

Select Committee on Floodplain Harvesting

1 October 2021

Response to issues raised on Cap and SDLs accounting

Dear Committee,

Several concerns were raised during the Inquiry regarding how Cap and Sustainable Diversion Limits are calculated. We have investigated these concerns and found they are based on a poor understanding of MDBA processes applied to all States, and erroneous comparisons.

Cap

- The Cap is not a fixed number, but a definition: “*The volume of water that would have been diverted under 1993/94 levels of development*”.
 - “*The Cap in New South Wales and Victoria is not the volume of water that was used in 1993/94. Rather, the Cap in any year is the volume of water that would have been used with the infrastructure (pumps, dams, channels, areas developed for irrigation, management rules, etc.) that existed in 1993/94, assuming similar climatic and hydrologic conditions to those experienced in the year in question.*”¹
- The Cap is not about the level of development, but the diversions (for which the level of development is one factor, among others):
 - “*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.*”²
 - Floodplain harvesting has been included in the MDB Agreement’s Cap on surface water diversions (the Cap) since 1995. It is likewise included as part of the Baseline Diversion Limits (BDLs) and Sustainable Diversion Limits imposed by the Basin Plan.³
- The Cap is not specific to the type of water take. The Cap and SDL are overall limits for all forms of take and do not on their own regulate individual methods of taking that water (i.e. there is no floodplain- harvesting-specific cap).

Cap vs Cap Scenario

- The MDBA has thoroughly reviewed and approved all existing Cap models. The process being followed by NSW is the same process followed by all other Basin States.
- The Cap is not increasing under updated models, but decreasing: The Cap Scenario model produces lower limits than the accredited Cap model – i.e. Cap Scenario means less water for irrigation⁴.
- The most recent model run uses more recent climatic data from recent years (i.e post accreditation), which were exceptionally dry years and leads to less water for irrigators.

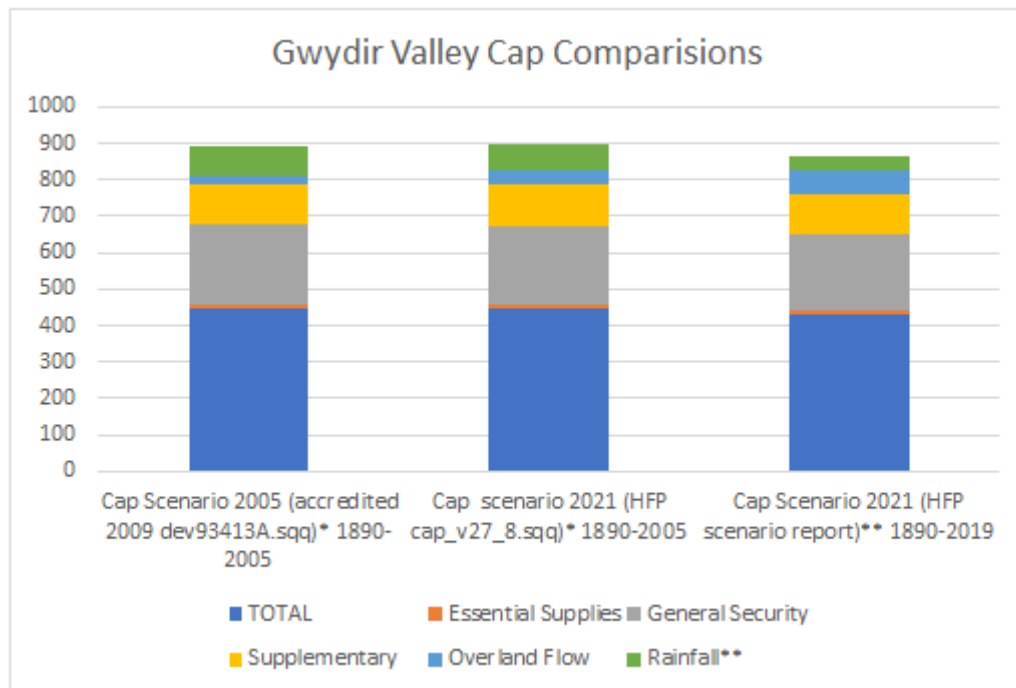
¹ https://www.mdba.gov.au/sites/default/files/archived/cap/cap_brochure_o.pdf

² https://www.mdba.gov.au/sites/default/files/archived/cap/cap_brochure_o.pdf

³ [Floodplain harvesting position statement \(mdba.gov.au\)](https://www.mdba.gov.au/sites/default/files/archived/cap/cap_brochure_o.pdf)

⁴ DPIE-Water evidence presented to the Upper House Inquiry hearing, 24 September 2021.

- Analysis submitted to the Committee by the party raising this issue is not a 'like for like' comparison - if you remove floodplain harvesting and rainfall runoff from model 1 but include those diversions in model 2, and then compare the change, you are always going to get a discrepancy, but that is not how limits are assessed. You need a 'like for like' comparison between the models (such as the below diagram). As the MDBA has advised, floodplain harvesting has always been included in the Cap and BDL/SDL.
- Due process has been followed: Updated modelling will be subject to re-accreditation through the Water Resource Plan process. Because this is a reduction, other processes (which are required if it goes up) were not required to be followed.
- This is not a sneaky way to increase diversion limits, but instead will result in a reduction in water for irrigators.



This diagram⁵ provides a 'like-for-like' comparison and shows that under the 'Cap Scenario' the Cap is actually decreasing.

Updating limits (BDL/SDLs)

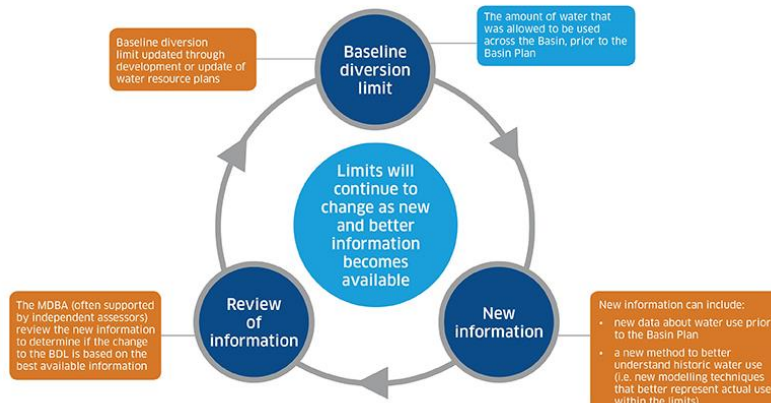
- Updating the BDL/SDL limits does not mean more water can be extracted.
- It simply provides a better estimate of historic take. Because many forms of extraction had little data available at the time, the Basin Plan set descriptive limits. Governments committed to improving data so BDLs could be adjusted to be more accurate over time.
- The MDBA has a webpage explaining this process.⁶ The processes are detailed and subject to significant scrutiny, and limits are not just changed at a whim.
- This has occurred in other NSW valleys, so is not unique to floodplain harvesting and this reform. It is also occurring in Queensland as part of its floodplain harvesting reform, while BDLs in Victoria and South Australia have also been adjusted with improved information since 2012.

⁵ These two scenarios, compare the cap conditions across the same climatic sequence. This is a like-for-like comparison. This scenario is the HFP updated model run but extended to include new climate information. Exempt and non-exempt rainfall runoff is combined. See GVIA Submission for more details on the Gwydir Valley.

⁶ <https://www.mdba.gov.au/basin-plan-roll-out/sustainable-diversion-limits/changing>

- The SDLs are not fixed volumes, but a formula expressed in Basin Plan Schedule 2 as: $SDL = BDL - (\text{local reduction amount}) - (\text{SDL resource unit shared reduction amount}) + (\text{SDL adjustment amount})$. However, the Basin Plan's volumetric water reduction amounts do not change.

Process for updating the BDL estimate



Conclusion

The proposed floodplain harvesting reform will reduce floodplain harvesting in NSW's northern valleys so that the total water take is compliant with the Cap.

NSW's Cap Scenario model produces lower limits than the MDBA-accredited Cap model – i.e. the Cap Scenario model means less water for irrigation. NSW Irrigators' Council encourages committee members to seek advice directly from the MDBA on these matters.

It has been disappointing to see efforts to undermine confidence generally in long-standing Cap and Basin Plan processes, checks and balances, and modelling protocols agreed to by all Basin States and the Commonwealth. Specifically in relation to floodplain harvesting, it has been disappointing to see efforts to undermine confidence in what has been one of the most thoroughly assessed and highly scrutinised processes in the history of Australia's water reform.

Please do not hesitate to contact us if you would like any more information or to discuss the issues raised above in more details.

Yours sincerely,

Jim Cush
NSWIC Chair
M: 0428 657 608
E: jim@pechelbafarming.com.au

Claire Miller
NSWIC CEO
M: 0409 509 677
E: claire@nswic.org.au