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SUBMISSION

Floodplain Harvesting licence rules in Water Sharing Plans

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Scope

NSWIC note that the scope of this consultation is specific to the management of FPH licences through rules in WSPs. NSWIC note there are 'default rules for floodplain harvesting' which are not included within the scope of this consultation, including: compliance with the extraction limit, share components, take from overland flow, temporary trade and mandatory conditions. In this submission NSWIC will thus focus specifically on the items in which feedback is sought, namely: account management rules, available water determinations, permanent trade, access arrangements and amendment provisions.



NSW Irrigators' Council

The NSW Irrigators' Council (NSWIC) is the peak body representing irrigation farmers and the irrigation farming industry in NSW.

Through our members, NSWIC represents over 12,000 water access licence holders in NSW who access regulated, unregulated and groundwater systems. NSWIC has member organisations in every inland river valley of NSW, and multiple coastal valleys. Our members include valley water user associations, food and fibre groups, irrigation corporations and commodity groups from the rice, cotton and horticultural industries.

NSWIC engages in advocacy and policy development on behalf of the irrigation farming sector. As an apolitical entity, the Council provides advice to all stakeholders and decision makers.

NSWIC welcomes this opportunity to provide a submission on Floodplain Harvesting (FPH) licence rules in Water Sharing Plans (WSPs), and see this as a valuable opportunity to provide expertise from our membership. Each member reserves the right to independent policy on issues that directly relate to their areas of operation, expertise or any other issues that they deem relevant.

NSW Irrigation Farming

Irrigation farmers in Australia are recognised as world leaders in water efficiency. For example, according to the Australian Government Department of Agriculture, Water and the Environment:

"Australian cotton growers are now recognised as the most water-use efficient in the world and three times more efficient than the global average" i

"The Australian rice industry leads the world in water use efficiency. From paddock to plate, Australian grown rice uses 50% less water than the global average." 2

Our water management legislation prioritises all other users <u>before</u> agriculture (critical human needs, stock and domestic, and the environment), meaning our industry only has water access when all other needs are satisfied. Our industry supports and respects this order of prioritisation. Many common crops we produce are annual/seasonal crops that can be grown in wet years, and not grown in dry periods, in tune with Australia's variable climate.

Irrigation farming in Australia is also subject to strict regulations to ensure sustainable and responsible water use. This includes all extractions being capped at a sustainable level, a hierarchy of water access priorities, and strict measurement requirements.

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¹ https://www.agriculture.gov.au/ag-farm-food/crops/cotton

² https://www.agriculture.gov.au/ag-farm-food/crops/rice



NSW Irrigators' Council's Guiding Principles

Integrity	Leadership	Evidence	Collaboration
Environmental health and sustainable resource access is integral to a successful irrigation industry.	Irrigation farmers in NSW and Australia are world leaders in water-efficient production with high ethical and environmental standards.	Evidence-based policy is essential. Research must be ongoing, and include review mechanisms, to ensure the best-available data can inform best-practice policy through adaptive processes.	Irrigation farmers are stewards of tremendous knowledge in water management, and extensive consultation is needed to utilise this knowledge.
Water property rights (including accessibility, reliability and their fundamental characteristics) must be protected regardless of ownership.	Developing leadership will strengthen the sector and ensure competitiveness globally.	Innovation is fostered through research and development.	Government and industry must work together to ensure communication is informative, timely, and accessible.
Certainty and stability is fundamental for all water users.	Industry has zero tolerance for water theft.	Decision-making must ensure no negative unmitigated third-party impacts, including understanding cumulative and socio-economic impacts.	Irrigation farmers respect the prioritisation of water in the allocation framework.
All water (agricultural, environmental, cultural and industrial) must be measured, and used efficiently and effectively.			Collaboration with indigenous nations improves water management.



Introduction

NSWIC welcomes the opportunity to provide this submission regarding FPH licence rules in WSPs. In addition to the positions raised in this submission, NSWIC endorse³ the specific valley-level details provided by our member organisations representing each of the impacted valleys, namely:

- Barwon-Darling Water Users
- Border Rivers Food & Fibre
- Gwydir Valley Irrigators' Association
- Macquarie River Food & Fibre
- Namoi Water.

NSWIC continue to fully support the Healthy Floodplains Project, particularly the key element of the FPH compliance framework, involving the reduction of FPH to be compliant with the Cap, as well as metering and licensing requirements. The irrigation industry accept that we need a stronger regulatory and compliance framework for FPH, even though this means farmers will access less floodwater than historically. Importantly, this process does not involve new or more water to irrigators - quite the opposite - it requires a historic form of water access to also be compliant with established limits on total water take, meaning FPH will need to be reduced to fit within this limit. It must be noted, that this reform will involve significant social and economic implications for the impacted valleys, and government should be seeking for a smooth transition to minimise these impacts.

Whilst NSWIC welcome the draft rules as a sign of the NSW Government's ongoing commitment to this process, NSWIC note that at the present time, there remains no regulatory framework in place to which these rules will sit. Without a framework in place to firstly establish licences and impose the metering and measurement regime, discussion of draft rules to which licences will operate is largely theoretical and academic. It must be a priority of the NSW Parliament to establish this framework⁴, particularly given the results from the Gwydir region (for example) highlight that 30% of the long-term water take remains outside of the contemporary framework of licensing, metering and limits on water take. Without this first step, this form of take remains unmanaged, unmetered and unaccounted for, which is against the interests of all stakeholders.

NSWIC have undertaken an analysis of stakeholder positions on establishing this framework, and the key finding is that there is a strong and broad commitment across diverse stakeholders to establish the compliance framework of licencing and metering (see Appendix 1). It is deeply unfortunate that other issues are being conflated into this process.

NSWIC agree that FPH must be considered within the established legal limits of water take. The decisions on the rules for how to achieve these limits, must respect the evidence-base developed over nearly two decades, and the socio-economic impacts on communities transitioning to a new framework with less water access.

³ To the extent of any inconsistency, the position of our Member Organisations prevails for the FPH licensing rules in their WSP.

⁴ This will require NSW Parliament to progress the regulations, following public consultation in 2020:

^{1.} Water Management (General) Amendment (Floodplain Harvesting) Regulation 2020

^{2.} Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2020

^{3.} Water Management (General) Amendment (Exemption for Rainfall Run-off Collection) Regulation 2020



Overview

Key Points

- The most critical point raised in this submission is that the **linkage between** account management rules, modelling entitlement size, and other components must be understood and respected i.e any changes to one component must be reflected in the other. Failure to understand and respect this linkage would lead to adverse impacts to water users, further reducing floodwater access beyond the policy intentions.
- The development of FPH licence rules in WSPs is not an opportunity for floodwater access to be further eroded beyond **policy intentions** of achieving Cap compliance. The legal limit of water use the Cap is established, and the development of rules is within this existing limit. The objective in determining FPH licence rules is thus the optimal management of water within this existing limit.
- The implementation of FPH reforms is significant, and will involve significant social and economic impacts to water users and their communities from the reduction in floodwater access compared to historical levels. These impacts, particularly given these communities are still in or recovering from extreme drought, cannot be downplayed. NSWIC recommend social and economic impact assessments are undertaken to better understand and quantify these impacts.
- The development of licence rules must be in the context of acknowledging that a new accounting framework designed to limit long-term take is being implemented. **Transition mechanisms** for water users and communities to shift to less floodwater access should be developed (such as through account limit initialisation) to allow for smooth adjustment to minimise the socio-economic impacts of implementing a reform designed to reduce long-term floodwater take.
- NSWIC support connectivity when possible (as per definition below)⁵, but recommend discussions on promoting connectivity occur separately to the FPH licensing framework (such as through the WSP process), as these FPH reforms focus only on floods when rivers are full and spilling, and connectivity requires particular focus at times of critically low water availability, and across multiple water sources (not just floodplains). A separate and informed discussion would achieve better outcomes, and far greater work is required to develop effective, scientifically robust and workable options.
- NSWIC note that this process has spanned nearly two decades, with significant assessments, modelling, studies and independent peer-reviews informing the final outputs. The FPH licence rules in WSPs must be informed by this evidence-base, and developed methodologically as the most suitable options, and strictly not be the result of political trade-offs or opinion.

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⁵ Defined specifically as flows to meet **critical human**, **environmental and cultural needs**, within the **physical**, **hydrological and climate limits** on rainfall, inflows and flow rates.



Recommendations

Item	Recommendation		
Account Management Rules	The linkage between account management rules and modelling entitlement size must be understood and respected, so that any change to one if reflected in changes to the other.		
	This is necessary to ensure future access remains within limits, but also that water users can access up to limits during infrequent episodic flood events, without perverse or unintended impacts that would go beyond the planned reduction in access intended by this reform.		
Initial AWD	Account limit initialisation is required as a transition mechanism for water users and communities to shift to less floodwater access, and allow smooth adjustment to minimise the socio-economic impacts of implementing a reform designed to reduce long-term floodwater take.		
AWDs after Y1	AWDs should be variable to manage take within limits with adaptive management.		
Trade	Permanent trade of FPH entitlements is important for water users, industry and NSW in meeting obligations of agreements to which the state is a signatory. Trading rules and requirements must be practical, workable and justifiable. Due to infrastructure limitations, temporary trade is not supported.		
Active Management	Whilst the principles of active management are supported, active management rules must only be designed and implemented at a future time when the necessary improvements to modelling and monitoring systems have been made, to inform practical and effective rules that are fair, reasonable and transparent.		
Access Rules & Amendment Provisions	Include amendment provisions, noting other options are too premature to be effectively, fairly, and properly implemented at this time. Areas of stakeholder interest must be addressed through the most appropriate and effective process to be meaningful and achieve positive outcomes.		



Submission

Account Management Rules

Key points

- There is a linkage between the account management rules and modelling entitlement size, and this linkage must be understood and respected. Any changes to one component must be reflected in the other. Failure for this linkage to be respected would result in significant further impacts to water users beyond the policy intentions, whilst also going against principles of evidence-based policy.
- Floodplain harvesting is highly variable in nature, and consequently, account management rules and entitlements will need to align with the highly variable nature of systems and access opportunities. Account management rules must ensure future access remains within limits, whilst balancing the highly variable and episodic nature of overland flows in ephemeral systems. Rules must seek to balance the licensee's ability to take water when it is available and in abundance, and the government's ability to limit total take and manage current/future growth to described limits.
- NSWIC is concerned that some stakeholders are using account management rules as an opportunity to further reduce actual floodwater access further below the policy intentions. This is not acceptable.

Recommendation:

The linkage between account management rules and modelling entitlement size must be understood and respected, so that any change to one if reflected in changes to the other.

This is necessary to ensure future access remains within limits, but also that water users can access up to limits during episodic flood events, without perverse or unintended impacts that would go beyond the planned reduction in access intended by this reform.

Initial Available Water Determination (AWD)

Key points

- NSWIC strongly support *account limit initialisation*, as is consistent with initialisation for all other types of NSW entitlements.
- The determination of the initial AWD must be in the context of acknowledging that a new accounting framework designed to limit long-term take is being implemented. On that basis, account limit initialisation is strongly recommended as a transition mechanism to assist water users and communities transitioning to less water access, and avoiding a shock socio-economic hit. It must be noted that this policy, by design, is reducing water access compared to historical levels of access, and this is a difficult transition for water users dependent on overland flows, and will have significant social and economic impacts to these communities. Account limit initialisation allows for a smoother transition, particularly for communities still recovering (or in some instances, still in) severe drought.
- Without account limit initialisation, as a necessary transitional arrangement, there is concern that if a flood event occurs within the first few years of the framework being in effect, that the rare and limited opportunity to access up to the limit will be missed. In the Border Rivers, for example, the impact of not adopting this principle has been modelled as a 36% reduction in water access in the first 5 years in a wet scenario. This would be an unintended but adverse impact further restricting water access in initial years beyond the reductions already intended by the policy.



- NSWIC note that the 'standard practice' is for an AWD greater than 100% of the share component to be applied in the first year. This standard practice developed given entitlements use long-term averages and need to factor in the variability of take between years, as well as potential carryover. NSWIC do not see justification to differ from standard practice. To the contrary, NSWIC is of the position that given the complexity of these reforms, abiding by standard practice where possible is preferred for simplicity, consistency, transparency and predictability.
- NSWIC note that account limit initialisation has long been proposed and has been the understanding of water users throughout this long reform process. Account limit initialisation has been the subject of broad public consultation (such as through the SAP process), and has been assumed in modelling and entitlement calculations. Any change from this assumption would not only undermine these processes, but would require the re-modelling of all these components. If such a change was proposed, socio-economic assessments must be required to inform the decision-making, as NSWIC has concerns of irreparable socio-economic damage from such a sharp additional regulatory hit (to communities already in drought or drought recovery).
- NSWIC note that all environmental assessments and downstream impact assessments
 have been conducted on the basis of account limit initialisation and have received
 approval from the relevant NSW authorities.
- At a minimum, the initial AWD should strictly be no lower than the modelling of the account balance that would have existed in 2021 had the framework been in effect years ago (i.e. at the time of the last valley-wide flood). Given the impacted valleys have faced severe drought with limited water availability and limited floodplain harvesting access opportunity in recent times, it is anticipated that the outcomes of such a methodology would lead to an initial AWD far greater than 1ML.

Recommendation:

Account limit initialisation is required as a transition mechanism for water users and communities to shift to less floodwater access, and allow smooth adjustment to minimise the socio-economic impacts of implementing a reform designed to reduce long-term floodwater take.

AWDs after Year 1

Key points

 NSWIC support AWDs being varied as a method for adaptive management to manage take within limits, and understand this is specified in the NSW Floodplain Harvesting Policy:

"It is also possible that once individual licences have been issued, estimates of the total long-term average annual take associated with floodplain harvesting could be recalculated due to better information or further improvements in model accuracy.

In recognition of this possibility, water sharing plans will permit available water determinations for floodplain harvesting access licences to be adjusted."

- This mechanism allows for adaptive management as adjustments can be made as new information becomes available.
- Adjustments to the AWD will also be important for water users if future take is below limits (i.e. owing to overly restrictive rules), as there is then a mechanism to adjust

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⁶ <u>https://www.industry.nsw.gov.au/</u> <u>data/assets/pdf</u> <u>file/0017/143441/NSW-Floodplain-harvesting-policy.pdf</u>



access to achieve limits. Notably, the legally defined volumes of water are set (e.g. Plan Limit, Cap and SDLs) – the purpose of this policy is not to define those limits, but to account for this form of water take within these limits, and ensure compliance with these limits.

Recommendation:

AWDs should be variable to manage take within limits with adaptive management.

Trade

Key points

- NSWIC support permanent trade of FPH entitlements, but given infrastructure limitations, do not support temporary trading at this time.
- NSWIC note that NSW is a signatory to numerous Commonwealth agreements which
 outline trading objectives and requirements, such as the National Water Initiative
 (Schedule G) and Basin Plan (Schedule 3). These agreements require free trade of
 surface water except in limited circumstances.
- NSWIC note that trade provides an adaptation mechanism which is important to irrigation farmers given the extent of changes, including both policy reforms and climate change. It also provides an exit-pathway if a farmer can no longer operate their business, as they then have an opportunity to sell entitlements and change their business model, with dignity and financial security. In these instances, trade also provides a mechanism to ensure the size of the productive water pool is not diminished, as that water can be sold to other productive users, rather than being forfeited.
- NSWIC note that there are specific issues relating to trading zones, and refer to the submissions of our member organisations for specific details. There are concerns that trading zones provide artificial market barriers and may lead to inequitable outcomes.
- Trading rules and requirements (including the development of trading zones) must be practical and workable, with clear justification. This may require the establishment of an anomalies process.

Recommendation:

Permanent trade of FPH entitlements is important for water users, industry and NSW in meeting obligations of agreements to which the state is a signatory. Trading rules and requirements must be practical, workable and justifiable. Due to infrastructure limitations, temporary trade is not supported.

Active Management

Key points

- Whilst NSWIC fully supports the principle of active management that Held Environmental Water must be protected from extraction, NSWIC do not see a practical and effective option to implement active management in a fair and reasonable manner for FPH at the present time.
- NSWIC recommend developing active management rules for FPH at a later point in time when the rules can be informed by a better understanding of the movement of floodwater on floodplains (particularly localised flooding), and when more advanced monitoring systems are in place.



Recommendation:

Whilst the principles of active management are supported, active management rules must only be designed and implemented at a future time when the necessary improvements to modelling and monitoring systems have been made, to inform practical and effective rules that are fair, reasonable and transparent.

Access Rules & Amendment Provisions

Key points

- NSWIC is highly concerned by the proposed options to implement event-based management (S324s or prohibiting access until downstream flow targets are met) and consider these options premature. NSWIC agree that the limitations are too significant to effectively, fairly and properly implement such options at the present time. Such limitations include (but are not limited to):
 - o Inadequacies of river system models to represent return flows from the floodplain to rivers, and the relative impact on FPH licences;
 - Varying interpretations of the desired outcomes and objectives, and the need for stakeholders to come to a shared understanding of connectivity.
- NSWIC is of the firm position that this reform is already significant and complex, and the immediate priority must be establishing the compliance framework, and then, technical and detailed discussions of this kind can be a secondary and separate step.
- Any new measures must be scientifically robust, and undergo due process with due
 diligence, such as independent peer-review, and public consultation. NSWIC would
 strictly not support any measures that have not undergone this process.
- NSWIC is of the view that significant and technical work is required before informed and effective pathways forward can be developed. NSWIC do not support any delays to implementing the FPH compliance framework, owing to the industries obligation to reduce take to Cap as soon as practicable, as well as the reform fatigue and uncertainty after nearly two decades of development.
- NSWIC has specific comments regarding the use of S324s, as outlined in our submission to the *Independent Assessment of the Northern Basin First Flush Event*, and summarised below⁸.
- Given these limitations, and the need for due-process and genuine outcomes, NSWIC
 is of the position that amendment provisions are the only feasible option at this time
 to genuinely address stakeholder interest in this area. Any amendment provisions

NSWIC has long called for the development of a regulation that codifies the application of S324s in a clear and transparent framework to guide Government on finding a balance between addressing emergency situations and protecting the integrity of the water management framework. WSPs must be effective in dealing with a broad range of scenarios, to avoid normalising the practice of suspending the regulatory framework.

NSWIC thus do not support relying on S324s (unless exceptional circumstances).

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⁷ https://www.nswic.org.au/wordpress/wp-content/uploads/2020/06/2020-06-07-NSWIC-Submission-Independent-Assessment-of-the-Northern-Basin-First-Flush.pdf

⁸ NOTE on S324s - NSWIC only support S324s in exceptional unprecedented circumstances to manage events more severe than anticipated when WSPs were made, and for the specific purpose of achieving critical public interest outcomes in situations where the WSP would otherwise not achieve those outcomes. S324s are an emergency mechanism, and should not become a business-as-usual approach. S324s do not provide the certainty and predictability which water users require to run businesses. S324s also allow for political discretion which lacks transparency and accountability.



must specify that amendments will be subject to further public consultation, and clearly outline the process involved in implementing them.

- A 'case for change' would need to be established to justify the need for any amendments to be implemented, such as, if the data that will become available through metering and reporting requirements and the next stage of the Floodplain Harvesting Action Plan, indicates that additional measures of this nature are required.
- NSWIC note that a large driver for these provisions is the current interest in promoting connectivity. NSWIC supports river connectivity defined specifically as flows to meet **critical human**, **environmental and cultural needs**, within the physical, hydrological and climate **limits** on rainfall, inflows and flow rates. However, the times at which these critical needs are at risk, are times of critically low water availability, rather than during flood events (which is the focus of this reform). NSWIC is also of the position that focusing on river connectivity just within the context of floodplains as the water source, and at times the rivers are full and spilling, is too limiting, and would thus not lead to optimal outcomes.
- NSWIC thus recommend focusing on connectivity separately from the FPH licensing
 process, such as through the WSP process, in order to achieve workable, practical and
 genuinely effective outcomes. As highlighted by the Independent Assessment, this will
 require stakeholders coming together to form a shared understanding of connectivity.
- NSWIC recommend implementation of the recommendations arising from the *Independent Assessment of the Northern Basin First Flush Event*, regarding managing first flushes. The management of first flushes following critically dry periods must be considered separately to the management of flood events more generally.

Recommendation:

Include amendment provisions, noting other options are too premature to be effectively, fairly, and properly implemented at this time. Areas of stakeholder interest must be addressed through the most appropriate and effective process to be meaningful and achieve positive outcomes.

Conclusion

NSWIC and our members are available at your convenience, if you have any questions or would like any further information.

NSW Irrigators' Council.



Appendix 1: Stakeholder Expressions of Support for Floodplain Harvesting Licensing & Metering

WENTWORTH GROUP

Wentworth Group of Concerned Scientists

"We recognise the progress made on these much needed reforms to ensure all forms of take are licenced, metered and brought into a compliance framework based on diversion limits. We also appreciate that the proposed reform is aimed at reigning in the growth of FPH diversions that have occurred since implementation of the 1993/94 valley-wide Cap on diversions."



Commonwealth Environmental Water Holder

Commonwealth Environmental Water Office

"Bringing floodplain harvesting (FPH) into the NSW licencing framework is supported by the Commonwealth Environmental Water Holder (CEWH), in the context of knowing the overall use of the water resource and thereby providing a means to protect significant environmental assets and ecosystem functions within NSW." ¹⁰



Environmental Defenders Office

"There are benefits to bringing floodplain harvesting within a licensing and associated compliance framework, such as a requirement that the water taken under a licence must for the first time be metered and measured.

Further, not all floodplain harvesting that has occurred up to the present day will be licensed (that is, the licensing is supposed to reduce the volume of water that is being diverted from floodplains)." 11



Murray-Darling Basin Authority

"The MDBA is supportive of the suite of reform measures that NSW is undertaking to bring floodplain harvesting into both the NSW licensing and regulatory framework and the Commonwealth framework for regulating water resources in the Murray–Darling Basin.

Measurement and metering of take by floodplain harvesting is critical to building confidence and understanding of the impacts of this form of take on the environment and river flows."12

 $\underline{c29dd5cf95f9/files/cewh-submission-independent-review-floodplain-harvesting-nsw-water-resource-plan-nov-2018.pdf}$

⁹ https://wentworthgroup.org/2020/12/border-rivers-fph-rules/2020/

¹⁰ https://environment.gov.au/system/files/pages/dca287c3-73bd-4ec1-a3b1-

[&]quot;https://www.edo.org.au/2020/12/09/floodplain-harvesting-without-the-necessary-protections-legal-action-is-a-risk/

 $^{^{12} \}underline{https://www.parliament.nsw.gov.au/lcdocs/submissions/67992/0001\%20Murray\%E2\%80\%93Darling\%20Basin\%20Authority.pdf}$





NSW Irrigators' Council

"We want full licensing and metering for floodplain harvesting as soon as possible." ¹³





South Australian Royal Commission

"A licensing and metering regime for floodplain diversions is necessary. New South Wales and Queensland must act on this issue to restore confidence within their own communities and amongst Basin States.

In New South Wales, it is frankly remarkable that a floodplain diversion policy has still not been implemented. Although the policy has been revised, it reveals no substantial change that could justify the failure to implement it. There is no objection, in principle, to the approach canvassed by New South Wales that would require floodplain diversions to be licensed and floodplain structures to be approved, having regard to the impact of diversions and the construction of infrastructure upon the environment and downstream users by reference to a Floodplain Management Area Plan."14



South Australian Government

"The Royal Commission also recommended a licensing and metering regime for floodplain diversions. South Australia supports Basin Governments developing this proposal to strengthen and improve existing regimes aimed at addressing water theft." 15

¹³ https://www.nswic.org.au/wordpress/wp-content/uploads/2020/09/2020-09-22-MR-FPH-Exemption-Regulation.pdf

¹⁴ https://www.environment.sa.gov.au/topics/river-murray-new/basin-plan/murray-darling-basin-commission

¹⁵ https://www.environment.sa.gov.au/files/sharedassets/public/river_murray/basin_plan/saresponse-mdb-royal-commission.pdf