

FLOODPLAIN HARVESTING

Legislative amendments: Licence determination and measurement

What we heard report

April 2021



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Introduction

The NSW Government, through the Floodplain Harvesting Action Plan, is committed to licensing, regulating, and measuring floodplain harvesting. Floodplain harvesting is the last substantial form of water take to be licensed in the Murray–Darling Basin (the Basin). The government is managing this process in a way that improves trust, confidence, and transparency with stakeholders.

In 2008, the NSW Government declared that water users taking water directly from floodplains need to hold a licence and a water supply work approval.

To make the rollout of the licensing and measurement framework possible, the Department of Planning, Industry and Environment developed the NSW Floodplain Harvesting Policy and the NSW Floodplain Harvesting Measurement Policy. Together, these policies provide a framework for licensing and measuring floodplain harvesting extractions.

These policies must be incorporated into the legislative framework if they are to have legal force and be enduring. As part of the legislative process, the department consulted the public and stakeholders on four packages of proposed amendments to the Water Management (General) Regulation 2018.

This report details the consultation outcomes for **two of the four packages** of amendments to the Water Management (General) Regulation 2018:

- the Water Management (General) Amendment (Floodplain Harvesting Access Licence) Regulation 2021 (the Licensing Regulation), which sets out the licence determination process for floodplain harvesting
- the Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2021 (the Measurement Regulation), which sets out the rules for measuring floodplain harvesting.

This report summarises what the NSW Government heard from written submissions about the proposed amendments, and outlines the effect of and justification for the final proposed amendments.

How we determine floodplain harvesting licences

In September 2020, the department published the *Guideline for the implementation of the NSW Floodplain Harvesting Policy*. This guideline detailed the processes of issuing and implementing floodplain harvesting access licences and approvals in NSW, as well as managing the take of water associated with floodplain harvesting.

The Water Management (General) Amendment (Floodplain Harvesting Access Licences) Regulation 2021 (the Licensing Regulation) formalises this guideline, making it into law.

The Licensing Regulation sets out how actual or proposed floodplain water usage by landholders will be converted into replacement floodplain harvesting licences, including eligibility for licences and determination of licence categories and share components. There are multiple stages in the process. If a landholder meets the requirements of each stage, WaterNSW will issue a floodplain harvesting access licence, with share components determined in line with the process set out in the regulation.

This regulation provides clarity and transparency for landholders and the broader public, outlining what steps the department must legally follow to determine a floodplain harvesting access licence. It makes sure the process is consistent in each valley where floodplain harvesting licences are issued, both now and in the future.

This change is made in line with section 57A of the *Water Management Act 2000 (WM Act)*. This section allows the regulation to make provisions under which actual or proposed floodplain water usage is converted into a floodplain harvesting access licence entitlement.

How we measure floodplain harvesting under a licence

The Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2021 (the Measurement Regulation) will give legal effect to requirements set out in NSW's Floodplain Harvesting Measurement Policy, which was released in August 2020.

The Measurement Regulation sets out the requirements for measuring water taken under a floodplain harvesting access licence. These requirements will apply to all storages used for floodplain harvesting and apply as conditions of floodplain harvesting access licences.

Each storage must be fitted with compliant 'primary metering equipment' – a water meter, tamperproof seals and a 'local intelligence device' that transmits water take information to the Natural Resources Access Regulator (NRAR). A 'duly qualified person' must certify that this equipment has been installed properly.

Under the Measurement Regulation, storages 1,000 ML or greater must have this equipment installed within six months of the start of relevant water sharing plan rules for floodplain harvesting. Other storages must have this equipment installed by 1 July 2022.

All storages must have secondary measurement equipment, such as a benchmarked gauge-board, to harvest floodplain water before the deadline for installing primary measurement equipment.

The Measurement Regulation uses the concept of a 'measurement period' to ensure that floodplain harvested water can be calculated. Water users must notify the Minister for Water, Property and Housing at the start and end of a floodplain harvesting event, and record and report water taken during this event. Outside of a nominated floodplain harvesting event, it will be an offence to harvest floodplain water.

Public exhibition

We publicly exhibited a draft Licensing Regulation and Measurement Regulation from 23 November 2020 to 20 December 2020. This consultation consisted of a formal submission process.

The purpose of public exhibition was to:

- communicate the proposed amendments to the Water Management (General) Regulation 2018, including the Licensing Regulation and Measurement Regulation
- seek public feedback on the proposed amendments
- ensure we gave all stakeholders the opportunity to comment on the proposed amendments before finalisation
- allow for effective implementation of the licensing and measurement framework for floodplain harvesting
- allow the department to respond to issues and concerns raised by stakeholders and, where appropriate, make changes to the proposed amendments before making them final.

Stakeholders engaged

To ensure broad and equitable engagement, we notified the following representative groups about the submission period:

- irrigators and other peak water users
- Traditional Owners
- environmental interests
- business interests
- Australian Government, NSW Government and other state government agencies
- individuals who had made submissions before or had attended previous engagement sessions
- regional councils
- local, state and federal politicians.

Final amendments – Licensing Regulation

Based on submissions received and the intended outcomes of licensing floodplain harvesting, the NSW Government has made the Licensing Regulation.

The key licence determination amendments are summarised in Table 1.

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The Licensing Regulation is substantively consistent with the draft Measurement Regulation that we exhibited. However, we have made some cosmetic changes to improve clarity.

Table 1. Final licence determination amendments

Regulation	Details
Eligibility for licences	The Licensing Regulation sets out the eligibility criteria for the issue of a floodplain harvesting access licence. A licence can only be issued where there is a confirmed eligible work as defined in the NSW Floodplain Harvesting Policy.
Determination of licence category	The Licensing Regulation sets out the criteria for determining the category of a floodplain harvesting access licence.
Determination of share components (regulated river)	Where a floodplain harvesting (regulated river) access licence category applies, share components will be determined using modelling.
	The model will calculate the capability of eligible works, both at a property scale and at a water source scale. Property scale volumes will be adjusted to determine entitlements that when combined with water sharing plan rules, achieve compliance with legal limits under current development conditions.
	This process will also be used to determine share components for floodplain harvesting (unregulated river) access licences located in the Barwon–Darling Water Source.
Determination of share components (unregulated river)	Where a floodplain harvesting (unregulated river) access licence category applies, share components will be determined through a repeat of the volumetric conversion process previously used for unregulated rivers.
Final determination of category and share component	Landholders will be notified of their entitlement and licence category before final issue. They will be given 28 days to make a submission if they do not believe their entitlement has been calculated correctly.
Licence nominates water supply work approvals	Once issued, the licence will be taken to nominate the relevant water supply works used for floodplain harvesting.

Final amendments – Measurement Regulation

Based on submissions received and the intended outcomes of NSW's Floodplain Harvesting Measurement Policy, the NSW Government has finalised the Measurement Regulation.

The key floodplain harvesting measurement amendments are summarised in Table 2.

As a result of public exhibition of the draft Measurement Regulation, and a subsequent Metering and Measurement Roadshow in February and March 2021, the NSW Government has made some changes to the compliance deadlines for large storages to have primary metering equipment.

These changes, which are described in Table 2, reflect stakeholder concerns about being expected to install metering equipment without being sure of their legal right to floodplain harvest.

The Measurement Regulation is otherwise substantively consistent with the draft Measurement Regulation that we exhibited. However, we have made some cosmetic changes to improve clarity.

Table 2. Summary of final measurement amendments

Regulation	Details
Scope and application	The measurement rules will apply to each storage that can be used to take water under a floodplain harvesting water access licence.
Metering equipment standards	Each storage must be fitted with compliant 'primary' metering equipment – a meter, telemetry enabled data logger and tamper-evident seals. The installation of this equipment must be certified by a duly qualified person.
Compliance date	Storages 1,000 ML or greater must have compliant primary metering equipment within six months of the relevant water sharing plan amendments relating to floodplain harvesting licensing coming into effect.
	Storages less than 1,000 ML or used, on average, once in every seven years or less, must have compliant primary metering equipment by 1 July 2022.
	A storage that does not have compliant primary metering equipment must have compliant secondary metering equipment to floodplain harvest.
Recording and reporting	Water users must notify the Minister for Water, Property and Housing at the start and end of a floodplain harvesting event, and record and report water taken during this event.

What we heard from stakeholders

Submissions received

The department received a total of 236 submissions. Submissions were about the licence determination process, measurement, the other proposed amendments, as well as floodplain harvesting more broadly.

Several submissions were pro-forma, with repeated support of a particular viewpoint by multiple stakeholders belonging to the same group.

Stakeholders also gave feedback that did not specifically relate to the proposed regulations. This feedback was on floodplain harvesting more generally or on the broader water management framework. This commentary, while out of scope for this report, is important to the department and was also shared more broadly within the department, where relevant.

General submission themes

Table 3 outlines general, recurring feedback stakeholders raised in submissions.

Table 3. General themes raised

Description	Government response
There was general stakeholder concern that floodplain harvesting in the	By licensing floodplain harvesting and returning diversions to within legal limits, we are returning water to rivers and floodplains. This will improve downstream flows.
northern Basin effects downstream systems.	The department is committed to demonstrating the anticipated downstream outcomes of licensing floodplain harvesting. The <i>Modelled downstream effects of licensing floodplain harvesting in</i> <i>the Border Rivers and Gwydir valley</i> report provides an initial analysis of downstream outcomes from licensing floodplain harvesting in the Border Rivers and Gwydir valleys. We will update this report once we have finalised the modelling for the remaining valleys.
	Of particular note, the downstream outcomes assessment for the Border River and Gwydir valleys indicates that the current growth in floodplain harvesting above legal limits in these valleys is not having a significant impact on allocations and diversions in the southern Basin.

Description	Government response
Many of the submissions expressed a lack of confidence in the NSW	Stakeholder confidence in NSW Government processes is critical. The lack of confidence shown in submissions is of concern to the department.
Government. This concern was repeated through comments	The department is committed to managing water equitably and transparently and is engaging with stakeholders broadly. We regularly meet with stakeholders on key projects and give stakeholders and the broader public opportunities to provide input on policies, plans, and other relevant documents.
	The department, together with the Murray–Darling Basin Authority, commissioned an independent peer review of implementation of the NSW Floodplain Harvesting Policy. The key aim of this independent review was to provide greater transparency and increase stakeholder confidence.
Many stakeholders did not support floodplain harvesting in any form and believe the activity should be illegal.	In 2013, the NSW Government introduced the Floodplain Harvesting Policy to stop unconstrained floodplain harvesting by bringing it into a licensing framework that will be the basis for a compliance and enforcement regime.
	Implementing the NSW Floodplain Harvesting Policy will restrict current floodplain diversions so that they return to within legal limits and as a result we will return water to rivers and floodplains.
	There is a misconception that not licensing floodplain harvesting will mean less water use in the northern Basin through the cessation of that activity and therefore more water for downstream water users. This is not the case. Instead, the water historically taken by floodplain harvesting within legal limits would be taken by other licence categories, causing significant effects on river connectivity and downstream water users.
	The department is committed to bringing this form of take into a licensing framework.

In support of the proposed amendments

Table 4 outlines themes raised in submissions that were supportive of the proposed licence determination regulation. There was a focus on the increased certainty and regulatory control that a licensing regime could provide and the need for conditions of relevant licences and approvals to protect the environment.

Feedback	Government response
The licensing framework will provide certainty and control and allow measurement.	The department agrees with this feedback.
	Under the NSW Floodplain Harvesting Policy, water users taking water directly from floodplains must hold a licence and a water supply work approval.
	Licences will define the volume that water users can legally take and how that water is to be accounted for. Works approvals will ensure that floodplain harvesting only occurs through approved works.
	Having licences and approvals allows the department to impose conditions to regulate that take. These are legal instruments that enable specific management outcomes to be achieved and regulate behaviour.
	Under the licensing framework, both water users and the Natural Resources Access Regulator can be confident about what can and cannot be legally taken from a floodplain.
General in-principle support for licensing. Minimal feedback about specific components of the licence determination process regulation.	The department acknowledges that the Licensing Regulation is complex. Some stakeholders may have had difficulty understanding the processes for how floodplain water usage by landholders will be converted into replacement floodplain harvesting licences, especially when expressed in legal terminology.
	The overarching principle of the Licensing Regulation is to set out the process that the NSW Government has to follow when determining floodplain harvesting licences. This process is outlined in plain English in the <i>Guideline for the implementation</i> <i>of the NSW Floodplain Harvesting Policy</i> . The guideline was referred to in public consultation and during development of the regulation amendments.
The process outlined in the Licensing	The department agrees with this feedback.
Regulation is consistent with the NSW Floodplain Harvesting Policy.	The Licensing Regulation sets out in legal terms the process for implementing the NSW Floodplain Harvesting Policy.
	This process is also outlined in the <i>Guideline for the implementation of the NSW Floodplain Harvesting Policy</i> , which was referred to in public consultation and during development of the regulation amendments.

Table 4. Feedback in submissions supportive of the proposed Licensing Regulation

Feedback	Government response
Licences should have rules that prioritise protection of environmental needs, such as commence or cease-to- pump rules, as well as Individual Daily Extraction Limits.	 It is not possible or practical to develop and/or implement commence or cease-to-pump rules for floodplain harvesting access licences at this stage because: Access to floodplain flows are unique to each property. This access does not correlate well against flows measured at river gauging stations. That is, high river levels do not necessarily mean that a property has access to floodplain harvesting, and low levels do not necessarily mean that a property does not have access. Current models cannot test the efficacy of different access rules or their effects. That is, it is not possible to quantify whether access rules for floodplain harvesting would deliver the desired environmental and downstream benefits, nor is it possible to quantify the effect that these rules would have on reliability of access for floodplain harvesters.
	The NSW Government has identified that to improve the management of floodplain harvesting, it must have the ability to assess the efficacy of access rules for floodplain harvesting access licences. The NSW Floodplain Harvesting Action Plan commits to this from 2021 onwards.
	Because of the current difficulty in developing and implementing access rules for floodplain harvesting access licences, the NSW Government will include amendment provisions in water sharing plans that will allow us to add access rules when we have the appropriate information base and management tools.
	Nevertheless, restricting floodplain harvesting to legal limits through licensing, measurement and management is expected to deliver very significant improvements to the environment and downstream water users. The department is committed to demonstrating this on a valley-by-valley basis.
	Water sharing plans will also include rules that protect against an increased rate of take by floodplain harvesting licences in environmentally sensitive areas.

Error! Reference source not found. outlines themes raised in submissions that were supportive of the proposed Measurement Regulation. There was an emphasis on transparency and compliance driven by good data.

Table 5. Feedback in submissions supportive of the proposed Measurement Regulation

Feedback	Government response
There was a strong focus on compliance. Stakeholders noted the need for a strong regulatory framework with enforcement driven by accurate and reliable data.	The requirements under the Measurement Regulation, including robust standards for metering equipment and the transmission of water take data in near real-time, will support NRAR in holding water users accountable.
The importance of the measurement policy in increasing transparency and trying to regain the social licence of the irrigation industry was raised.	The requirements under the Measurement Regulation will help give the public confidence that floodplain harvesting is being managed in accordance with legal limits.

Not in support of the proposed amendments

Table 6 outlines themes raised in submissions that were not supportive of the proposed Licensing Regulation. Concerns were raised about the prioritisation of water for the environment.

Table 6. Feedback in submissions not supportive of the proposed Licensing Regulation

Feedback	Government response
Stakeholders were concerned about the priority of access and sharing flows between extractive users, the environment and those for critical human needs.	Licensing floodplain harvesting allows the regulation of a historically legitimate form of take within the limits established under NSW water sharing plans and the Basin Plan. It will deliver significant improvements to the environment and downstream users by controlling the growth that has occurred above these legal limits.
	When designing the licensing framework for floodplain harvesting, the department must comply with the water management principles and water sharing priorities outlined in the <i>WM Act</i> .
	The department will develop a report for each of the water sharing plans amended to include floodplain harvesting provisions. These reports will outline how compliance with these principles and priorities has been achieved.
	One such report is available online now for the Water Sharing Plan for the NSW Border Rivers Regulated River Water Source 2020 at www.industry.nsw.gov.au/water/plans- programs/healthy-floodplains-project/water-sharing- plan-rules

Table 7 outlines the themes raised in submissions that were not supportive of the proposed Measurement Regulation.

Table 7. Feedback in submissions not supportive of the proposed Measurement Regulation

Feedback	Government response
A range of implementation difficulties were raised, including the capabilities and usability of water accounting systems, the declaration of a measurement period and in determining what water comes from which source.	Implementing changes of this scale and complexity will always involve challenges. The NSW Government will continue to engage with water users and other stakeholders throughout the implementation of the measurement rules, to ensure they understand what they need to do to comply.
Concerns around the proposed Ministerial Exemption from the measurement requirements	The proposed exemption-making power is very narrow and consistent with the power for measuring take from rivers. The Minister for Water, Property and Housing can only grant an exemption if satisfied that it is not physically possible to accurately measure floodplain harvesting using one of the prescribed methods.
	Further, the minister can issue an exemption subject to a requirement that the applicant uses an alternative measurement method.
Measurement and metering should be in place before licences are issued	The NSW Government has used multiple lines of evidence to estimate current and historical floodplain harvesting. Licensing will allow the department to control the growth that has already happened.
	The data generated following the rollout of floodplain harvesting measurement will provide an additional source of evidence to inform planning and policy decisions in the future. Measurement data will allow the legal limit to be re-estimated into the future, with any necessary adjustments made through available water determinations. This situation is not unique to floodplain harvesting licences.

Feedback	Government response
Concerns about the staged compliance dates	The NSW Government recognises that water users need certainty about their rights and obligations to floodplain harvest before they invest in measurement equipment.
	Under the final Measurement Regulation:
	 storages 1,000 ML or greater have six months from the date water sharing plan rules for floodplain harvesting licences start to have primary metering equipment installed other storages will have until 1 July 2022 to be fitted with primary metering equipment ahead of these compliance dates, these storages will need to be fitted with 'secondary' metering equipment, such as a benchmarked gauge board, to floodplain harvest.

Other changes

We made some others changes to the proposed regulation amendments to improve clarity and structure.

Table 8 Summary of changes made to the proposed Licensing Regulation to improve clarity

Change made	Description
Title of regulation amendment changed to Water Management (General) Amendment (Floodplain Harvesting Access Licences) Regulation 2021	The title has been changed to clarify that the purpose of the regulation is to establish floodplain harvesting access licences. The date has also changed to 2021.
Structure and order within regulation divisions	We have simplified the structure and order within divisions of the regulation amendment. Clauses that deal with similar requirements have been moved into the same division. The previous and current division and clause numbers are shown in Table 9 below.
Eligibility criteria	We have updated the eligibility criteria under clause 23B to clarify any potential ambiguity about the meaning of 'constructed', as that term was used in the Floodplain Harvesting Policy.
Consultation requirements	We have updated the requirement to provide a 28-day opportunity for making submissions for proposed determinations of eligibility and share components in clauses 23B (4) and 23F, to clarify this may be done before or after the Licensing Regulation begins. This recognises (and avoids unnecessary duplication of) the substantial work that has been completed to date to carry out the floodplain harvesting policy. We have removed notification requirements after a determination has been made as these have no legal effect and can be carried out administratively.
Determination of share components for properties with regulated river entitlement	The purpose of clause 23C is to ensure that share components in regulated river systems and the Barwon–Darling recognise all relevant entitlements in force as at 3 July 2008. We updated this to include entitlements held under the <i>Water Act 1912</i> at that date which subsequently converted to unregulated river entitlements.

Change made	Description
Determination of share components for properties with unregulated river entitlement	We updated clause 23D to include situations where a groundwater entitlement is held in addition to an unregulated river entitlement.
	We also amended the method of determining share components to properly reflect that set out in the Floodplain Harvesting Policy and its implementation guidelines. This included replacing the definition of 'irrigated area' with a more appropriate definition of 'authorised area'.
Descriptions of models	We have made changes to better describe what each model used to determine share components of floodplain harvesting access licences represents and how each is to be used.
	In particular, clause 23J (2) clarifies that the plan compliance scenario model is to be used to proportionally allocate any adjustments required. This is to ensure that the long-term average annual extraction limit is not exceeded (or where exceedance is caused by growth in other types of extraction, the floodplain harvesting part of the limit is not exceeded).
Nomination of water supply work approval	To reduce the administrative burden to issue floodplain harvesting licences, we have added clause 23K (3) to allow a floodplain harvesting licence, once issued, to automatically nominate relevant water supply works used for floodplain harvesting.
Circumstances when a licence will not be issued	We have added clause 23L to clarify that the licensing process will be declared as complete according to floodplains, rather than water sources.

Table 9 Changes in structure to the proposed licence determination regulation

Publicly exhibited regulation	Final regulation
Division 1 Preliminary	Division 1 Preliminary
23A Definitions	23A Definitions
Division 2 Eligibility	Now within Division 1 Preliminary
23B Eligibility criteria	23B Eligibility criteria
Division 3 Determination of share components	Division 2 Determination of share components
23C Minister must determine matters	23B (5)

Publicly exhibited regulation	Final regulation
23D Regulated and unregulated (excluding (3)-(5))	23C Regulated and unregulated
23D (3) – (5)	23H (2), 23I (2), 23J
23E Unregulated river	23D Unregulated river
23F Groundwater	23E Groundwater
23G Minister to notify	23F Minister to notify
Division 4 Miscellaneous	Division 4 Miscellaneous
23H Develop models	Division 3 Models 23G Develop models 23H Current conditions model 23I Eligible works model 23J Plan limit model
23I Models published	23G Develop models
23J Licence takes effect	23K Issue of licence

Next steps

The government remains committed to bringing floodplain harvesting into a licensing framework, underpinned by robust measurement rules, and compliance and enforcement measures. This is a new regulatory regime and the government is committed to working with:

- all stakeholders to ensure that they understand the rules and their intent
- water users to ensure that they understand their obligations.