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Policy on Healthy Floodplains

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Chief Executive Officer

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Disclaimer

This policy is not – and must not be interpreted as – endorsement or support for any of the legislation, plans or processes to which this document addresses.

This policy is not designed to favour any side of politics. As an apolitical entity, all NSWIC policies are designed based on evidence and robust consultation with irrigation farmers and communities to which these issues affect most.

Policy positions must be passed through a motion at a NSWIC meeting by Members. However, 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.

1. Introduction to NSWIC

The NSW Irrigators' Council (NSWIC) is the peak body representing irrigation farmers and the irrigation industry in NSW. Our Members include valley water user associations, food and fibre groups, irrigation corporations and commodity groups from the rice, cotton, dairy and horticultural industries. Through our members, NSWIC represents 12,000 water access licence holders in NSW who access regulated, unregulated and groundwater systems.

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

Irrigation farmers are stewards of tremendous local, operational and practical knowledge in water management. With over 12,000 irrigation farmers in NSW, there is a wealth of knowledge available. NSWIC and our Members are a valuable way for Governments and agencies to access this knowledge.

The policies of NSWIC are intended to provide decision-makers with a source of advice, guidance and evidence for best-practice policy, not only *endorsed* by the industry, but *developed* by the industry. This provides decision-makers with an efficient, timely, and effective means to adopt and implement industry and community policy positions at local, state and federal levels.

All NSWIC policies are founded on core principles.

2. Members of the NSW Irrigators' Council

The NSW Irrigators' Council has 26 member organisations that are located across NSW. These member organisations include valley water users' associations, food and fibre producers, irrigation corporations and commodity groups from the rice, cotton, dairy and horticultural industries.

Southern Valleys

- 1) Murray Irrigation Ltd.
- 2) Murray Valley Private Diverters Inc.
- 3) West Corugan Private Irrigation District
- 4) Western Murray Irrigation Ltd.
- 5) Murrumbidgee Private Irrigators' Inc.
- 6) Murrumbidgee Groundwater Inc.
- 7) Murrumbidgee Valley Food & Fibre Assoc.
- 8) Murrumbidgee Irrigation Ltd.
- 9) Coleambally Irrigation Co-operative Ltd.
- 10) Riverina Winegrape Growers
- 11) YACTAC
- 12) Ricegrowers' Assoc. of Australia

Lachlan Valley

- 13) Lachlan Valley Water

Coastal Valleys

- 14) Bega Cheese Ltd.
- 15) Hunter Valley Water Users' Assoc.
- 16) Richmond Wilson Combined Water Users' Assoc.

Northern Valleys

- 17) Border Rivers Food & Fibre
- 18) Gwydir Valley Irrigators' Assoc. Inc.
- 19) Namoi Water
- 20) Macquarie River Food & Fibre
- 21) Barwon-Darling Water

State-wide

- 22) Cotton Australia
- 23) Dairy Connect NSW
- 24) NSW Farmers' Assoc.

3. Relevance to NSW Irrigators' Council's Strategic Plan

This policy has been prepared with consideration to the NSWIC Strategic Plan it's mission and in particular its values of integrity, leadership, evidence and collaboration.

This policy has been developed in recognition for need for leadership and direction and its development has been prioritised to help inform and engage with stakeholders regarding the implementation of this critical and complex reform.

This policy is prepared to demonstrate the NSWIC commitment to implementation of floodplain harvesting licences in NSW by clearly articulating a state-wide position on these matters, now and into the future.

This policy aligns with the strategic objectives to enhance government and stakeholder relations, as well as demonstrate our improved process for internal governance to members.

4. 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 on-going, 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.

Policy for Healthy Floodplains

All water (agricultural, environmental, cultural and industrial) must be measured, and used efficiently and effectively.

Collaboration with indigenous nations improves water management.

4. NSWIC Policy Positions on Healthy Floodplains

4.1 Primary Policy Position

“The NSW Irrigators Council is supportive of the need to bring the legitimate historical floodplain harvesting access into the current regulatory framework by converting a descriptive take licensed under NSW Water Act 1912 into a volumetric license consistent with the NSW Water Management Act 2000.”

“The NSWIC agree that with all water available to irrigators and the river system limited, licensing of floodplain flows must demonstrate ‘no more or no less’ take and provide tools to better measure and monitor floodplain take to ensure overall usage remains within described limits, as set out in water sharing plans and the Basin Plan.”

Agreed 4 July 2019

4.2 Process and communication

Policy Position:

“The process should be done in a timely and efficient manner, balancing the competing needs of working with sound information, and the need to complete the process at the earliest feasible opportunity as a means to secure the future of industries and communities that rely on floodplain flows.”

Agreed 4 July 2019

Only by converting this descriptive take into a volumetric licence and bringing it in line with other entitlements in the regulatory framework, can we improve its measurement, monitoring and reporting and ensure the sustainability of our industry and communities that rely on floodplain flows. Contemporising FPH, as with all other conversion processes, is not without its challenges.

NSWIC welcomed the NSW Government’s independent peer review of the implementation of the NSW Floodplain Policy, which was finalised in August 2019. It is critical that the NSW Government continues to improve the confidence and trust of all stakeholders by undertaking the recommendations of that review process but that in doing so, consider an ongoing independent and objective review for the final stages of the program’s implementation.

The NSW Government’s floodplain harvesting action plan; as their blueprint to implementing the licencing and management (monitoring and compliance regime) by the third quarter of 2021 is ambitious and requires a significant amount of work, by the government, in a short timeframe. The NSW Government must also consider how they will keep stakeholders engaged throughout this process and report on key outcomes.

NSWIC has clear expectations on how to communicate and engage with stakeholders (insert link to this policy). It is important that the NSW Government provides strong and consistent communication with water users and communities, including both those who floodplain harvest, and those who do not regarding the technical aspects of this reform and correct any miss-information provided by any party.

This is important to ensure that the policy is practical and implementable, but also to ensure adequate public understanding so that the social license to operate is not undermined by misinformation.

It is imperative that the irrigation farmers who have willingly contributed towards this process by gathering this information are genuinely consulted and involved in key aspects of the process moving forward. It is imperative that these individuals can have visibility of their farm's model calibration process and see transparency in communicating farm-level entitlements back to land holders.

It is important that the NSW Government ensure appropriate resources are allocated to this program in its final stages and commitments to communication and transparency are maintained despite impending deadlines.

NSWIC remains committed to the timeframes presented although is concerned regarding the NSW Government's ability to meet those timeframes, given the workload required to meet the expectations of the peer review and stakeholders.

4.3 Public Confidence

Policy Position:

"It is critical to ensure that the licensed volume of FPH can demonstrate with confidence that no more or no less water is taken in respect described limits, as set out in water sharing plans and the Basin Plan and the model results can demonstrate this confidently."

Agreed 4 July 2019

Public confidence is fundamental to water management in NSW, and Government must actively build public confidence of all stakeholders. As outlined, the completion of the independent peer review and the ongoing independent assessment is a critical step in this process. However, it is the NSW Government's responsibility to demonstrate that the implementation of this program, ensures that no more or no less water is taken in respect described limits, as set out in water sharing plans and the Basin Plan and the model results can demonstrate this confidently. This will ensure that everyone receives their fair share with creating any new, unmitigated third-party impacts.

Communities everywhere cannot afford to not finalise the implementation of this program, as the status quo is untenable and the government must work to ensure there is public confidence in the management of all water in NSW, with floodplain harvesting just one component.

NSWIC believes that while public confidence is important it should be part of a broader government agenda and that the needs of the broader public will be different to water users directly involved in the program.

4.3.1 No more and no less take

Floodplain harvesting as a form of access is not new but rather is a volumetric conversion of current and historic practice. Such a process cannot lead to any more or any less, take of water.

Firstly, any entitlement and subsequent allocations provided through the implementation of licenses are already estimated as historical take, the licensing process is better estimating this take. (insert reference to MDBA BDL video)

Secondly, as all water take is limited, the issuing of volumetric licences and the associated account management tools will help to better regulate, share and account for water take in the valley allowing mechanisms to reduce take, where limits maybe exceeded.

NSWIC holds the view that the licensing of floodplain harvesting should not result in any net reduction of the overall Cap, or the Cap on any other classes of water. The process will result in a better definition of Cap and future Sustainable Diversion Limits but that this does not represent more water being taken but rather a historical underestimation of that form of take.

Critical to this process is the fundamental need for quality data to inform the volumetric conversion of FPH and demonstration of these aspects via models.

For that reason, NSWIC recommends a flexibility mechanism which allows adjustments to the volumetric number to be made as higher quality data and model calibration is made possible, to ensure the modelling is accurate and ground-truthed.

A calibration period is needed to verify that the modelled volumetric licences are an accurate indication of current FPH volumes. The aim of this calibration period would be to:

- a) Improve confidence and trust in the model; and,
- b) Ensure that the outcomes produced are robust and accurately reflect what is actually occurring.

The calibration period may take the form of a sunset clause, flexibility/adjustment mechanism, or formalised review / adaptive process to continue to allow for improvements based on verification/validation after major floodplain harvesting events occur.

4.4 Rainfall Runoff

Policy Position:

Rainfall runoff collected from irrigation areas is not floodplain harvesting. The collection and re-use of rainfall is not legally or in practicality take but part of the management of irrigation developments within irrigation developed areas for environmental purposes and must be consistently regulated throughout NSW. Runoff from irrigated areas has been enhanced by design due to:

- *Land improvements and levelling to improve drainage (runoff);*
- *Farming practices that create runoff including minimum soil-water deficits and limited groundcover;*
- *Water reticulation and storage systems to enable water recycling; and*
- *Irrigation application that artificially wets the profile.*

NSWIC consider it inappropriate to include rainfall runoff within floodplain harvesting licences as part of a state-wide regulation. We recommend the Government identifies alternatives means to regulate rainfall runoff.

Agreed 4 July 2019

NSWIC maintains that it is inappropriate, impractical and illogical to include rainfall runoff in FPH licencing as it creates state-wide inequities and has compromised the monitoring and management of floodplain flows. For irrigation farmers, the preferred option is removing rainfall runoff from irrigation development areas, is excluded from the FPH licence.

Rainfall runoff is not a form of additional take. A significant proportion of rainfall runoff is the result of farmers developing their farms in a way that maximises water efficiency, and thus creates 'rainfall runoff' as water can then be recycled and reused multiple times on the farm to maximise water efficiency. Rainfall runoff is thus artificially created / recycled water. This does not involve additional take.

NSWIC certainly recognises that rainfall runoff is part of the water balance, and accept that means to regulate all water will be required, but we do not agree that FPH licencing is the platform to regulate rainfall runoff given it is a distinct and state-wide (not just floodplains) practice.

Given the difficulties with modelling rainfall runoff and the recommendation for further review (by another third-party), its important NSW Government consider alternative options that can be consistently applied state-wide to account for rainfall runoff.

4.4.1 Third-party analysis

NSWIC urges the Government to adopt the recommendation from the Independent Reviewers for third party analysis of the quantum and significance of rainfall runoff. NSWIC notes that in the Action Plan for Healthy Floodplains, a “Report on the significance of additional rainfall runoff due to irrigation and how this is being managed” is due to be completed by Q4 2019.

The Terms of Reference should also include an assessment of the policy and its impacts across the state; that being areas outside of a designated floodplain or the five initial northern valleys as well as improved modelling options to better estimate rainfall runoff given the deficiencies at current.

4.5 Downstream and broader impacts

The process of volumetric licensing floodplain harvesting take is one of conversion and discussions regarding impacts from such take, as with all other forms of take, is supplementary to issuing licenses.

Therefore, the NSWIC support *the NSW Government undertaking continual upgrades to ensure that modelling of the impacts and benefits of regulating water take can be undertaken.*

NSWIC note that the Action Plan provides for the provision of a Environmental Benefits report and downstream benefits should be included in that report.

NSWIC note that continual model improvement is required for all surface water planning models and therefore, support further quantification of the impacts and benefits of FPH elsewhere in the system are important improvements. It is vital that governments, as well as the irrigation farming industry, are able to identify with confidence the outcomes of the implementation of the program on communities on the floodplain and downstream in order to communicate with the public and maintain social licence to operate.

NSWIC recommend further work is done in this regard, however, it should occur separately/subsequently to ensure it does not stall the regulatory transition to bring the practice into alignment with the requirements of the *Water Management Act 2000*.

4.6 Trade

Policy Position:

“While NSWIC recognizes National Water Initiative principles around tradability of water rights, NSWIC does not support the trade of inherent rights (such as rainfall) due to compliance difficulties and

operational impracticalities and recommends this be excluded from the trading framework and cannot be traded from a property.”

Agreed 4 July 2019

Central to a trading framework is the need to ensure compliance and ensure operational practicalities where the water can be transferred between parties, so the market functions effectively.

As this process is converting historical take, NSWIC suggests that in the event that no growth in extractions has occurred, if an individual breaches their floodplain harvesting licence accounting limits and is actively seeking to trade in additional floodplain allocation, but has not altered their floodplain works materially, then the licencing determination process has been inaccurate and should be revisited.

The development of any future trading framework must carefully consider options to ensure that there is confidence that floodplain take has been reduced by the traded volume either temporarily or permanently.

The removal of rainfall runoff from the FPH license would simplify the trading rules and eliminate the risk of farms being unable to continue to capture rainfall within the irrigation development, if they have traded their FPH license.

4.7 Monitoring & Measurement

The ongoing monitoring of floodplain harvesting must give confidence to both water users and the community that take remains within limits.

Critical to giving confidence to water users and communities, is clearly communicating that this process will ensure that the volumetric conversion of current and historic practice will not and cannot lead to any more or any less, take of water.

As a principle, NSWIC strongly expects all water (agricultural, environmental, cultural and industrial) to be measured, and used efficiently and effectively. The Council believes that the Monitoring & Auditing Strategy should facilitate the collection of more data to inform modelling of accurate FPH.

The future monitoring strategy should be practical, achievable, accurate and aligned to risk of take but should also be supported through other lines of evidence such as satellite monitoring and a strong on-ground compliance program to monitor floodplain structures.

NSWIC supports the development of a national standard for floodplain measurement although acknowledges the difficulties in developing this quickly and implementing it, given the challenges experienced in the surface water and groundwater systems which have had a national standard for some time.

5. Background Information

The responsible and sustainable conservation of floodwaters as they cross the floodplain has been a critical part of the irrigation resource mix in the northern NSW valleys since the 1960's and 70's.

The typography and hydrology of some valleys, particularly (but not limited to) the Northern Basin, are characterised by networks of small creeks and floodplains that may intermittently flow, rather than large consistently flowing rivers. These regions are also characterised by climatic extremes of floods than droughts, meaning it is critical for farmers to conserve water when its available during times of flood, to sustain farming throughout subsequent drought periods. This ensures farming can be sustainable through dry periods, but also reduces the demand on the networks of smaller creeks during dry periods.

Floodplain harvesting can only occur if there is a flood – in which case there is excess water in the networks of creeks, causing the river system to overflow. In these circumstances, the capacity of the system is full, meaning there is no further capacity for water to be delivered through these small creeks downstream.

The amount of floodwater which is stored by farmers is relatively small compared to the total amount of water in the landscape from the flood.

The historical reliance on floodwater can be traced to a number of factors including:

1. The relatively low yield of low reliability entitlements from public infrastructure dams;
2. The topography and the influence of the sub-tropical climate and the significant rainfall events which produce regular, large, medium and small floods;
3. The delivery timeframes and operational decisions to efficiently manage public infrastructure including dam wall debiting of accounts;
4. Limited re-regulation within the river systems; and
5. The historical switch of water infrastructure investment from public investment to privately funded on-farm investment.

Historically, floodplain harvesting was regulated under Part 2 and Part 8 of the *Water Act 1912*, and was viewed as an implied right, in a similar manner to the taking of supplementary (off-allocation) water. When the *Water Management Act 2000* was introduced, following from the National Water Initiative, there was a requirement for all water usage to be within the same volumetric licencing framework. This included surface water, groundwater and floodplain harvesting. The Healthy Floodplains Project focused on bringing these existing practices and regulations under the same NSW water management and compliance framework as other extractive forms of take.

Floodplain harvesting is a key economic and social driver for the towns of the Northern Murray-Darling Basin, and to a lesser degree the southern irrigation valleys and the coastal regions. It forms a significant part of the portfolio of water entitlement products needed to manage the episodic nature of water availability in the Northern systems.

Currently as the NSW Healthy Floodplains policy stands, anyone who collects and impedes rainfall on their property into a storage facility is a floodplain harvester, hence the policy is not only relevant in the Northern systems as once understood.

6. Recent NSWIC Activity

May 2019 – NSWIC Submission on the Independent Review of NSW Floodplain Harvesting Policy Implementation [[HERE](#)].

February 2019 – NSWIC Submission on Draft Floodplain Harvesting Monitoring and Auditing Strategy [[HERE](#)].

November 2018 – NSWIC Submission to Department of Industry – Independent Review of NSW Floodplain Harvesting Policy Implementation [[HERE](#)]

7. Approval and Review Details

Approval and Review	Details
Approval Authority	Council [Policy Motions], Chair [Explanatory]
Review Period	Maximum 5 years, or as required earlier
Next Review Date	[04/07/2024]

Amendment History	Details
Original Approval Date	[first approved date DD/MM/YYYY]
Amendment Authority and Date	[Relevant approval authority DD/MM/YYYY]
Notes	Updated policy following NSWIC meeting and feedback as well as information session on the NSW Floodplain Harvesting Action Plan.

8. Contact Us

If you would like to give us feedback on this policy document, you can contact our office at nswic@nswic.org.au or call us during office hours on (02) 9264 3848.

For more information about the Council and our work, visit our website www.nswic.org.au.