

27 October 2021

## **Inquiry into Floodplain Harvesting: Supplementary questions to NSWIC**

Dear Committee,

This letter is in response to the supplementary questions sent to NSW Irrigators' Council (NSWIC) on 12/10/2021.

### **NSW Irrigators' Council (no specific witness)**

1. How many members do you currently have?
  - a. Has the number of members changed over the last 5 years?

NSWIC has member organisations and levypayers in every Murray-Darling Basin valley of NSW, as well as a several coastal valleys. In total, 18 organisations are NSWIC members. The number of members has changed from time to time since the Council's inception in 1983. A list of membership organisations is available on our website.

2. If floodplain harvesting licences are issued, as proposed by NSW, will this affect allocations to general security licence holders in the northern valleys?

The designated floodplains in the northern basin where floodplain harvesting is proposed to be licensed are below each of the public headwater storages in those valleys and therefore, the issuing of licences below those storages will not impact general security licences which are linked to inflows into those headwater storages.

However, there is a risk that if floodplain harvesting licences are not issued and action is needed to address growth in total extraction from all forms of water take in these valleys or others around NSW, allocations to general security licences may be impacted as per the process set out in water sharing plans.

3. If irrigators were aware of the 1994 cap on development, why were new floodplain works constructed?
  - a. Why did floodplain harvesting extractions continue to increase?

This question implies a misunderstanding of the Cap, which is on total valley diversions, not on irrigation development. Murray-Darling Basin Commission documents from the time it was decided to impose the Cap state that: *"The Cap should restrain diversions, not development. With the Cap in place, new developments should be allowed, provided that the water for them is obtained by improving water use efficiency or by purchasing water from existing developments."* See: [https://www.mdba.gov.au/sites/default/files/archived/cap/cap\\_brochure\\_0.pdf](https://www.mdba.gov.au/sites/default/files/archived/cap/cap_brochure_0.pdf)

To be clear, there are not separate Caps on different forms of water take; rather the Cap is the total diversions from all forms of take. In this context, the MDBA explains:

*Floodplain harvesting has been regulated under the cap system since 1995, although it has never been fully measured and accounted for. The proposed changes mean usage will typically now be restricted to the levels used in the year 2000. Doing so will make these*

*limits consistent with the Basin Plan, existing arrangements for other water use, and represent a lower level of overall water use than was in place under the Cap in 1995, which is considered sustainable.*<sup>1</sup>

FPH extractions have continued to increase because there has not been (and still isn't) any mechanism in place (such as volumetrically-limited licences) to limit take so that total diversions from all forms of take are within Cap. That is the entire point of this reform. In 2008 the NSW Government initiated an embargo on infrastructure as a measure to limit further growth in the meantime.

Northern systems require farmers to manage their own water because they don't have the 'turn on the tap' convenience that exists elsewhere. This is because the northern Basin has so few public water storages (i.e. northern Basin public storages are only 28% the capacity of those in the southern Basin has).

Governments (over many decades and various sides of politics) have actively encouraged floodplain harvesting, as a result of the limited public water storages in the northern Basin and the sustainability of the practice in capturing water at times of plenty to conserve for later times of scarcity.

4. Why didn't your members apply for a floodplain harvesting licence under the water act 1912?

There was no means to do so, to our knowledge. Regardless, water users were never instructed to do so.

**Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council**

1. Ms Miller also said "Floodplain harvesting—I am a Victorian—as far as I am aware, does not occur in Victoria or in South Australia, so that would bring it back to Queensland."

a. Can you please explain how floodplain harvesting could occur on the northern side of the Murray River and not the southern side?

As per my answer, as far as I am aware, floodplain harvesting does not occur in Victoria or South Australia. Questions relating to other States should be directed to the relevant water authorities in those States.

Floodplain harvesting is, however, recognised for the purposes of Cap and BDL/SDL accounting as occurring in NSW and Queensland. This practice is most common in northern NSW Basin valleys, but it may also be occurring in southern valleys such as the Murrumbidgee and the Edward, Wakool, and Tuppal-Bullatale floodplains in the NSW Murray catchment. Further information can be found in the Natural Resources Commission audits of the 10 Floodplain Management Plans for southern NSW Basin valleys.

2. In the hearing Ms Miller said "So that means if there was no floodplain harvesting farmers can still use water up to the Sustainable Diversion Limit, but it will mean that more is taken from rivers under other existing licences and rights. We think this is the worst outcome for the environment, for connectivity and for downstream communities."

a. If there was to be no floodplain harvesting and no changes to the Baseline Diversion Limit /Sustainable Diversion Limit as currently proposed by NSW, how much more water do you predict would be taken under existing licences?

This question is very hypothetical and does not make sense.

Firstly, there is floodplain harvesting occurring and it is already estimated as part of total valley diversions, which have always been known to need updating. This means that it is extremely unlikely that no changes to the Baseline Diversion Limit /Sustainable Diversion Limit would occur. The MDBA has updated BDLs/SDLs in other valleys in other States since 2012, and will continue to do so as new and more accurate information comes to hand.

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<sup>1</sup> <https://www.mdba.gov.au/basin-plan/sustainable-diversion-limits/floodplain-harvesting-overland-flows>

Secondly, removing FPH does not make more water available, but rather this volume of water which is still being assessed by NSW, can also be made allocated to other forms of take. That's because limits on extraction are for the total water take by all means/methods – there is no specific limit for each form of water take individually, but a total for the collective level of extraction. Put simply – the limit is on the total, not separate limits on each component of the total. The limit on total extraction varies each water-year depending on a range of factors, such as variable rainfall and runoff.

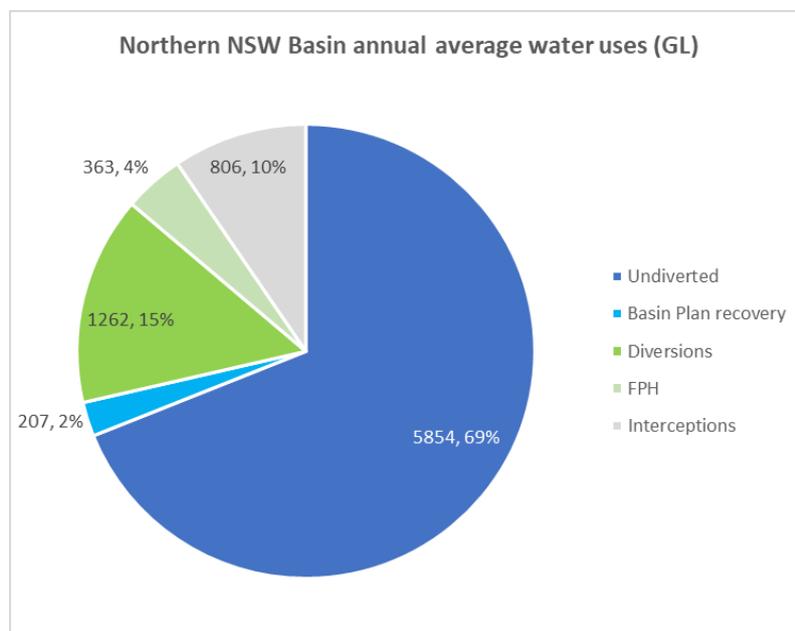
If there was no floodplain harvesting, there would be serious negative environmental consequences because the timing of water access would shift away from floods (i.e. times of plenty), to allowing more access at other, non-flood times subject to the existing licence conditions such as supplementary licences.

Finally, to understand the long-term volume of water being calculated as within legal limits refer to the modelling scenario reports from NSW.

3. Ms Miller also said “Using the MDBA’s water balance tables underpinning the basin plan, that means floodplain harvesting in northern New South Wales amounts to just 3 percent of the average 12,100 gigalitres of northern Basin inflows.”

a. Excluding inflows in Queensland and passing over the border, what is the volume of inflows in northern NSW valleys and what percentage do the proposed floodplain harvesting volumes represent?

The below diagram has been constructed in response to this question, to exclude inflows from Queensland and Queensland diversions/interceptions. Floodplain harvesting in NSW at estimated current levels of 363GL then represents 4% of the total water balance. The compliance proposal by NSW would further reduce this by ~100GL if this reform progresses, based on provisional licensed FPH volumes included in the recent IPART pricing determination. This would reduce FPH as a proportion of water use in the northern NSW Basin from 4% down to 3%, and increase the undiverted proportion to 70%.



Notes:

- Diversions are take from watercourses, and include water for towns, stock and domestic and irrigation entitlements.
- Interceptions include hillside farm dams, basic landholder rights and plantations. This category does not include take from floodplain harvesting.
- Basin Plan recovery is annual average yield from entitlements recovered for the environment.
- FPH is NSWIC estimated current diversion; various sources put diversion in the range 350-390GL.

Data sources: Inflows:

- MDBA 2011 Water Resource Assessment, Table 25, p47: <https://www.mdba.gov.au/sites/default/files/pubs/1111-BPKId-water-resource-assessments-development-baseline.pdf>;
- Water recovery: DAWE recovery progress tables, [Surface water recovery under the Basin Plan as at 30 June 2021 \(awe.gov.au\)](https://www.dawe.gov.au)
- BDL diversions: MDBA 2019-20 BDL estimate table, [Sustainable Diversion Limit \(SDL\)s as at 30 June 2019 - surface water.XLSX \(mdba.gov.au\)](https://www.mdba.gov.au)
- FPH: DPIE WSP models for Gwydir, Border Rivers and Macquarie; Namoi and BD best estimate.

4. Ms Miller also said “Storages are also multipurpose. These storages are also used to contain water that they get from general security allocations because the way that it works up there, with the reduced river losses and so forth, is that those releases are put out in block releases from the dam and if you do not have on-farm storage to take it as it goes past your farm, then you cannot access that general security allocation at all. So these storages are there reflecting the boom-and-bust nature of the system up there so that they can store water from supplementary access under those licences and also store water that they access under general security licences and they can also put floodwater into it as well.”

- a. Is it common practice for irrigators to store all of their general security water in storages at or around the same time as harvesting flood waters?

This hypothetical question is very dependant on the circumstances at the time of the theoretical flood but this is a possibility. The water user may also have a range of other entitlements in those dams also such as, supplementary water, groundwater, unregulated entitlements.

Different farms are operated differently for different reasons, there is no ‘1 size fits all’.

- b. In 1994 when there was less than 600GL of storage capacity, where did irrigators store the floodwater and general security water?

In their storages, although we note that the rules governing general security accounting management and delivery operations were very different in 1994.

- c. Have river transmission losses increased or decreased since 1 July 1994?

This question would need to be directed to the relevant authorities, such as WaterNSW and DPIE-Water. Delivery operations and account management rules since then have very much changed.

**Mr Peter Holt, Special Counsel, Holding Redlich, NSW Irrigators' Council**

I am happy to answer questions 1 and 3 on my own because they are legal questions. The responses to the remaining questions have been developed with assistance from Ms Miller and Ms Freak.

1. Mr Holt said “My understanding of the way this system is working is that a common law right—a residual common law right, if you like—is now in the process of being transitioned into a statutory licence. So in that way it is consistent with what has happened in the past, say, for example, for groundwater. That is happening now.”

- a. In your legal opinion, what do you say about section 393 of the Water Management Act 2000 and its effect on the common law rights you rely upon?

. Section 393 abolishes the common law riparian rights with respect to water in rivers, estuaries or lakes. It says nothing about abolishing any residual common law right to take overland flow waters from the floodplain.

2. Mr Holt also said “One of the problems—back to your point about property and equity—is that at the moment, where we are there is an inequity in the sense that it is accepted that floodplain harvesting is unlicensed and unregulated. The New South Wales Government is now telling people that as a consequence of being unable

to impose a regulatory environment take in the way that it is being modelled suggests that the amount of available water—the available water determination for licence holders who have supplementary water licences—has been reduced as a consequence. I suppose those people who have supplementary water licences can feel a little bit aggrieved that the amount of water that they are otherwise being allowed to take is being reduced as a consequence of being stuck in transition. Whereas I think everybody is saying what is a fair situation is that the long-term growth and the extraction referred to by Ms Faehrmann earlier should be reduced by the amount of water that is taken under floodplain harvesting licences. At the moment, those with supplementary are wearing the cost of the unconstrained growth of floodplain harvesting. There is an inequity in that.”

- a. The Water Management Act 2000 lists the priorities of water access licences in section 58. It clearly stipulates that supplementary licences are the lowest priority. Why would these licence holders be aggrieved? What inequity do you refer to?

I refer the Committee to information here:

[https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0006/385134/faqs-reduced-supplementary-allocations-fact-sheet.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0006/385134/faqs-reduced-supplementary-allocations-fact-sheet.pdf)

Because the NSW Government has no mechanism in place to manage floodplain harvesting (i.e. no volumetrically-limited licences) in NSW Water Sharing Plans, the exiting growth in use response mechanisms within the water sharing plans are being utilised. This means other existing licences (i.e. supplementary licences) are having to be reduced instead. This is to ensure that the total diversions, from all sources/forms/methods remains within the total limits on water extraction.

As the above fact sheet says: “Licensing of floodplain harvesting will largely address this growth in use. Until then, the current WSP provisions require that the compliance action is to reduce the maximum available water determination (AWD) made on 1 July for supplementary water access licences.”

This means that, at present, supplementary licence holders are facing reduced water allocations until there is a mechanism in place for floodplain harvesting to be reduced instead, that generates an inequity between holders of supplementary access licences and those who take water from the floodplain. This is currently being implemented in the Border Rivers and Gwydir Valleys.

3. Mr Holt also said “Yes, I agree with Mr Walker's advice and analysis.” Do you also agree with Mr Walker’s update to the Inquiry that under the Water Act 1912 it was an offence (albeit indirect) to use water obtained via a work, for the purposes of irrigation, without a licence?

I have had a chance to review the uncorrected transcript of Mr Walker’s evidence to the Inquiry. I must confess I do not clearly understand the point he is making. My own view is that it was not an offence to take water indirectly through a Part 8 approval under the Water Act 1912.

NSWIC note Mr Walker has been clear that: ““The circumstances that have obtained for generations are, it turns out, circumstances under which the take of water through floodplain harvesting should be considered (not merely "could be considered") a legal activity.”

4. Mr Holt also said “I just make the point that the proposal here is that the water sharing plans are amended to incorporate certain rules. What we are anticipating here is a sort of hierarchy, if you like, that long-term over-allocation is addressed by initially the reduction and the ability to take water from floodplain harvesting then moving onto supplementary and then into general security. At the moment that system is not operating, as you would appreciate, so at the moment the long-term extractions are being managed not by rules within the water sharing plan but by reductions in the available water determinations for the coming year for supplementary water access licence holders.”

- a. If a water sharing plan is amended and this impacts the volume of floodplain harvesting licences, will this be compensable to affected licence holders?;

My understanding is that floodplain harvesters will not be compensated for the reductions in current floodwater access under this reform.

We have not seen the detail of how floodplain harvesting will be given effect to in the relevant water sharing plans but understand that the approach to be adopted will be structured to not allow claims for compensation.

Compensation is not payable where the variation of the bulk access regime results an amendment of a management plan by the Minister under section 45 that is authorised by the plan. Relevant water sharing plans already recognise that those plans will be amended to give effect to the floodplain harvesting licensing framework consistent with the Floodplain Harvesting Policy – in those circumstances compensation will not be payable.

Beyond the initial changes to introduce the floodplain harvesting licensing framework, licensed volumes do not guarantee entitlement holders access to that volume every year. Instead, the amount of water allocated to a water licence, through available water determinations, varies based on how much water is available – reduced allocations are not compensable.

This is demonstrated through what is occurring in the Border Rivers and Gwydir Valleys right now with supplementary reductions.

Under legislation (Water Act 2007 Cth, Sch 3A):

“*Water access entitlement* holders are to bear the risks of any reduction or less reliable water allocation, under their *water access entitlements*, arising from reductions to the consumptive pool as a result of:

- (i) seasonal or long-term changes in climate; and
- (ii) periodic natural events such as bushfires and drought.”

b. When you say that general security licences will eventually be reduced, do you mean that they will be reduced in order to maintain water allocations to floodplain harvesting and supplementary licence holders? If not, what do you mean?

No – this was simply referring to the hierarchy of water licences outlined in the Water Management Act. See response to Question 2(a) above.

c. Following the past flooding and wet 18 months, storages in northern NSW are at, or near, capacity. When did NSW first start making reductions to available water determination for supplementary licence holders in northern NSW valleys?

The NSW Government reduced AWD for supplementary the first opportunity they had following the finalisation of modelling outcomes in those valleys, which was the starting allocation on 1 July 2021. See answer to question 2 above, and:

[https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0006/385134/faqs-reduced-supplementary-allocations-fact-sheet.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0006/385134/faqs-reduced-supplementary-allocations-fact-sheet.pdf)

We note, the water-year preceding this involved severe drought conditions, where irrigators did not have significant water access for most of the water year (if any).

d. Has it been common practice for NSW to make reductions in available water determinations for northern NSW valleys? In your legal opinion, why do you think this is the case?

Available water determinations are made for every type of water licence in every NSW valley across the State, on the 1 July (start of the water year), and throughout the water year as required. The volumes allocated vary depending on climate conditions and the outlook. This is nothing new.

The full record of available water determinations are on the NSW DPIE-Water website: <https://www.industry.nsw.gov.au/water/allocations-availability/allocations/dashboard>

The below table shows general security closing allocations (2017-18 to 2020-21). This table shows that during the drought years, general-security licences were significantly reduced (i.e. a reduced AWD),

with many on 0%. In 2019-20, the only major valleys that actually had a general security allocation were the Lower-Darling, Murray and Murrumbidgee, albeit very low.

Valley	2017-18	2018-19	2019-20	2020-21
<b>Border Rivers (GS B)</b>	16%	0%	0%	47%
<b>Belubula</b>	0%	0%	0%	0%
<b>Cudegong</b>	38%	0%	0%	68%
<b>Gwydir</b>	18%	0%	0%	58%
<b>Lachlan</b>	2%	0%	0%	70%
<b>Lower-Darling</b>	96%	0%	30%	52%
<b>Macquarie</b>	38%	0%	0%	68%
<b>Murray</b>	51%	0%	3%	50%
<b>Murrumbidgee</b>	45%	7%	11%	82%
<b>Namoi</b>	7%	0%	0%	90%
<b>Peel</b>	100%	38%	0%	84%

\*It must be noted that the above data shows the closing allocation. In most valleys the allocations were considerably lower during the earlier phases of the water year before growing to culminate in the closing allocation (and thus the above table tends to overrepresent actual water availability for most of the water year). The above link includes the inter-year allocations.

5. Mr Holt also said “What we are talking about here is the implementation of a tighter, more restrictive policy framework on the northern valleys. But we would anticipate that same policy framework would be rolled out consistently across not only the southern valleys but also other parts of New South Wales with the consequential amendments to the water sharing plans and the proclamations and the ability to access the exemptions.”

a. Do you think that Murray Valley irrigators are entitled to seek an increase to the Baseline Diversion Limit in their valley and new access licences equivalent to the volumes that they prove they were taking in 1994 (in excess of their licensed entitlement)?

No. This question shows a complete misunderstanding of the reform. This reform will involve a reduction in floodplain harvesting – meaning, significantly less water for irrigators.

b. Is this the type of same policy framework that you expect to be rolled out? If not, why not?

This question would best be referred to DPIE-Water for a response because is a policy matter. We support consistency in implementation of water management policy and principles across NSW.

## General comment

NSWIC would like to express its disappointment with the political hurdles being put in the way of a reform which is an environmental and compliance reform, without compensation or transition for those communities who will need to again, adapt to less water. This scale of this reform is required, only because of successive governments inaction. We support this reform, to rectify the current situation allowing unlimited, unrestricted and unmetered floodwater take. We ask our parliamentarians, to heed Mr Walker's advice to hurry up and regulate floodplain harvesting.

NSWIC would also like to express its disappointment about the prevalence of misinformation and what we would deem 'conspiracy theories' being presented to this Committee, which are intentionally seeking to undermine public confidence in a necessary public interest reform. We have seen the impacts of misinformation in the context of Covid-19, and it should be intolerable for a Parliamentary Committee to entertain attempts of this nature in this inquiry, and ignore the information and science being provided by the relevant authorities. Just like many on this committee have encouraged NSW to get vaccinated and trust the information, we encourage you to focus on the clear benefits of this reform, for equity, transparency, the environment and all communities and persons that rely on floodplain flows.

Yours sincerely,



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