water use and cropping history from 1993 to 1999, including the maximum area cropped and water from all sources used to grow that crop. When registrations of interest for floodplain harvesting were sought, additional questions about cropping information were included. |
| **If my application for a floodplain harvesting licence was unsuccessful but I still want to take overland flow, do I need to have compliant metering in place before taking water?**<br><br>**Why do floodplain harvesting licence holders have 12 months to install primary measurement equipment?** | Yes. All take of overland flow — whether under a floodplain harvesting access licence or an unregulated river access licence — must have compliant measurement devices in place before any water is taken.<br><br>Floodplain harvesting access licence holders may use a secondary measurement device for the first 12 months while installing their primary device. After that time, a primary measurement device must be used, with secondary devices only permitted as backup in the event of a failure. |
| **If I wasn't approved for a floodplain harvesting licence but want to take overland flow, and have 15–20 inflow points, do I need certified meters at all of them?** | No. The floodplain harvesting rules allow you to measure take using either:<br><br>• a storage measurement device — the preferred option for properties with multiple inflow points, as the total take is measured by changes in storage volume<br><br>• a point-of-intake meter — best suited where inflows can be controlled at a single location. Additional point-of-intake meters can be used if required. |
| **Some meters recommended by the department are reportedly failing in hot conditions. What meters should we be installing?** | The department only recommends meters that meet approval standards. If a meter is experiencing performance issues, these need to be addressed directly with the supplier or manufacturer. |

| Question | Response |
|---|---|
| **Was change of ownership considered when determining floodplain harvesting licences?** | No. Change of ownership was not a factor in determining floodplain harvesting share components. There was no increased likelihood of obtaining a licence if there had been an ownership change. |

## Property measurement plans

Table 10. Questions and answers relating to property management plans

| Question | Response |
|---|---|
| **If there is a big rain event upstream, and on my property, will my property measurement plan include rules to help me know when I should close my farm?** | No. Property measurement plans are based on the water infrastructure plan issued with each licence, but they are optional and do not form part of your approval or licence conditions.<br>They are best described as a communication tool for farm managers, meter installers, and others who need to understand how overland flow is taken and measured on your property. They are not a regulatory guide for operational decisions during rain events. |
| **Does the property measurement plan use the same map as the Water Infrastructure Plan and Water Supply Works Approval?** | Yes. The property measurement plan is based on the Water Infrastructure Plan, which maps the works included in your Water Supply Works Approval that can take overland flow, when the approval was first issued.<br>The property measurement plan adds further detail, such as meter locations, survey benchmarks, overland flow paths, and points where water enters your developed land. It is an optional communication tool only and does not form part of your approval or create any additional licence conditions. |

## Other

Table 11. Other questions and answers

| Question | Response |
|---|---|
| **What is the cost per megalitre of a water licence?** | Charges for water licences vary depending on the licence type and are set by the Independent Pricing and Regulatory Tribunal (IPART). Information on water management charges are available on the WaterNSW website. |

| Question | Response |
| --- | --- |
| **Why can't floodplain harvesting licences be temporarily traded, when most other entitlements can?** | The decision to prohibit temporary trading of floodplain harvesting licences was made early in the development of the floodplain harvesting policy. It was designed this way to manage growth in water use, avoid unintended impacts, and ensure compliance with long-term diversion limits.<br><br>The NSW Floodplain Harvesting Policy states that temporary trading will not initially be allowed because of the difficulty in ensuring these trades do not cause inappropriate impacts, such as growth in overall take.<br><br>These types of trades may be reconsidered in the future once appropriate metering, monitoring, administrative, and accounting systems are in place to manage them effectively. |