

## Supplementary questions for DPIE

### Floodplain Harvesting

1. Is the model for the volume of take by floodplain harvesting and rainfall runoff harvesting for 1 July 1994 based on all floodplain harvesting that was assumed to have been occurring or only that volumes that were being lawfully taken?

ANSWER:

They are one and the same thing. It is the department's view that all floodplain harvesting occurring on 1 July 1994 was occurring legitimately.

- a. What is the difference between those two volumes?

ANSWER:

None.

2. Dan Connor said "Unfortunately, that data does have a reasonably large error band on it. It is about plus or minus 30 percent. That is quite different." Does this mean that the current proposed volumes for floodplain harvesting licences could be out by 30% or more than 300GL if you do not use the 500% carryover rule?

ANSWER:

This specific reference was in regard to the remote sensing method that the department has used to estimate changes of water in storage from recent high flood events, much of which could be attributable to floodplain harvesting. This method is published on the department's website, and without direct measurement, as is proposed to accompany the licensing of floodplain harvesting, it is the most reliable method available for this purpose. The modelling used to determine licence entitlements on the other hand, uses multiple lines of evidence and sources of uncertainties are reported in the published model build reports. Although remote sensing as a line of evidence in modelling, its application is quite different to that described above.

3. How many floodplain structures have been built post 2008?

ANSWER:

Most floodplain structures are not used to harvest water and the department does not hold the information requested.

4. Is DPIE aware of any unprocessed Part 2 licence applications?

ANSWER:

No.

5. Will DPIE consider reviewing its records to see which landholders were trying to be compliant with the Water Act 1912?

ANSWER:

The department considers that floodplain harvesting was a historically legitimate practice under the *Water Act 1912* for which express permissions in the form of volumetric licences were not required.

6. In 1994 there was only 600 GL of storage capacity. DPIE proposes to issue 346GL of floodplain harvesting entitlements with a 500% carryover rule that means 1,729 could be extracted in one year.

ANSWER:

DPIE is not proposing to issue 346 GL/yr of floodplain harvesting entitlements. The preliminary estimate of total entitlements is 267.9 unit shares.

| <b>Valley</b>     | <b>Entitlement (unit shares)<sup>1</sup> (assuming the rainfall runoff exemption is in place)</b> |
|-------------------|---|
| NSW Border Rivers | 43.0  |
| Gwydir            | 108.6   |
| Namoi             | 43.3  |
| Macquarie         | 52.3  |
| Barwon Darling    | 20.7  |

The maximum usage years are very rare and are confined to extreme wet periods. For example, modelling of floodplain harvesting diversions post policy implementation over the historical climate sequence (1895 – 2009) indicates a maximum annual diversion in the Gwydir valley in the order of 350% of the entitlement value assuming 1 ML/unit share. For more information about expected annual diversions, please refer to

[https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0011/350201/modelled-downstream-effects-if-licensing-floodplain-harvesting-nsw-border-rivers-and-gwydir.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0011/350201/modelled-downstream-effects-if-licensing-floodplain-harvesting-nsw-border-rivers-and-gwydir.pdf).

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<sup>1</sup> These figures are the best available on 25/10/2021 and include model outputs that are still in development, so changes should be expected.

- a. How is this within the Murray-Darling Basin Cap?

ANSWER:

The Murray-Darling Basin Cap is set for all forms of water take within a designated Cap valley, not for individual forms of take. Although assessed annually, it is a long-term limit, meaning that individual years can be (and are) much higher than average, so long as they are offset by years that are below the average. The published model scenario reports demonstrate compliance with the water source legal limits, which in many cases are much lower than Cap.

- b. Did irrigators have the capacity to capture 1,729 GL of floodplain harvesting in 1994?

ANSWER:

Limiting development to 1994 levels is not the purpose nor intended outcome of the Cap. The Cap is a limit on the volume of water that could have been taken with both rules and infrastructure that were in place in 1994. Rules and infrastructure can and have changed over time.

7. Has the Murray-Darling Basin Authority agreed the Cap scenario models in accordance with Schedule E of the Murray-Darling Basin Agreement?

ANSWER:

Existing accredited Cap models will be used for schedule E reporting until amended models are accredited or the Cap is repealed, whichever occurs first. Across the NSW Border Rivers, Gwydir and Macquarie valleys, NSW revised models are suggesting that the water source legal limits are almost 100GL/yr lower than the previously accredited Cap models. This is because the Cap is the oldest and least stringent limit currently in place across the Basin. These revised models will be assessed by the Murray-Darling Basin Authority as part of the accreditation of water resource plans. Please refer to [https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0008/404666/How-surface-water-legal-limits-on-water-take-are-defined.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0008/404666/How-surface-water-legal-limits-on-water-take-are-defined.pdf).

8. Have the Cap scenario models been independently accredited against the requirements set out in Schedule E of the Murray-Darling Basin Agreement?

ANSWER:

See answer above. This will occur, if required, as part of the assessment and accreditation of water resource plans.

9. What is a 'clunk model run'?

ANSWER:

A clunk model run is the annual model run process used for Cap reporting under Schedule E of the Murray-Darling Basin Agreement.

10. If licence holders were not granted a 500% entitlement how would this impact the size of their entitlements?

ANSWER:

The size of modelled entitlements for floodplain harvesting access licences is directly linked to the accounting period. If annual accounting were enabled with no ability to carry over water to successive years, licence holders' entitlements would be almost three times larger than what is currently proposed under five-year accounting. Annual accounting would allow the same long-term volume that is permissible within the water source legal limits.

The department has published a comparison of annual accounting and five yearly accounting with regard to entitlement size and environmental outcomes. See

[https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0003/368139/border-rivers-account-management-comparison.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0003/368139/border-rivers-account-management-comparison.pdf).

a. How much would the annual licence volume be if the 500% carryover was not granted??

ANSWER:

See answer above.

b. DPIE has stated that the 500% carryover produces a better environmental outcome, how is this so?

ANSWER:

In two key ways:

1. In comparison to annual accounting, it will result in greater improvements in small and moderate floodplain flows.
2. In comparison to annual accounting, three times smaller entitlement volumes will be issued, which will carry a much lower risk of future growth in use management intervention.

Please refer to [https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0003/368139/border-rivers-account-management-comparison.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0003/368139/border-rivers-account-management-comparison.pdf).

11. Is it premature to issue floodplain harvesting licences before there is data and information about what is being taken and what is environmentally sustainable?

ANSWER:

We have spent more than 8 years and \$17million improving our understanding of current and historical floodplain harvesting. This analysis indicates that in some areas, growth in floodplain harvesting has caused the water source legal limits to be exceeded. Licensing will allow us to reduce floodplain harvesting where necessary to comply with these water source limits, rather than needing to reduce supplementary licenses to offset this growth, as is currently the case in the Gwydir and NSW Border Rivers valleys. The proposed water sharing rules will allow allocations to floodplain

harvesting licences to be adjusted in response to improved model estimates of the water source legal limits, without triggering compensation under the *Water Management Act 2000*.

The proposed measurement and monitoring requirements that will accompany licensing will also significantly improve the quality of floodplain harvesting data and information, which can then be used adaptively to improve future management. Licensing and measurement are the key to improved management of floodplain harvesting.

12. Have the proposed volumes been modelled against climate change to determine that they represent an environmentally sustainable levels of take?

ANSWER:

ESLT (environmentally sustainable level of take) is given effect through the Basin Plan as a requirement of the *Water Act 2007* (Cwth). The Basin Plan was developed by the MDBA based on the climatic period 1895-2009. Like all Basin states, NSW has agreed to implement the Basin Plan and it does not have the liberty to change it.

13. What volume of water does the DPIE model calculate was being taken for floodplain harvesting in the northern valleys under the 1994 cap on restrictions?

ANSWER:

The Cap applies at the valley scale, not for individual forms of take i.e. there is no individual Cap limit for floodplain harvesting or any other category of water take. Current estimates from the accredited and revised Cap models as well as the revised Baseline Diversion Limit model as at 25/10/2021 are supplied in the table below. Some revised models are still in development, and none of the revised models have been submitted to the MDBA for assessment to-date – this will occur as part of the accreditation of water resource plans. It should be expected that the final figures will change as the model assessment and accreditation process progresses. Any changes that occur as part of the assessment and ultimate accreditation of these models will be reconciled through the water allocation process.

| <b>Valley</b>     | <b>Accredited Cap estimate (GL/year)</b> | <b>Revised Cap estimate<sup>2</sup> (GL/year)</b> | <b>Revised Baseline Diversion Limit<sup>3</sup> (GL/year)</b> |
|-------------------|--|---|---|
| NSW Border Rivers | 199 <sup>4</sup>                         | 208.5   | 205.8   |
| Gwydir            | 448 <sup>5</sup>                         | 431.4   | 431.4   |
| Namoi             | 315                                      | 233 <sup>6</sup>                                  | 222.5 <sup>6</sup>  |
| Macquarie         | 447 <sup>7</sup>                         | 376   | 358.6   |
| Barwon-Darling    | 224                                      | 195.8   | 195.8   |
| <b>Total</b>      | <b>1,633</b>                             | <b>1,444.7</b>                                    | <b>1,414.1</b>  |

<sup>2</sup> Estimate includes overbank harvesting and rainfall runoff harvesting

<sup>3</sup> Estimate includes overbank harvesting and rainfall runoff harvesting

<sup>4</sup> Estimate includes overbank harvesting but excludes rainfall runoff harvesting

<sup>5</sup> Estimate includes overbank flow harvesting and rainfall runoff harvesting

<sup>6</sup> Preliminary estimate – modelling not yet complete

<sup>7</sup> Estimate excludes overbank harvesting and rainfall runoff harvesting

- a. Is the volume an average annual extraction limit?

ANSWER:

The volume supplied is a long-term average because Cap is a long-term limit, meaning that individual years can be higher than average so long as they are offset by years that are below the average.

- b. What yearly period is the annual limit based on?

ANSWER:

There are no annual Cap limits, Cap is a long-term limit. Annual Cap accounting of the cumulative difference between observed vs modelled diversions occurs under schedule E of the Murray-Darling Basin Agreement – although compliance action is only taken when the long-term diversions exceed the long-term Cap.

- c. What time period is the annual limit based on?

ANSWER:

There is no annual limit, see responses above.

14. Why did DPIE double its estimate of the irrigated area used to calculate the Cap scenario, as the basis for issuing floodplain harvesting licences in the Gwydir valley?

ANSWER:

**Note: It is unclear from the question, what is the reference point, i.e., doubled in comparison to what and/or when?**

The accredited Cap model for the Gwydir valley uses the maximum irrigated area as an input for irrigation area (83,800 ha). The current model (i.e., the Cap scenario) distinguishes between the area developed for irrigation (116,901 ha) and maximum area that can be planted (90,277 ha). The differences are due to better information available since the time of the original model accreditation. Specifically, remote sensing of crop areas has been heavily employed in the revised model, whereas the accredited Cap model relied almost exclusively on survey returns from water users.

15. Why are the rules around rainfall runoff collection not dealt with via a Harvestable Rights Order?

ANSWER:

The current harvestable rights orders (HRO) are specific in the ability of a landholder to capture and use rainfall runoff. Any rainfall runoff taken above that permitted under the harvestable rights requires a licence or exemption to account for the water taken.

If the HRO were amended to include rainfall runoff from irrigation areas, there would not be the ability to switch off the basic right during certain circumstances. Under the proposed licence exemption, during periods when other structures on a landholding are collecting overland flow, the rainfall runoff collected must be measured and accounted for under a licence.

16. Why is the rainfall runoff exemption not confined to storages less than 500ML?

ANSWER:

Rainfall-runoff from irrigation areas is commonly captured and stored in multipurpose storages that range in size. Limiting the proposed exemption to storages less than 500ML would in many cases incentivise new infrastructure that could lead to increased usage overtime. It would also increase on-farm evaporative loss and decrease farm efficiency.

It is important for river health that farmers are not forced or encouraged to discharge into our creeks and rivers rainfall runoff from cropped areas that may be contaminated with agricultural chemicals or high nutrient and sediment loads.

17. What do you estimate is the value of the total 346GL of water that you plan on allocating for floodplain harvesting?

ANSWER:

DPIE is not proposing to issue 346 GL/yr of floodplain harvesting entitlements. The preliminary estimate of total entitlements is 267.9 unit shares.

The value of the proposed floodplain harvesting licences is not able to be estimated until a market for those licences is established.

The productive value of the water that can be accessed by floodplain harvesting within the water source legal limits is dependent on climatic conditions. Recent economic modelling undertaken by Aither indicates that following implementation of the Floodplain Harvesting Policy, the present value of floodplain harvesting over ten years across the northern Basin will range between \$505m (10th percentile or dry climate scenario) and \$750m (90th percentile or wet climate scenario). The median hydrology scenario, which equates to 338 GL of floodplain harvesting water being available per annum, is estimated to have an on-farm economic value of approximately \$747 million (present value over 10 years discounted at 7 per cent per annum).

18. In the hearing Dan Connor stated that “We probably need about five years of measurement data to really make a step change in those models and improve them”. If the updated models result in a decrease in floodplain harvesting entitlements will irrigators be compensated for that decrease?

ANSWER:

It is proposed that the water sharing plans will permit this change without compensation.

- a. If there is a risk of compensation as a result of updated models would it not make sense to introduce temporary licences?

ANSWER:

Creating temporary licences would result in significant delays to licensing and additional resourcing requirements. The same outcomes can be achieved under the proposed framework. Specifically, it is proposed that water sharing rules can be altered and allocations adjusted without compensation risk.

- b. Will that compensation be based on the decrease in the annual amount or the annual amount times 500%?

ANSWER:

It is proposed that the water sharing plans will permit this change without compensation.

19. If after floodplain harvesting licences and volumes have been granted, end of system flow targets are introduced, and those targets result in an irrigator being unable to floodplain harvest when they previously would have expected to be able, will they be eligible for compensation?

ANSWER:

It is proposed that the water sharing plans will permit this change without compensation.

20. If the carryover rule was modified would licence holders be entitled to compensation?

ANSWER:

It is proposed that the water sharing plans will permit this change without compensation.

21. Has DPIE done any work to calculate the compensation it may be liable for based on the entitlements it intends to hand out and the margins of error in it's modelling?

ANSWER:

N/A, see above.

22. Considering the immense value of these allocations and the uncertainty around modelling and the potential for introducing end of system flow rules after volumes are allocated, shouldn't the government hand out temporary licences initially?

ANSWER:

The proposed regulatory framework for licensing provides for the same outcomes and ability to adjust without compensation. See answers above.

23. Noting that we had a one-in-25 year flood earlier this year, would you say that the last 18 months have seen well above average inflows in the northern NSW valleys?

ANSWER:



The average flow at Wilcannia in the last 18 months is 4,917 ML/day compared to the long-term average of 4,220 ML/day.

24. What rainfall exceedance was experienced in the Northern NSW valleys each year since 2000?

ANSWER:

This analysis has not been undertaken by DPIE. Anecdotally we understand that rainfalls have been generally well below average across the northern basin since 2000 despite some notable wet years such as 2016 and more recently since early 2020. The Bureau of Meteorology regularly publishes reports such as <http://www.bom.gov.au/climate/current/statements/scs70.pdf> and <http://www.bom.gov.au/water/nwa/2020/mdb/climateandwater/climateandwater.shtml> that would better respond to this type of question.

25. Noting that there was already some water in Menindee Lakes to begin with (ie. they were not completely dry), how much water has Menindee Lakes received in the past 12 months?

ANSWER:

Flows entering the Menindee Lakes are not directly measured. Flows past Wilcannia in the last 12 months are 2,343,499 ML from 22 October 2020 to 22 October 2021. Over the same period, Menindee Lakes storage has increased by 1,503,810 ML. 280,522 ML has been released at Weir32 and 31,398 ML through the Cawndilla outlet.

26. When Menindee Lakes are dry, how much water is needed before Lake levels start to rise again?

ANSWER:

When the lakes are truly dry, large volumes are required to fill up the soil in the lake bed before water is visually being stored. The Menindee Lakes surface area is 47,500 ha and soils generally require 1-2 ML/ha to refill the soil moisture profile. It is not possible to make a simple statement that X GL is required to cause a lake level rise.

27. If there is a fixed relationship between the baseline diversion limit and the sustainable diversion limit, why has this not applied to the baseline diversion limit and the sustainable diversion limit in the Intersecting streams?

ANSWER:

The relationship between the baseline diversion limit and the sustainable diversion limit in the Basin Plan is fixed. The SDL is equal to the BDL minus the SDL resource unit local and shared reduction amount plus the SDL adjustment amount. The volumes of the local and shared reduction amounts vary between the SDL resource units, and not all Water Resource Plan areas have an SDL adjustment amount.

Under the Basin Plan, the Intersecting Streams SDL resource unit does not require a local reduction amount. Therefore, any water recovered in the Intersecting Streams contributes to the NSW northern Basin shared reduction amount.

28. Is the Commonwealth Environmental Water Holder eligible for floodplain harvesting licences in any valleys?

ANSWER:

Eligibility is based on land ownership, and the Commonwealth Environmental Water Holder doesn't own land that has historically undertaken floodplain harvesting.

a. If so, has it applied for any?

ANSWER:

N/A

b. If not, will any licence volumes it could be eligible for be issued to irrigators?

ANSWER:

N/A

29. What is the average inflows into Menindee Lakes since 2000 and since 2012?

ANSWER:

As above, inflows to Menindee Lakes are not directly measured. Average daily flows at Wilcannia from 1/1/2000 to 22/10/2021 is 3,367 ML/day and 1/1/2012 to 22/10/2021 is 3,098 ML/day.

30. Why has Menindee Lakes not received an average inflow even though we have seen such a wet sequence?

ANSWER:

Without undertaking extensive additional analysis and research, this question cannot be answered in a definitive way. Inflows into the Menindee Lakes are an outcome of many complex factors, and it is not reasonable to expect that an 'average' inflow will occur against an 'average' rainfall sequence.

There are many factors that influence inflows to the Menindee Lakes, including the antecedent conditions (prolonged, short or no drought), the volume of rainfall and where it falls in the northern Basin, how much runoff occurs which is a function of soil moisture content, how long has it been since rivers flowed, temperature and evaporation losses and many more. The period of flow record for Menindee and the Barwon-Darling demonstrates that 'average Menindee inflows' are not something that can be expected or anticipated.

Across the northern Basin, the major public storages are still not all at capacity and have been filling since early 2020 when rainfalls started to recover. These storages are generally located to collect flows from the most productive parts of the catchment so refilling these dams after such a severe drought will always result in a lower proportion of northern basin rainfall appearing as inflows to Menindee Lakes.

Similarly, private on farm storages were generally empty or at low levels in early 2020 whereas now they are mostly either full or at high levels as the storage owners have accessed flows against their entitlements or through floodplain harvesting activities that remain unlicensed.

In addition to these constructed water storages, it has been observed that the proportion of rainfall that appears as runoff measured at flow gauges designated as hydrologic reference stations by the Bureau of Meteorology (because they are considered to be upstream of significant human influences), has declined significantly since the millennium drought. It generally appears that a rainfall event will still generate a similar instant runoff response, but the longer tail of inflows after rainfall is either absent or reduced. It has been postulated that the millennium drought dried out soil moisture reserves and shallow groundwater systems so they do not “leak” water into creeks and rivers as much as we are familiar with. MDBA has previously undertaken joint studies with NSW on this topic and the Commonwealth has recently funded some CSIRO research to be undertaken jointly with the states and MDBA in the same area. It is expected that a number of years of wet to average conditions will be required to “refill” these landscape water stores in the same way that it took an extreme drought event to dry them out over multiple years.

31. When converting from the Baseline Diversion Limit to the Sustainable Diversion Limit how does the department decide what entitlements to cut?

ANSWER:

This is decision undertaken by the Commonwealth Department of Agriculture, Water and Environment. Entitlements are not ‘cut’. They have been recovered through direct purchase or efficiency projects. These methods convert consumptive entitlements to environmental entitlements.

32. Do you agree that under the Water Act 2007 that amendments to the Sustainable Diversion Limits can only be amendments are only to be made either by amendments under subdivision F or by the process and subject to the limitations in ss 23A-23B of the Water Act and Ch 7 Pt 2 of the Basin Plan?

ANSWER:

This is a question for the Commonwealth Government. NSW is not responsible for amendments to the SDLs.

- a. If you disagree can you confirm under what section of the Water Act you are making those amendments?

ANSWER:

NSW does not make these changes. This is a question for the Commonwealth Government.

- b. Is DPIE and the NSW Government seeking to increase Sustainable Diversion Limits by amending the basin plan under subdivision F of the Water Act 2007 or adjusting the SDLs under s 23A of the Water Act 2007?

ANSWER:

NSW does not make these changes. This is a question for the Commonwealth Government.

- c. If you intend to adjust the SDLs via s 23A have you confirmed that the total Basin adjustment is less than 5%?

ANSWER:

NSW does not make these changes. This is a question for the Commonwealth Government.

- d. Have you determined that the increase in the SDLs still represents an environmentally sustainable level of take?

ANSWER:

The Basin Plan, developed by the MDBA, sets the SDLs to meet environmentally sustainable level of take principles. The Basin Plan also allows volumetric estimates of BDLs, which directly correspond to SDLs, to be updated with better information. Like all Basin states, NSW has agreed to implement the Basin Plan and it does not have the liberty to change it.

- e. Do you intend to consider submissions from the public on the amendments to the SDLs?

ANSWER:

Sustainable diversion limits are set out in the Basin Plan. As such, any amendments to SDLs would require an amendment to the Basin Plan and would be the responsibility of the Commonwealth Government. Like all Basin states, NSW has agreed to implement the Basin Plan and it does not have the liberty to change it.

- f. Is the MDBA seeking and considering advice from the Basin Officials Committee on the changes to the SDLs?

ANSWER:

This is a question that should be directed to the MDBA.

- 33. Noting Bret Walker's evidence that it will be unlawful to increase the sustainable diversion limit by any increase to the baseline diversion limit:

ANSWER:

That is a question that should be directed to the MDBA. Please also refer to <https://www.mdba.gov.au/basin-plan-roll-out/sustainable-diversion-limits/changing>.

- a. How will DPIE issue 346 GL of floodplain harvesting licences and remain within the sustainable diversion limit?

ANSWER:

The department's model scenarios report for each valley detail how entitlements will be issued so that total take will remain within legislated extraction limits.

- b. Will proposed floodplain harvesting licences issued be reduced to the levels in the sustainable diversion limit of 46 gigalitres?

ANSWER:

The sustainable diversion limit is a limit for all diversion types, there is no separate limit for floodplain harvesting or any other individual diversion type. The volumetric estimates of BDLs and subsequently the SDLs will also be amended to represent the most up to date information. Please refer to <https://www.mdba.gov.au/basin-plan-roll-out/sustainable-diversion-limits/changing>.

- c. Will water recovery targets be increased by 300 gigalitres if the baseline diversion limit increases by 346 gigalitres and the sustainable diversion limit remains at 46 gigalitres for floodplain harvesting?

ANSWER:

See previous answers.

34. Has advice been sought from Treasury in relation to:

- a. The value of the proposed floodplain harvesting licences?

ANSWER: No.

- b. Liability of compensation should floodplain harvesting licences be issued if the proposed increase in the sustainable diversion limit is unlawful and successfully challenged?

ANSWER:

No. See answer to questions 18, 19, 20, 21 and 22.

## Emergency Works Regulation

1. What are the requirements for returning water to the environment that is captured under the emergency works regulation?

ANSWER:

There is no requirement under the regulation to return water taken to the water source. Dewatering will sometimes involve the removal of a mix of groundwater and surface water (rainfall runoff) which spills into an excavation or hole dug around a broken sewer pipe, for example, to be able to fix it. It may also be impossible in some cases to reinject water back into a groundwater source if water table levels remain high, and it would be unwise in other cases to require water to be returned to a surface water source if a risk of flooding remains, potentially affecting neighbouring or downstream assets.

- a. What requirements are explicitly required in the regulation?

ANSWER:

Clause 17B of Schedule 4 of the regulation provides that the exemption does not apply to any subsequent use of water that has been taken under the exemption for any purpose related to domestic consumption, supply of the water to another person or body, or any other use from which a commercial benefit is or may be obtained. This means any use of water taken under the exemption for a commercial purpose, including irrigation or storage for later irrigation use, must be covered by a relevant water access licence (or another exemption if such exemption exists).

- b. Is there anything in the regulation that prohibits water being held indefinitely?

ANSWER:

No, but if holding the water provides any commercial benefit then the exemption no longer applies and use of the water must be covered by a relevant water access licence (or another exemption if such exemption exists).

- c. How does the department ensure water taken under this regulation is returned to the environment?

ANSWER:

Most water taken under this exemption is expected to be reinjected into the underlying groundwater source (where possible) or released into the stormwater system. The regulation will have negligible effects on the environment as it is expected the minimum volume possible will be removed by persons to fix the emergency situation. This acknowledges that emergency situations and dewatering activities cause delays and costs to corporations, councils and businesses and it is in their interest to remove the water as quickly as possible so that the emergency works can be undertaken.

- d. Will the department make data about water captured and returned to the environment public?

ANSWER:

The department intends to report annually on the volume of water reported as taken under exemption, by catchment area.

- e. What happens if an irrigator doesn't have the infrastructure to return the water to the environment?

ANSWER:

If any water taken under the exemption is used for a secondary purpose, including any use from which a commercial benefit is or may be obtained, then the take and use of that water must be covered by a relevant water access licence or another exemption.

2. Could an irrigator capture water under the emergency regulation in a water year when their floodplain harvesting allocation is down to zero, hold the water until the next water year and then use it for a secondary purpose applying it to the new years floodplain harvesting allocation?

ANSWER:

Any subsequent use of water is deemed to have been taken at and from the time of the subsequent use (see clause 17B(2)(a)). To be lawfully taken therefore, the water user's account would need to have a sufficient account balance at that point in time to cover the volume.

- a. What is in the rules to avoid this situation?

ANSWER:

To claim the exemption, a number of requirements apply under the regulation:

- a. it must be new works carried out urgently, as a direct result of an emergency event, to remove groundwater or overland flow water for the purpose of reducing a significant risk to:
  - i. public health or safety or
  - ii. the environment or
  - iii. infrastructure or the construction of infrastructure.

An existing structure/work on the floodplain constructed with the intent of, and for the purpose of, collecting water during an imminent or future flood or storm (resulting in a large rainfall runoff event), cannot be considered works carried out urgently in response to an emergency event and, as such, any water taken by the work is not covered by the exemption

- b. it does not cover works that are, or should have been, included in a planned schedule of maintenance or repairs, or works that would have been required to be carried out even if the relevant emergency event had not happened

- c. works authorised by the exemption are limited to doing only what is necessary to reduce the significant risk (not to eliminate the risk altogether)
- d. NRAR must be notified before or as soon as reasonably possible after any emergency works commence and the volume of water extracted while carrying out the works must be reported within 14 days of its completion.

- b. If they can do this, aren't irrigators incentivised to capture water under this regulation?

ANSWER:

The above requirements act as a barrier to any irrigator seeking to misuse this exemption.

3. If water is taken under the reg and then put to a secondary use, does it have to be applied to a floodplain licence?

ANSWER:

The relevant licence needed to cover any secondary use would depend on the source of the water taken under the exemption. This would be a relevant aquifer access licence in the case of water originating from a groundwater source, or a relevant regulated river, unregulated river or floodplain harvesting (once commenced) water access licence.

- a. Can it be applied to other licences such as a groundwater licence?

ANSWER:

See answer above.

4. What irrigators captured overland flows on the basis of an 'emergency' similar to the threat of infrastructure damaged that led to the lifting of the embargo on floodwater take in February 2020?

ANSWER:

None. See answer to 2 above.

5. Will this regulation allow for the take of flood water while an s324 embargo in place?

ANSWER:

The emergency works exemption only exempts a person from offences relating to a failure to hold an access licence (s 60A), a water use approval (s 91A), a water supply work (s 91 B) or a controlled activity approval (s 91E). This exemption does not exempt a person from the offence of failing to comply with a s 324 order under s 336C.



**Internal DPIE & NRAR Emails (refer to document, 'NRAR Annexures' , tabled by Mr Searle)**

1. Regarding emails on page 23 that unmanaged growth in floodplain harvesting will be offset by reducing the volume of water that can be taken under supplementary. How many ML of supplementary licences are there and will they be reduced to OML this year and/or next year?

ANSWER:

The NSW Water Register provides public access to information about water licences, approvals, water trading, water dealings, environmental water and other matters related to water entitlements in NSW. See <https://waterregister.waternsw.com.au/water-register-frame>. Allocation decisions are market sensitive and are not released publicly until a formal announcement is made.

2. Regarding the email at page 24 where Jon-Maree Baker asked Dan Connor to explain where the legislation said he did not need a licence. What was the response from Dan Connor to this question?

ANSWER:

Dan Connor referred Jon-Maree Baker to the relevant offense provisions under the *Water Management Act 2000*.

3. Regarding the email on page 25. Why has DPIE waited until 6:28pm on the last Thursday before Christmas Eve to advise landholders who are considering floodplain harvesting to seek their own legal counsel. Why did DPIE not share its legal advice dated 9 October 2020 with the landholders?

ANSWER:

The legal advice is consistent with the public communication by DPIE that the current situation is uncertain. As is clearly evidenced by this inquiry, the laws are not clear and it was prudent to recommend that landholders seek advice that is specific to their individual circumstances. Further and more importantly, it was judged to not be in the public interest to release general advice that makes it clear that the position is not without doubt and hence that the prospect of a successful prosecution would be extremely low. The rationale for this is now further underscored and supported by the advice and testimony of Bret Walker SC.

4. Regarding the email on page 26 why did DPIE send a further email saying to landholders that the lawfulness is unclear?

ANSWER:

See answer above.

- a. The email states “NRAR expect water users to understand their obligations and comply with the law”. What did DPIE understand water users obligations to be?

ANSWER:

That landholders do what they can to demonstrate that they are either complying or seeking to comply with the relevant laws.

- b. How can NRAR have this expectation when DPIE is sending out emails saying it's unclear and even they are unsure?

ANSWER:

This question should be directed to the Natural Resources Access Regulator.