

NSW First Flush Assessment, C/o Department of Planning, Industry and Environment Locked Bag 5022 Parramatta NSW 2124

By email: independentpanel.firstflush@dpie.nsw.gov.au

Thursday 4th June 2020

Submission

Independent assessment of the management of the Northern Basin 'First Flush' event.

Healthy Rivers Dubbo is a grass roots community group dedicated to providing a strong voice for our local rivers, aquifers and wetlands in the Murray-Darling Basin for the benefit of wildlife, plants and people. We pay our respects to Elders past, present and future, and acknowledge that this land was never ceded.

Thank you for an opportunity to provide comment to the Independent assessment of the management of the Northern Basin 'First Flush' event.

Summer 19/20 in the Macquarie Valley

The summer of 2019/20 was shocking in the Macquarie Valley. The sharp severity of the drought was unprecedented.

The Warren weir was raised by WaterNSW stopping flows beyond. Downstream, the river rapidly dried up to a series of disconnected green pools.



Macquarie River, 20km downstream of Warren NSW,

November 2019

Insurance populations of turtles and fish were rescued from the river and secured in hatcheries by environmental agencies. Despite commendable efforts from the recreational fishing community to rescue as many fish as possible, mass fish deaths resulted.

The Macquarie Marshes were parched. There hadn't been any surface water in the core Marsh since January 2019. The impact of years of 'tight' river management was evident - there was far less water around, and it disappeared very quickly.



Dead Red Gums, Macquarie Marshes August 2019

Critical human need and stock and domestic requirements were not being met along the River and creeks downstream of Warren.

There was a shocking loss of wildlife as a result. Mobs of kangaroos perished, many 50 year old plus turtles died, and we lost some of the oldest mussels known to exist in our fresh water rivers. The loss of vegetation meant less habitat for many and varied water dependant animals, fish and birds.

The North Marsh reed bed (the largest reed bed in the Murray Darling Basin) caught a lightning strike in October 2019 and about 5,000 ha was burnt.



North Marsh reed bed, October 2019

We knew the reed beds needed flood water ASAP. While they shot up after some rain fall that summer, we understood that they were using what little precious reserves their rhizomes held, making floodwater even more critical to their recovery.

The Drought Breaks

The flows came in February 2020, entering the Macquarie in several events through the Bell, Little and Talbragar Rivers – all of which are downstream of Burrendong Dam.

The first announcement of supplementary access was made on the 20th February, leading to over 12 GL being extracted from the vital first flow peak.

The peak of the flow was taken, that meant that the area of wetland that potentially could have been inundated by the first flow was greatly reduced. The shape of the hydrograph matters. The same volume of water flowing down the river over longer period of time wouldn't have had the same potential to inundate as many hectares as the water arriving in

one peak flow. The value of the peak of the flow to the environment in this circumstance was exponentially higher than the same volume of subsequent inflows at lower daily flow rates.

By 1/3/2020, less than 1,200 ha of the 5,000 ha burnt North Marsh Reed bed had been inundated.



Image taken 1 March 2020 with red area showing inundation area at that time and the blue line the extent of the burnt area

Timing matters. The reed bed needed to get that flood water as early as possible, so they could take advantage of the warmer summer days and get some growth up to store energy in their rhizomes for winter.

It was not until late April 2020, after the on-farm storages near the river were reportedly almost full, that flood water finally made it to the northern most part of the charred reed bed, and into the Lower Macquarie River.

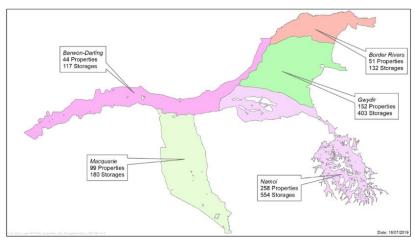
Because of the delay in flows reaching all of the fire damaged reed bed, the requirement for environmental water in the Macquarie Marshes is still classified as HIGH as of autumn 2020.

From the 130 GL that was metered upstream of the Marshes, an unknown, unmetered volume of water was floodplain harvested. It is difficult to overstate how frustrating it is that the volumes of floodplain harvested water taken this year in the Macquarie Valley are not public.

When asked in a drought update public forum on Thursday 28th May 2020 what the volumes of floodplain harvesting (FPH) take have been in the Macquarie Valley so far in 2020, WaterNSW stated they were under no obligation to tell the public. In the media, on twitter and facebook, when discussing floodplain harvesting take, representatives of the local

irrigation industry play down the volume involved: "we only have a small number of floodplain harvesters in the Macquarie."

As this map shows, there are 99 properties and 180 storages being assessed for floodplain harvesting in the Macquarie – hardly a small amount.



Source: NSW Govt, Floodplain

Harvesting Measurement Policy March 2020.

The go ahead to pump and divert was given before critical human need, and stock and domestic requirements downstream had been actually met (only forecast to be met). Healthy Rivers Dubbo believes that by only forecasting that downstream needs would be met at some future date, and not waiting until they had been, the intent of the Macquarie Cudgegong Regulated Water Sharing Plan is not being honoured by WaterNSW:

- 4) Taking of water under supplementary water access licences shall only be permitted when flows, including any releases from Burrendong Dam FMZ, are in excess of those required:
- (a) under the environmental water provisions specified in Part 3 of this Plan,
- (b) to supply domestic and stock rights and native title rights,
- (c) to supply higher priority access licence requirements, and
- (d) to provide replenishment flows as specified in clause 58.2

In a combined letter to Minister Pavey, Healthy Rivers Dubbo, Inland Rivers Network and Central West Environment Council expressed concerns about the announcement of supplementary access being made within days of the first water flowing past the Warren weir since September 2019 – Appendix A.

Connecting the Macquarie to the Barwon-Darling Rivers is a critical requirement for native fish, season water replenishment in the Barwon, and assisted flows to the Darling. With flows reduced by unknown volumes of floodplain harvest take, unknown volume of rainfall run off take, and supplementary take of around 35 GL, it will be more difficult to achieve the connection between the Macquarie and the Barwon.

¹ Tony Quigley, Chair Macquarie River Food and Fibre on ABC radio, NSW Country Hour 27/5/2020 https://www.abc.net.au/radio/programs/nsw-country-hour/nsw-country-hour/12269824

² https://www.legislation.nsw.gov.au/#/view/regulation/2015/630/part9/div3/sec47

For the health of the entire Darling River, especially the Lower Darling, no access to first flush flows should be allowed until Menindee Lakes holds 400 GL.

The Floodplain Harvesting regulation came with no explanation or warning on the 7th February 2020, creating confusion and stress for stakeholders. The regulation was a very basic and poorly written set of words, and it seemed to give legal rights to previously unapproved infrastructure. The Water Management (General) Amendment (Exemptions for Floodplain Harvesting) Regulation 2020 should be repealed.

A FPH embargo was put in place, then lifted just over the parts of the Basin that were receiving flows. The Minister was saying on NSW Country Hour that only 'a few properties' were allowed to take when the restriction was temporarily lifted, however the lifted restrictions covered entire water sharing plan areas – enormous areas and significant numbers of properties.

The explanation that the embargo was lifted to protect infrastructure on a few properties doesn't pass the 'pub test'.

On the 12th February, the regulation was expanded to include the unregulated Macquarie Valley. The media contacted WaterNSW for comment, whose media spokesperson incorrectly interpreted that the FPH embargo was being lifted. This sent stakeholders and media into a flurry of evening phone calls and messages, trying to clarify what was actually happening.

Transparency from the NSW Water Minister's office was sorely absent.

Clear rules in all water sharing plans are that protect first flows after a prolonged drought are vital. It is important for communities, the environment, and for irrigators who need certainty when planning for the coming season. Having access to a little bit of water will only make industries more eager to catch every little bit they can. Alternatively, if the rules are clear when the drought breaks, irrigators will know that access is off bounds and plan accordingly.

Floodplain harvesting should be completely restricted before the issuing of new property rights in the form of floodplain harvesting licences.

There has to be a complete assessment of the cumulative environmental, social and economic impacts that floodplain harvesting has had on the Darling River and downstream areas in the tributary rivers before the handing out of brand new tradable, compensable property rights.

There must be no carryover allowance in the policy. Take must be limited to 100% of share allocation a year. Carry over allowances (up to 500% in the 2010 draft policy) will mean in dry times accounts can accumulate up to 5 times the total licence volume. When a drought breaks, the need for water in the environment is extreme. This will coincide with empty farm dams and access accounts several times larger than the licence allowance. To assist the protection of first flush flows, there must be no carryover allowance.

There should be no exemption for rainfall run off capture in a developed area. Rainfall captured on irrigation fields should either be the 10% harvestable right that all landholders have access to, or be included in a water access licence.

The Long Term Annual Average Extraction Limit must not be increased to accommodate new floodplain harvesting access licence shares. The new volumes must be included in the current volume of shares in each water source.

Since the 1990's, massive volumes, entire flood events have been withheld and kept for free, to be used to create personal and corporate profit. The irrigation industry has had free access to unmeasured water from the floodplains for the past 30 years, at astounding cost to the environment, communities and economies downstream.

Melissa Gray

Convenor

Healthy Rivers Dubbo



centralwest environment council



Healthy Rivers Dubbo

20th February 2020

The Hon. Melinda Pavey MP Minister for Water, Property & Housing Level 17 52 Martin Place SYDNEY NSW 2001

Dear Minister Pavey,

Objection to proposed supplementary access announcement in Macquarie River

Our groups represent people who wish to see water management in NSW maintain healthy river systems and wetlands. We understand that consideration is being given to announce supplementary water access in the Macquarie River in central west NSW. We strongly object to water extraction from natural inflows to the river system at this time.

The Macquarie River has been hard hit by the unprecedented severe drought since 2017. Our summer has been one of intense heat, parched soils, and almost constant dust storms of record intensity. Water quality in the Macquarie River was in steady decline, with algae levels peaking as water levels dropped.

This terrifying drought is not over.

Recent isolated rain events have not broken this drought. They may, however, have created a false sense of security, with some tributaries below Burrendong Dam receiving flows.

The internationally significant Ramsar listed Macquarie Marshes were as dry and parched as they have ever been this summer. A 4000 ha fire last year has severely compromised the North Marsh reed bed, and caused the death of many River Red Gums. These available inflows from tributaries are critical to save the largest reed bed remaining in the Murray-Darling Basin. The timing of these flows is critical for the internationally significant Macquarie Marshes. Any reduction of floodwater available to the Marsh reed beds at this time will compromise their resilience. Australia, and the NSW Government as Ramsar managers, have a moral and legal obligation under the Commonwealth Water Act 2007 to maintain the nature of internationally significant wetlands.

The river was stopped at Warren last year to divert water for critical human need in the Valley. Downstream of Warren, the remaining disconnected pools rapidly receded, causing extensive deaths of water dependent wildlife and vegetation. The river environment below Warren was depleted of critical environmental flows for several months over summer. All available water should be left in the system to counteract the damage incurred during this time, and maximise the potential extent of the flow.







Healthy Rivers Dubbo

Only last month, the Macquarie Valley community was rocked by unprecedented fish kills, and our community is still reeling. Announcing supplementary access to flows now in the Macquarie will fortify growing public concern about water management in NSW.

We the undersigned are asking you to disallow the call from WaterNSW to allow supplementary licence access in the Macquarie Valley from current tributary inflows.

Yours sincerely,

B. Smiles

Bev Smiles

President, Inland Rivers Network

Cilla Kinross

President, Central West Environment Council

Melissa Gray

Convenor, Healthy Rivers Dubbo

cc Mathew Keane MP

cc Dugald Saunders MP

cc Roy Butler MP