Attachment B

Inquiry into Floodplain Harvesting

Responses by the Minister for Water to supplementary questions asked by members of the Select Committee on Floodplain Harvesting

1. The Minister said "ironically, if the practice were to stop completely this would simply place more pressures on our rivers and creeks to supply the water historically taken from the flood plains. I trust that the members of this Committee can all agree that this would be a bad outcome for all stakeholders, especially those downstream."

    a. How does stopping floodplain harvesting put more pressure on rivers and creeks?

    b. Wouldn't stopping floodplain harvesting result in more water for rivers and creeks?

    c. Would this not have been the natural state of the basin system prior to the rise in floodplain harvesting practices?

Answer

1a. If floodplain harvesting is stopped, other forms of diversions, including from rivers and creeks, would grow to take the place of floodplain harvesting within established water source extraction limits. This would diminish river flows and come at a cost to all water users and the environment.

1b. See answer for 1(a). Note, the NSW Floodplain Harvesting Policy aims to reduce floodplain harvesting so that total legal extraction limits are not exceeded. Therefore, implementing the reform will result in more water (especially locally) flowing in rivers and creeks than is currently the case.

1c. Despite the growth in floodplain harvesting in recent years due to lack of regulation, floodplain harvesting is included within the water source extraction limits. Therefore, stopping floodplain harvesting will not return the system to a natural state, but will instead encourage growth in other forms of diversions within the water source extraction limits.

2. The Minister said she was "fighting for more water to stay in Menindee Lakes". Does this mean that the Minister and NSW has abandoned the Menindee Lakes Sustainable Diversion Limit AM project?

Answer

2. The NSW Government has reviewed the Menindee Lakes Project to understand options that deliver benefits to the environment and to the people that rely on these

rivers for their health, culture and livelihood. I announced the details on 23 October 2021.

3. The Minister said “As I have just pointed out, on average only 1 per cent of water that flows into the Murray—which goes through the Darling, down the Lower Darling and then into the Murray—comes from floodplain harvesting." How can water that has been floodplain harvested contributeto flows into the Murray?

Answer

3. If hypothetically, floodplain harvesting in the northern Basin were to stop and other extractions did not grow to take its place within the water source extraction limits, modelling indicates that there would be less than 1% improvement to inflows to the River Murray.

4. The Minister said “It would have been perfect if the upper House had not voted to disallow the regulation. We would have had more water in the wetlands this year. That is my answer.” However,the most recent floods were in March 2021 and the regulations were not introduced until April 30.

   a. When you refer to “disallow the regulation” are you referring to the Floodplain Harvestingregulations introduced in April 2021 or the Water Management (General) Amendment (Exemptions for Floodplain Harvesting) Regulation 2020 introduced in February 2020?

   b. In either case, how does the disallowance cause there to be less water in the wetlands this year?

Answer

4a. My reference was to the floodplain harvesting regulations introduced in February 2020. Had these transitional regulations not been disallowed, the government could have had floodplain harvesting licences in place for the Gwydir valley before the recent flood event occurred.

4b. In the Gwydir Valley, remote sensing analysis indicates that up to 50% more water may have been harvested from the floods in February-April 2021 than would have otherwise been permitted for the entire water year, had the proposed licences and rules been in operation at that time. The advice and testimony of Bret Walker SC confirms that these sort of impacts will continue to occur until licensing can be put in place.https://www.industry.nsw.gov.au/water/science/data/remote-assessment-of-water-take

5. The Minister said “We need to be able to use the latest evidence, the latest information” in regards to altering the Baseline and Sustainable Diversion Limits

   a. What evidence does NSW have today which alters its view on the amount of water being taken as of 1 July 1994 compared to the information it held in 2009 and 2012?

b. What new evidence is coming to light?

c. Will other valleys in NSW be allowed to prepare new evidence and information to support increases to the Cap and Sustainable Diversion Limit for those valleys?

Answer

5a. All water source legal limits are defined as the amount of water that could have been taken under a set of conditions at a point in time. Limits are volumetrically estimated using models that represent those time periods and are configured with best available information.

To improve the models' inputs, we have invested significantly in data, including satellite imagery, over the last eight years to improve our understanding of floodplain harvesting now and in the past. Our models use multiple lines of evidence to understand the impacts that development, water user behaviour and water sharing rules have on flows and diversions in each valley.

Using this information to better represent conditions in 1993/94 and in 1999/2000 has updated the volumetric estimates of the Cap and long-term average annual extraction limit (LTAAEL) in the water sharing plans for each valley. We now have a more accurate picture of conditions at those points in time. Volumetric estimates will continue to be refined as better modelling information becomes available.

5b. New evidence includes data from user surveys, on-ground inspections, river flows, metered diversions, remote sensing, flood studies and hydraulic models. Details on how the models are developed and the results of the modelling for each valley are available online. All modelling is independently peer reviewed.

Note, all models have uncertainty. Implementing the reform, measuring and having 'real' data will reduce this uncertainty. Until then, we must use multiple lines of best available scientific evidence for the models.

5c. Yes, although this process is not unique to NSW or floodplain harvesting. Formal assessment and recognition of these improved estimates occurs as part of the assessment of Water Resource Plans – this is yet to occur for NSW. Summary information about how the estimates of these water legal limits for each Basin State is available on the MDBA website https://www.mdba.gov.au/basin-plan-roll-out/sustainable-diversion-limits/changing

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