

Joint Response from Namoi Water, Border Rivers Food and Fibre and Gwydir Valley Irrigators Association for Questions on Notice, from the Inquiry into the impact and implementation of the Water Management (General) Amendment (Exemption for Floodplain Harvesting) Regulation 2020.

Question on Notice:

Mr JUSTIN FIELD: One quick follow-up to that: Let us talk about the overland flows for a minute.

I get the sense that this is where some of the confusion comes from. It can be a substantial amount of water. I understand—and you have said—very little of that would have ever been able to contribute to downstream flows, but I think we know that the size of the properties and the way they are designed is to maximise gravity-fed water moving over the farm and through the landscape to capture it. Just so I understand, that is what I understand the Government calls "passive take". Is it your understanding that using that water, capturing that water, diverting that water is considered "floodplain harvesting"? Is that water use or take going to be licensed as part of the Floodplain Harvesting Policy?

Ms BAKER: Chair, it is going to take a long time to answer this question.

Mr JUSTIN FIELD: I am happy to put some of that on notice if it is useful.

The CHAIR: Yes. Ms Baker, could you put some of that on notice?

Response:

Introduction and background

It's important to note that the exemption regulation at the centre of this inquiry, does not in any way differentiate or refer to how overland flow is intercepted, either passive (or active) take but rather provides an exemption to use approved structures to continue to floodplain harvest.

Floodplain harvesting as described in the *NSW Water Management Act 2000* is the collection and impoundments of overland flow – which is described in Section 4A below:

*4A Meaning of "overland flow water"*

*(1) In this Act, "overland flow water" means water (including floodwater, rainfall run-off and urban stormwater) that is flowing over or lying on the ground as a result of--*

*(a) rain or any other kinds of precipitation, or*

*(b) rising to the surface from underground, or*

*(c) any other process or action of a kind prescribed by the regulations.*

*(2) Water is flowing over the ground for the purposes of subsection (1) even if it flows over the ground by means of artificial structures such as roads, canals or road gutters.*

The collection and impoundment of overland flow is a historic practice that occurred following the licencing of Part 2 and Part 8 approvals under the *NSW Water Act 1912*.

Previously, all water was administered under the *NSW Water Act 1912* until the *NSW Water Management 2000* was passed, that required all water take to be licenced, metered and accounted-for. Initially, state Water Sharing Plans (WSP) administered the highest priority water licences, High Security, General Security, Supplementary and Unregulated, as these were the most used and had the greatest volumes. These were progressively transitioned from the *NSW Water 1912* framework to *NSW Water Management Act 2000*, whereby description-based licences were converted to volumetric licences.

Not all these transitions and conversions have taken place. Floodplain harvesting is one of those activities where its legal authority remains within the original Part 2 and Part 8 Approvals under the *Water Act 1912*. Under this Act it was not required to be licenced and the practice has continued to this day on that basis.

Schedule 10 - Conversion of former entitlements to access licences and approvals of the *NSW Water Management Act 2000* provides for enduring rights, licences, and approvals within existing within the *Water Act 1912*. This schedule refers directly to Part 2 and Part 8 approvals and licences, as well as lists floodplain harvesting licences as proposed entitlements to be later amended.

The implementation of the transition/conversion process of floodplain harvesting has continued in response to these commitments and were embedded within the first iteration of WSPs in the early 2000's and the Floodplain Harvesting Policy since Minister Nathan Rees announced it in 2008.

For these reasons and our history of participating in conversation of other licences, our groups have not considered there a need for formal legal advice on this form of take. It is important to note that we have had many legal discussions with a variety of different firms, each have supported this view and that formal legal advice would not differ. We particularly draw your attention to the fact that this opinion, is in contrast to that of within Submission 20 of this inquiry, which at no point recognises the enduring rights presented within the *NSW Water Act 1912*, or the commitment of the NSW Government to transition the descriptive take to volumetric licences as part of Schedule 10 of the *Water Management Act 2000*, or the northern WSPs and the Healthy Floodplains Program.

It is important to note that water users do not in practice differentiate between how they access overland flow water i.e. if it is active or passive take. Until recently, neither did the Department.

Northern irrigators accept that many of them capture overland flow during a flood that is in addition to their requirement to capture rainfall runoff from their developed area. It is this activity which has been the commitment of NSW Government to be licenced as part of the Healthy Floodplains Program.

This delineation of how to access overland flow was for the first time, used in the *Temporary Water Restriction (Northern Basin) (Floodplain Harvesting) Order 2020* only, stating:

*3) This order does not apply any of the following:...(b) the take of water by a water management work that cannot be reasonably prevented from taking water due to the nature of the work (passive take).*

*Note. For example, this order does not apply to passive take by on-farm storages, dams, and open channels.*

The reference to passive take was understood to be made as part of the exclusions (allowable forms of water) under the temporary restriction order to allow for the continuation of collection of rainfall within a developed area but was also to recognise that without the full implementation of the Healthy Floodplains program, there would be challenges for water users and regulators in avoiding incidental take that could not be reasonably prevented. Pre-planning and engagement, as well as implementation of the licencing, measurement and compliance strategy, could have alleviated some of these concerns but would not have eradicated the need for rainfall from within an irrigation development to be continued to be taken.

That's because rainfall runoff collected from irrigation areas for most water users, is not traditionally understood as floodplain harvesting despite the description of the *NSW Water Management Act 2000* for overland flow. The collection and re-use of rainfall is not legally or in practicality take but part of the management of irrigation developments within flood protected areas for environmental purposes to avoid potentially contaminated water being returned to a river or stream and must be consistently regulated throughout NSW. Runoff from irrigated areas has been enhanced through land development and design to encourage water use efficiencies due to:

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

We note that the question raised by Mr. Field can be described in two parts:

1. What is Passive Take?
2. Will passive take be licenced as part of the Healthy Floodplains Project, to calculate and determine floodplain harvesting licences?

### What is Passive Take?

The concept and difference between passive and active overland flow take were new terms issued to water users as part of the temporary restriction order only, this new description is not part of *NSW Water Management Act 2000* definition or the regulation in question.

Further information requested after the confusion that arose from the Temporary Restriction order and industry trying to interpret what was meant by reasonably preventing passive overland flow, resulted in the following clarifying statement being issued by DPIE-W via the Early Warning Network on 8 February 2020, stating:

***What is the effect of the section 324 order for floodplain harvesting?***

*The order restricts the take of **all floodplain harvesting**, except for floodplain harvesting that is:*

- *taken passively into on-farm storages (cannot be restricted by a pump, pipe or regulator), or*
- *taken through irrigation tailwater return drains.*

*All other floodplain harvesting is restricted by the order.*

*The intent of this order is to restrict access to floodplain harvesting where this is both possible and practical. Overland flow that is either taken passively (cannot be restricted by a pump, pipe or regulator) or through irrigation tailwater return drains is not restricted by this order.*

*Water users are encouraged to take reasonable steps to ensure that they can account for any changes to the volume of water in on-farm storages during this period of restriction.*

***If water is captured as a result of the exceptions above, can I then move that around my property?***

*Yes. However, water users are encouraged to keep records of their activities so they can account for any movement of water, or changes to the volume of on-farm storages during this period of restriction.*

*More broadly, there is passive take of overland flow occurs everywhere on floodplains. The floodplain passively absorbs (takes) soil moisture and eventually recharges groundwater systems, it is also the residual water visible in depressions on fields, natural lagoons, against levies or culverts on the sides of roads and railways that due to floodplain hydraulics becomes stranded water after the flood subsides.*

*On an irrigation system, passive take describes the water that may flow within an irrigation system without intervention. The movement of water relies on natural floodplain hydraulics and gravity. The capture and storage of any overland flow without intervention is considered passive take, this includes rainfall.*

Given the definitions within the *Water Management Act 2000* and the clarifying material associated within the fact sheet (above), all farms have the potential to take passive

overland flow particularly if they have irrigation developments like tailwater return drains and it rains enough to create runoff.

Will passive take be licenced as part of the Healthy Floodplains Project, to calculate and determine floodplain harvesting licences?

While all farms take passive overland flow, not all farms capture and store this water for the purposes of irrigation or are located on a designated floodplain.

The floodplain licencing program provides a framework to licence the capture and storage of overland flow and does not differentiate between passive or active take. Only farms that can capture and store overland flow and on a designated floodplain in the northern valley will be licenced. All other forms of passive take are currently exempted as either harvestable rights or exempted as part of the Water Management (General) Amendment (Exemption for Floodplain Harvesting) Regulation 2020.

The blanket approach to licence all types of overland flow in some instances, created inequity issues for NSW, given only the five northern valleys are at this stage proposed to be licenced as floodplain harvesters but that irrigation farms with developments are required to retain rainfall runoff within the irrigation development to minimise the release of potentially contaminated water into waterways.

The NSW Government following consultation in 2018, decided it could not implement a policy whereby only a subsection of the industry was licenced while the rest remained outside the licencing framework. Hence the Water Management (General) Amendment (Exemption for Floodplain Harvesting) Regulation 2020 was finally implemented with greater relevance for those water users outside of the five northern valleys.

It is believed an amending exemption is also foreshadowed to continue to allow the capture of rainfall runoff collected from irrigation developments when no other overland flow is being taken, which will work in conjunction with proposed floodplain harvesting licences. This proposed exemption will be state-wide and allow all irrigators to continue to meet their obligations to retain rainfall runoff in a consistent way. This approach maintains the commitment that any overland flow taken during a flood event (regardless of if its passive or active) will be included within the proposed volumetric licencing system.

Yours Sincerely,

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Executive Officer  
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Zara Lowien  
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