

## INQUIRY INTO FLOODPLAIN HARVESTING

**Organisation:** Slattery & Johnson

---

Licensing floodplain  
harvesting in Northern  
NSW:  
analysis and implications



# Contents

1	Introduction .....	4
2	Concepts .....	6
2.1	Murray-Darling Basin Cap .....	6
2.2	Baseline Diversion Limits .....	8
2.3	Environmentally sustainable level of take .....	9
2.4	Environmental water recovery .....	10
2.5	Sustainable diversion limit .....	10
2.6	Water Sharing Plan limits .....	11
2.7	Floodplain harvesting volumes in the baseline diversion limit .....	12
3	Analysis and implications .....	13
3.1	Floodplain Water Harvesting .....	13
3.2	Changing the Cap .....	15
3.2.1	Valley Cap models .....	15
3.2.2	‘Cap scenario’ models .....	15
3.3	The baseline diversion limit and sustainable diversion limit .....	17
3.3.1	Changing the baseline diversion limit based on best available information .....	17
3.3.2	Baseline diversion limit must represent State law at June 2009 .....	18
3.4	Establishing a fixed relationship between the baseline diversion limit and the sustainable diversion limit .....	19
3.5	Increasing baseline diversion limits and sustainable diversion limits .....	20
3.6	Increasing the sustainable diversion limits without amending the Basin Plan .....	21
3.6.1	Amending the Basin Plan .....	21
3.6.2	Amendments under Subdivision F of the Water Act 2007 .....	21
3.6.3	Basin Plan requirements for amendment .....	22
3.7	Water resource plans .....	23
3.8	Water Sharing Plans .....	23
4	Extraction limits in the Gwydir Valley .....	25
4.1	Presenting a ‘Cap scenario’ that is different to the official Cap .....	25
4.2	Using the ‘Cap scenario’ to claim that floodplain water harvesting volumes will be reduced to the official Cap .....	26

4.3	Increasing the baseline diversion limit to include floodplain water harvesting volumes.....	27
4.4	Increasing the sustainable diversion limit by the increased baseline diversion limits	28
4.5	Removing quantified extraction limits and reference to model runs from State and Federal legislation .....	28
4.5.1	Sustainable diversion limit for the Gwydir regulated resource.....	29
4.5.2	Plan limit for the Gwydir regulated resource .....	29
4.6	Amending the Basin Plan outside Parliamentary process .....	30
5	Conclusion .....	31

# 1 Introduction

In 1995, in response to general understanding that irrigation extractions in the Murray-Darling Basin were exceeding the capacity of the system, the Murray-Darling Basin Ministerial Council agreed to cap water extractions at the 1994 level of development. This is known as the Murray-Darling Basin Cap (the Cap<sup>1</sup>) and has been the foundation of Basin water reforms.

The Commonwealth Water Act came into effect in 2007. The *Water Act 2007* was a response to evidence that extractions under the Cap were still too high and should be reduced further to an environmentally sustainable level of take, represented by a sustainable diversion limit, specified in a Murray-Darling Basin Plan. The Basin Plan was legislated in 2012.

However, only a small amount of floodplain water harvesting (the interception and storage of water from floodplains) was included in estimates of extraction, and these estimates were based on poor data.

Floodplain water harvesting occurs mostly in the Northern Murray-Darling Basin. In New South Wales it has never been licensed, metered, measured, or regulated, and its growth has been unchecked. The NSW Government says that this water has, for many years, been

*...treated as a freely available bonus to a farmer's licensed entitlement.*<sup>2</sup>

The NSW Department of Planning, Industry and Environment (DPIE) plans to license floodplain water harvesting in the Gwydir, NSW Border Rivers, Namoi, Macquarie/Wambuul, and Barwon-Darling/Baaka valleys in 2021.

DPIE acknowledges that growth in extractions by floodplain water harvesting, in the NSW part of the Northern Basin, has caused take to exceed the Cap.<sup>3</sup>

To be consistent with the Cap principles and the *Water Act 2007*, the volume of floodplain water harvesting licensed must be included in the limits set by NSW Water Sharing Plans, Water Resource Plans and the Murray-Darling Basin Plan. NSW Water Sharing Plans state that total extractions must be the lesser of the Cap or the limits in Water Sharing Plans.<sup>4</sup>

Licensing floodplain water harvesting and keeping extractions within the Cap is causing significant difficulties for the NSW and Commonwealth governments.

---

<sup>1</sup> In this document, the 'Cap' refers to the long-term annual average extraction limit that is derived by an official Cap model.

<sup>2</sup> Blair. (2015). *Water Sharing Plan for the Gwydir Regulated River Water Source 2016, Appendix 3: State floodplain harvesting principles, Section 2 (3)*. Sydney: NSW Government. <https://legislation.nsw.gov.au/view/pdf/asmade/sl-2015-629>

<sup>3</sup> DPIE. (2021). *Floodplain harvesting entitlements for the Gwydir Valley regulated river system*. Sydney: DPIE [https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0013/350203/scenario-report.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0013/350203/scenario-report.pdf)

<sup>4</sup> Blair. (2015). *Water Sharing Plan for the Gwydir Regulated River Water Source 2016, Appendix 3: State floodplain harvesting principles*. Sydney: NSW Government. <https://legislation.nsw.gov.au/view/pdf/asmade/sl-2015-629>

DPIE and the NSW Water Minister claim that floodplain water harvesting is being reduced to bring extractions within the Cap.<sup>5</sup>

The evidence outlined in this report describes how the NSW and Commonwealth governments are making extractions appear to be within legal limits. These steps are to:

1. Present a 'Cap scenario' that is different to the official Cap.
2. Use the 'Cap scenario' to claim that floodplain water harvesting volumes will be reduced to the official Cap.
3. Increase the baseline diversion limit to include floodplain water harvesting volumes.
4. Increase the sustainable diversion limit by the increased baseline diversion limits.
5. Remove legislated, quantified extraction limits from State and Federal legislation.
6. Amend the Basin Plan outside Parliamentary process.

These steps are inconsistent with the spirit and intent of the Murray-Darling Basin water reforms. If allowed to proceed, they have serious consequences for the integrity of Murray-Darling Basin water policies. The consequences are:

- the existing limits on take will be exceeded,
- proper scrutiny of water policy processes will be avoided and removed, and parliamentary authority will be bypassed,
- that the mechanisms and processes in the Basin Plan, Water Resource Plans and Water Sharing Plans intended to quantify limits and make them enforceable will be rendered ineffective, and
- there will be no legislative limits to extractions in NSW.

This report:

- explains concepts, terms and definitions used in water management and reform in the Murray-Darling Basin,
- describes how the Murray-Darling Basin Authority (MDBA) and DPIE are using the complexity and ambiguity of many of these concepts to obscure increased take in the Northern Basin, and
- refers specifically to the licensing of floodplain water harvesting in Northern NSW and uses the Gwydir Valley as an example.

The analysis provided in this report provides evidence that both the NSW State and the Commonwealth Parliaments must act urgently to protect the integrity of the reforms.

---

<sup>5</sup> DPIE. (2021). *Floodplain harvesting entitlements for the Gwydir Valley regulated river system*. Sydney: DPIE  
[https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0013/350203/scenario-report.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0013/350203/scenario-report.pdf)

## 2 Concepts

The implementation of the Basin Plan requires the application and interaction of various concepts. They include the:

1. Murray-Darling Basin Cap.
2. Baseline diversion limits.
3. Environmentally sustainable level of take.
4. Environmental water recovery.
5. Sustainable diversion limits.
6. Water Sharing Plan limits.
7. Floodplain harvesting volumes in the baseline diversion limit.

This section outlines and describes these concepts in plain English, equipping readers with an understanding of how these policy instruments are intended to work.

### 2.1 Murray-Darling Basin Cap

In 1995, the Murray-Darling Basin Ministerial Council agreed to introduce a Cap on extractions from the Murray-Darling Basin.

*The introduction of the Cap was seen as an essential first step in establishing management systems to achieve healthy rivers and sustainable consumptive uses. In other words, the Ministerial Council determined that a balance needed to be struck between the significant economic and social benefits that have been obtained from the development of the Basin's water resources on the one hand, and the environmental uses of water in the rivers on the other.*<sup>6</sup>

The continuation of the Murray-Darling Basin Cap (the Cap) is a legislative requirement of the Water Act 2007.<sup>7</sup> This continuity under Commonwealth law was enabled by The Murray-Darling Basin Agreement being gazetted as Schedule 1 of the Water Act, with Cap on Diversions being Schedule E of this Agreement.<sup>8</sup>

The Cap on Diversions is fundamental to the water reforms in the Murray-Darling Basin. The NSW Government said in 2000:

*The Cap is a critical response to the declining health of rivers in the Murray-Darling Basin. Its continuing value is as a minimum standard across the Basin.*

*The Cap has provided a strong complement to the water reforms in NSW. ...In this context the Cap has been important in:*

---

<sup>6</sup> Murray-Darling Basin Commission. (2000). *Review of the operation of the Cap*. Canberra: Murray-Darling Basin Authority. [https://www.mdba.gov.au/sites/default/files/pubs/overview-report-mdbc-Aug-2000-w-4-companion-papers\\_0.pdf](https://www.mdba.gov.au/sites/default/files/pubs/overview-report-mdbc-Aug-2000-w-4-companion-papers_0.pdf)

<sup>7</sup> Commonwealth, Water Act 2007, <https://www.legislation.gov.au/Details/C2017C00151>

<sup>8</sup> Commonwealth, Water Act 2007, <https://www.legislation.gov.au/Details/C2017C00151>

- *bringing about a general halt to growth in further water diversions;*
- *assisting NSW to implement more sustainable water management measures; and,*
- *providing downstream valleys with a basis upon which to plan.*<sup>9</sup>

The Cap as a Schedule of the *Water Act 2007* limits extractions to baseline conditions. Baseline conditions are defined as:

*...the level of water resource development for rivers within the Murray-Darling Basin as at 30 June 1994 determined by reference to:*

- *the infrastructure supplying water; and*
- *the rules for allocating water and for operating water management systems applying; and*
- *the operating efficiency of water management systems; and*
- *existing entitlements to take and use water and the extent to which those entitlements were used; and*
- *the trend in the level of demand for water within and from the Murray-Darling Basin.*<sup>10</sup>

The baseline conditions are represented in a hydrological model for each valley, known as that valley's Cap model.<sup>11</sup>

Each valley's Cap model contains a formula for calculating diversions. These formulae are defined in a Diversions Register,<sup>12</sup> required by the Murray-Darling Basin Agreement.<sup>13</sup>

The process for updating or modifying a valley's Cap model is legislated in the *Water Act 2007*.<sup>14</sup>

---

<sup>9</sup> Land and Water Conservation. (2000). *NSW Submission in response to the Draft Overview Report of the Cap Project Board on the Review of the Operation of the Cap*. Canberra:

MDBA. <https://www.mdba.gov.au/sites/default/files/archived/cap/nsw.pdf>

<sup>10</sup> Commonwealth. (2007). *Water Act, Schedule 1 Murray-Darling Basin Agreement, Schedule E Cap on Diversions, Clause 2*. <https://www.legislation.gov.au/Details/C2014C00194/Html/Text>

<sup>11</sup> Commonwealth. (2007). *Water Act, Schedule 1 Murray-Darling Agreement, Schedule E Cap on Diversions, Sub-clause 11(4): Developing analytical models and 5(1) Baseline conditions and model*. <https://www.legislation.gov.au/Details/C2014C00194/Html/Text>

<sup>12</sup> MDBA. (2018). *Diversion Formula Register for the Murray-Darling Basin*. Canberra: MDBA. [diversion-formula-register-v6.pdf \(mdba.gov.au\)](https://www.mdba.gov.au/diversion-formula-register-v6.pdf)

<sup>13</sup> Commonwealth. (2007). *Water Act, Schedule 1 Murray-Darling Agreement, Schedule E Cap on Diversions, Clause 4*. <https://www.legislation.gov.au/Details/C2014C00194/Html/Text>

<sup>14</sup> Commonwealth. (2007). *Water Act, Schedule 1 Murray-Darling Agreement, Schedule E Cap on Diversions, Clause 10: Power of Authority to alter long-term diversion caps*. <https://www.legislation.gov.au/Details/C2014C00194/Html/Text>



The Cap models are independently audited against the description of Cap in the Murray-Darling Basin Agreement.<sup>15</sup> After auditing, Cap models are approved by the MDBA.<sup>16</sup>

The process of developing, testing, and auditing Cap models was executed and refined from when Cap was first implemented in 1997 until the last Cap model was audited in 2011.<sup>17</sup> This process is fundamental to achieving confidence in the regulation of water use in the Murray-Darling Basin.<sup>18</sup> Changes to the Cap must be made in accordance with Clause 11, Schedule E of the Murray-Darling Basin Agreement. This includes updating the Cap model, which is then approved by the MDBA.<sup>19, 20</sup>

Any changes to the Cap must be included in the Cap model and approved by the MDBA (cl. 11 Schedule E, Murray-Darling Basin Agreement).

The NSW Water Sharing Plans limit the amount of water that can be extracted to the lesser of the Plan Limit (refer Section 2.6 - [Water Sharing Plan limits](#)), or the Cap.<sup>21</sup>

## 2.2 Baseline Diversion Limits

The baseline diversion limit (BDL) is a critical component of the Basin Plan. It is defined in Section 1.07 and Schedule 3 of the Basin Plan. Section 1.07 of the Basin Plan defines the baseline diversion limit as:

*...the baseline limit of take from an SDL resource unit.*<sup>22</sup>

The baseline limit of take from a surface water sustainable diversion limit (SDL) resource unit is:

*...the quantity of water calculated in accordance with column 2 of the table in Schedule 3 for that SDL resource unit.*<sup>23</sup>

---

<sup>15</sup> Independent Audit Group. (2001). *Review of Cap Implementation 1999/00*. Canberra: Murray-Darling Basin Authority. [IAG Report - Review of Cap Implementation 1999/00 -March 2001 \(mdba.gov.au\)](#)

<sup>16</sup> Commonwealth. (2007). *Water Act, Schedule 1 Murray-Darling Agreement, Schedule E Cap on Diversions, Sub-clause 11(5): Developing analytical models*. <https://www.legislation.gov.au/Details/C2014C00194/Html/Text>

<sup>17</sup> MDBA. (2016). *Water Audit Monitoring Report 2011-12: Report of the Murray-Darling Basin Authority on the Cap on Diversions*. Canberra: MDBA. [https://www.mdba.gov.au/sites/default/files/pubs/Water-audit-report-2011-12\\_0\\_0.pdf](https://www.mdba.gov.au/sites/default/files/pubs/Water-audit-report-2011-12_0_0.pdf)

<sup>18</sup> Murray-Darling Basin Commission. (2000). *Review of the Operation of the Cap*. Canberra: MDBA. [https://www.mdba.gov.au/sites/default/files/pubs/overview-report-mdbc-Aug-2000-w-4-companion-papers\\_0.pdf](https://www.mdba.gov.au/sites/default/files/pubs/overview-report-mdbc-Aug-2000-w-4-companion-papers_0.pdf)

<sup>19</sup> The NSW Cap models were approved between 2003 and 2011, except the Barwon-Darling which does not have an approved Cap model. The Cap models have not been modified.

<sup>20</sup> Commonwealth. (2007). *Water Act*. <https://www.legislation.gov.au/Details/C2014C00194/Html/Text>

<sup>21</sup> Blair, N. (2016). *Water Sharing Plan for the Gwydir Regulated River Water Source 2016*. <https://legislation.nsw.gov.au/view/pdf/asmade/sl-2015-629>

<sup>22</sup> Commonwealth. (2012). *Basin Plan 2012, Section 1.07*. <https://www.legislation.gov.au/Details/F2012L02240>

<sup>23</sup> Commonwealth. (2012). *Basin Plan 2012, Schedule 3*. <https://www.legislation.gov.au/Details/F2012L02240>

Schedule 3 of the Basin Plan describes the process for estimating the Basin's baseline diversion limit and an estimate of the baseline diversion limit for each valley. For most valleys in NSW this is the long-term average annual:

- limit under State water management law at 30 June 2009, for regulated rivers and floodplain harvesting,<sup>24</sup> plus
- take of water between 1993 to 1999, for unregulated rivers, plus
- take of water under the level of development at 30 June 2009, for basic rights, plus
- limit under State water management laws at 30 June 2009, for run-off dams (excluding take under basic rights)<sup>25, 26</sup> plus
- take of water under the level of development at 30 June 2009, for runoff dams under basic rights, plus
- net take of water under the level of development at 30 June 2009, for commercial plantations.<sup>27</sup>

Schedule 3 also includes the estimate for each of the above baseline diversion limit categories as a note.

In most NSW valleys, the baseline diversion limit for regulated rivers and floodplain harvesting is the NSW Water Sharing Plan limit (refer section 2.6 *Water Sharing Plan limits*).<sup>28</sup>

The baseline diversion limit for the Barwon-Darling/Baaka is the Cap limit for that valley.<sup>29</sup>

## 2.3 Environmentally sustainable level of take

The *Water Act 2007* defines an environmentally sustainable level of take as the level at which water can be taken from a water source which, if exceeded, would compromise:

- *key environmental assets of the water resource; or*
- *key ecosystem functions of the water resource; or*
- *the productive base of the water resource; or*
- *key environmental outcomes for the water resource.*<sup>30</sup>

---

<sup>24</sup> 1 July 2010 for the Namoi Valley.

<sup>25</sup> Runoff dams are small dams on hillsides and small gullies

<sup>26</sup> 1 July 2010 for the Namoi Valley.

<sup>27</sup> Commonwealth. (2012). *Schedule 3, Basin Plan 2012*. <https://www.legislation.gov.au/Details/F2012L02240>

<sup>28</sup> Moroka Pty Ltd. (2019). *Independent review for of interim baseline diversion limits for NSW floodplain harvesting*. Canberra: MDBA. Obtained under FOI 115. <https://www.mdba.gov.au/about-us/accountability-reporting/freedom-information/foi-disclosure-log>

<sup>29</sup> Commonwealth. (2012). *Basin Plan 2012, Schedule 3*. <https://www.legislation.gov.au/Details/F2012L02240>

<sup>30</sup> Commonwealth. (2007). *Water Act, Section 4*. <https://www.legislation.gov.au/Details/C2014C00194/Html/Text>

## 2.4 Environmental water recovery

The volume of environmental water recovery is the amount needed to reduce extractions from the baseline diversion limit to an environmentally sustainable level of take.<sup>31</sup>

The Basin Plan identifies water recovery targets as both a local reduction amount<sup>32</sup> and a shared reduction amount.<sup>33</sup> The local reduction amount is the water recovery target for an individual valley. The shared reduction amount is the amount that each valley contributes downstream.

## 2.5 Sustainable diversion limit

The *Water Act 2007* requires that the sustainable diversion limit must reflect an environmentally sustainable level of take.<sup>34</sup>

The Basin Plan defines the sustainable diversion limit as the baseline diversion limit minus the volume of water recovery (local and shared).<sup>35</sup> For example, the original surface water sustainable diversion limit for the Basin was:

Baseline diversion limit	13,623 GL
Water recovery	2,750 GL
Sustainable diversion limit	10,873 GL <sup>36</sup>

The baseline diversion limits and water recovery targets have been amended several times since the Basin Plan was legislated and the current surface water sustainable diversion limit for the Basin is:

Baseline diversion limits	13,647 GL
Water recovery	2,075 GL
Sustainable diversion limit	11,510 GL <sup>37, 38, 39, 40</sup>

---

<sup>31</sup> MDBA. (2020). *Trends in water use relative to the sustainable diversion limit in the southern Murray-Darling Basin*. Canberra: MDBA. <https://www.mdba.gov.au/sites/default/files/pubs/trends-in-water-use-relative-to-the-sustainable-diversion-limit%28SDL%29-in-the-southern-murray-darling-basin-2020-full-report.pdf>

<sup>32</sup> Commonwealth. (2012). *Basin Plan 2012, Schedule 2*. <https://www.legislation.gov.au/Details/F2012L02240>

<sup>33</sup> Commonwealth. (2012). *Basin Plan 2012, Section 6.05*. <https://www.legislation.gov.au/Details/F2012L02240>

<sup>34</sup> Commonwealth. (2007). *Water Act, Sub-section 23(1)*. <https://www.legislation.gov.au/Details/C2014C00194/Html/Text>

<sup>35</sup> Commonwealth. (2012). *Basin Plan 2012, Schedule 2*. <https://www.legislation.gov.au/Details/F2012L02240>

<sup>36</sup> Murray-Darling Basin Authority. (2020). *Current diversion limits for the Basin*. MDBA: Canberra.

<https://www.mdba.gov.au/basin-plan/sustainable-diversion-limits/current-diversion-limits-basin>

<sup>37</sup> Note the MDBA has advised at least three different sustainable diversion limits for the 2019/20 year: 11,510, 11,586 and 11,909 gigalitres. The sources of these three numbers are included in References (38 - 40)

<sup>38</sup> Murray-Darling Basin Authority. (2020). *Current diversion limits for the Basin*. MDBA: Canberra.

<https://www.mdba.gov.au/basin-plan/sustainable-diversion-limits/current-diversion-limits-basin>

<sup>39</sup> MDBA. (2019). *Murray-Darling Basin Sustainable Diversion Limits – estimate for 2019/2020 water year*. Canberra: MDBA. <https://www.mdba.gov.au/sites/default/files/pubs/sustainable-diversion-limit-2019-20-water-year-surface%20water-nov-19.PDF>

<sup>40</sup> MDBA. (2020). *Rural and Regional Affairs and Transport Legislation Committee, Answers to questions on notice, Agriculture, Water and the Environment Portfolio, Question No. 50, Budget Estimates, 10 November 2020*, [https://www.aph.gov.au/Parliamentary\\_Business/Senate\\_estimates/rrat/2020-21\\_Budget\\_estimates](https://www.aph.gov.au/Parliamentary_Business/Senate_estimates/rrat/2020-21_Budget_estimates)

There are sustainable diversion limits for individual water sources as well as the overall sustainable diversion limit for the Basin.<sup>41</sup>

The sustainable diversion limits will be implemented after Water Resource Plans are accredited by the Federal Water Minister. The MDBA began ensuring compliance with sustainable diversion limits in July 2019, despite Water Resource Plans in NSW not being accredited by the Commonwealth Water Minister, and sustainable diversion limits not being finalised. Until then, MDBA is assessing sustainable diversion limits based on volumes agreed with NSW:

*Interim arrangements have been put in place in the form of bilateral agreements between MDBA and states to ensure key elements of the water resource plans are given effect from 1 July 2019 where WRPs are not accredited by that date.*<sup>42, 43</sup>

Compliance with the Cap remains a legislative requirement until Schedule E is changed or rescinded. MDBA explains:

*It should be noted that the Cap on diversions continues in parallel with SDL accounting until at least the reporting and assessment requirements of Schedule E of the Agreement are amended or repealed. The MDBA is working with Basin States to cease Cap reporting upon full implementation of SDLs.*<sup>44</sup>

Replacing the Cap with the sustainable diversion limit will require a change to Schedule E of the Murray-Darling Basin Agreement (Schedule 1 of the Water Act), which requires consensus agreement of the six Basin Governments.<sup>45</sup>

## 2.6 Water Sharing Plan limits

The NSW Water Sharing Plans are legislative instruments in NSW. The current plans establish a legislative, quantified limit on extractions. The NSW Water Sharing Plans:

*establish a long-term extraction limit for this water source being the lesser of:*

---

<sup>41</sup> Murray-Darling Basin Authority. (2011), *The proposed "environmentally sustainable level of take" for surface water of the Murray-Darling Basin: Methods and outcomes*. Canberra: MDBA. <https://www.mdba.gov.au/publications/mdba-reports/proposed-environmentally-sustainable-level-take-surface-water-murray>.

<sup>42</sup> MDBA. (2020). *Trends in water use relative to the sustainable diversion limit in the southern Murray-Darling Basin*. Canberra: MDBA. <https://www.mdba.gov.au/sites/default/files/pubs/trends-in-water-use-relative-to-the-sustainable-diversion-limit%28SDL%29-in-the-southern-murray-darling-basin-2020-full-report.pdf>

<sup>43</sup> Glyde. (2020). Agreement 1 June 2020 between Murray-Darling Basin Authority and New South Wales. Canberra: MDBA. <https://www.mdba.gov.au/sites/default/files/pubs/new%20south%20wales%20mdba%20wrp%20bilateral%20agreement.pdf>

<sup>44</sup> MDBA. (2020). *Trends in water use relative to the sustainable diversion limit in the southern Murray-Darling Basin*. Canberra: MDBA. <https://www.mdba.gov.au/sites/default/files/pubs/trends-in-water-use-relative-to-the-sustainable-diversion-limit%28SDL%29-in-the-southern-murray-darling-basin-2020-full-report.pdf>

<sup>45</sup> Walker. (2009). *Murray-Darling Basin Royal Commission Report*. Adelaide: Government of South Australia, Department for Environment and Water, <https://www.environment.sa.gov.au/topics/river-murray-new/basin-plan/murray-darling-basin-commission>

- a) *the long-term average annual extraction from this water source that would occur with:*
  - i. *the water storages and water use development that existed in 1999/2000, and*
  - ii. *the share components in this water source that existed on 1 July 2004, and*
  - iii. *the rules defined in this Plan as at 1 July 2004, excluding the rules in clause 38, and*
  - iv. *the application of a limit on supplementary water access licence available water determinations of 1 megalitre per unit share, or*
- b) *the long-term average annual extraction from this water source that would occur under Cap baseline conditions.*

The 'Plan limit' is the NSW term for the volume of water which can be extracted under a Water Sharing Plan, derived by the hydrological model that underpins each Water Sharing Plan in NSW.<sup>46</sup>

The run numbers of the models used to derive the Plan limits, and the Plan limit volumes themselves, are included as a note in the gazetted Water Sharing Plans. This ensures that there is a record of the model, the model run, and the volumetric limit of the model run in the Water Sharing Plan.

The Water Sharing Plan model can be a different model to the MDBA Cap model.

In most valleys in NSW the Plan Limit is less than the Cap except the Barwon-Darling/Baaka, where the Plan Limit is the same as the Cap.<sup>47</sup>

## 2.7 Floodplain harvesting volumes in the baseline diversion limit

The baseline diversion limit for NSW includes 46.3 gigalitres of floodplain water harvesting.<sup>48</sup> The floodplain water harvesting volumes in the baseline diversion limit for each valley are shown in Table 1.

---

<sup>46</sup> DPIE. (2021). *Floodplain harvesting entitlements for the Gwydir Valley regulated river system: Model scenarios*. Sydney: DPIE. [https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0013/350203/scenario-report.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0013/350203/scenario-report.pdf)

<sup>47</sup> Moroka Pty Ltd. (2019). *Independent review for of interim baseline diversion limits for NSW floodplain harvesting*. Canberra: MDBA. Obtained under FOI 115. <https://www.mdba.gov.au/about-us/accountability-reporting/freedom-information/foi-disclosure-log>

<sup>48</sup> MDBA. (2019). *Murray-Darling Basin Baseline Diversion Limits – estimate for 2019/2020 water year*. Canberra : MDBA <https://www.mdba.gov.au/sites/default/files/pubs/Baseline%20Diversion%20Limit%20%28BDL%29s%20for%202019%2020%20water%20year%20-%20surface%20water....pdf>

Table 1: Floodplain water harvesting volumes in the baseline diversion limit

Valley	Floodplain harvesting volume in the baseline diversion limit (GL)
NSW Border Rivers	3
Gwydir	17.8
Namoi	14
Macquarie/Wambuul	-
Barwon-Darling/Baaka	11.5
<b>Total</b>	<b>46.3</b>

MDBA and DPIE have stated that the estimates of floodplain water harvesting included in the baseline diversion limits in the Basin Plan are incorrect, and that the baseline diversion limits will be increased to include the latest estimates.<sup>49, 50</sup>

## 3 Analysis and implications

This section analyses the proposed licensing of floodplain water harvesting, and its implications.

### 3.1 Floodplain Water Harvesting

The NSW Floodplain Harvesting Policy defines floodplain water harvesting as:

*the collection, extraction or impoundment of water flowing across floodplains, including rainfall runoff and overbank flow.*<sup>51</sup>

<sup>49</sup> Glyde. (2021). *Official Committee Hansard, Senate, Management and execution of the Murray-Darling Basin Plan: Multijurisdictional management of the Murray-Darling Basin Plan: Tuesday, 9 February 2021*. Canberra: Australian Parliament. [https://parlinfo.aph.gov.au/parlInfo/download/committees/commsen/e46f111a-9b7b-48ba-866b-d807fcaf08ac/toc\\_pdf/Management%20and%20Execution%20of%20the%20Murray%20Darling%20Basin%20Plan\\_2021\\_02\\_09\\_8467\\_Official.pdf;fileType=application%2Fpdf#search=%22committees/commsen/e46f111a-9b7b-48ba-866b-d807fcaf08ac/0001%22](https://parlinfo.aph.gov.au/parlInfo/download/committees/commsen/e46f111a-9b7b-48ba-866b-d807fcaf08ac/toc_pdf/Management%20and%20Execution%20of%20the%20Murray%20Darling%20Basin%20Plan_2021_02_09_8467_Official.pdf;fileType=application%2Fpdf#search=%22committees/commsen/e46f111a-9b7b-48ba-866b-d807fcaf08ac/0001%22)

<sup>50</sup> DPIE. (2021). DPIE: Sydney. *Floodplain harvesting entitlements for the Gwydir valley regulated river system: Model scenarios*. Sydney: DPIE [https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0013/350203/scenario-report.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0013/350203/scenario-report.pdf)

<sup>51</sup> NSW Department of Industry. (2013). *NSW Floodplain Harvesting Policy* (Updated 2018) Policy document, Sydney: NSW Department of Primary Industry., Available at: [https://industry.nsw.gov.au/\\_data/assets/pdf\\_file/0017/143441/NSW-Floodplain-harvesting-policy.pdf](https://industry.nsw.gov.au/_data/assets/pdf_file/0017/143441/NSW-Floodplain-harvesting-policy.pdf)

Floodplain water harvesting has never been regulated, measured, or monitored in New South Wales (NSW).<sup>52, 53</sup> Water Sharing Plans in the northern valleys include, as an appendix, the NSW State Floodplain Harvesting Principles, which say:

*The Water Act 1912 provided powers to licence floodplain harvesting. However, this was never applied as there was generally no requirement to restrict total overall water extractions or off-allocation diversions. Harvested floodplain water has been treated as a freely available bonus to a farmer's licensed entitlement.*<sup>54</sup>

Despite the requirement that structures used for floodplain water harvesting must be licensed, reviews have found that many water harvesting systems have been built without approval, and that there has been an increase in the number of systems and the amount of water harvested.<sup>55, 56</sup>

NSW DPIE intends to license and regulate floodplain water harvesting by the end of 2021.<sup>57</sup>

NSW DPIE has acknowledged that growth in floodplain water harvesting has exceeded Cap levels and claim that, by licensing floodplain water harvesting, extractions will be reduced to legal limits:

*In most valleys in northern NSW, revised modelling is showing that floodplain harvesting has grown above the legal limits described in NSW water sharing plans and the Australian Government Basin Plan. This growth in floodplain harvesting is reducing the volume of water that remains on floodplains and re-enters rivers and creeks.*

*The NSW Government is bringing floodplain harvesting into an enforceable regulatory framework, by controlling floodplain harvesting through licences and water supply works approvals. The process for this includes evaluating the environmental and downstream benefits of reducing floodplain harvesting to legal limits.*<sup>58</sup>

---

<sup>52</sup> Walker. (2019). *Murray-Darling Basin Royal Commission Report*. Adelaide: South Australian Department of Environment and Water., <https://www.environment.sa.gov.au/topics/river-murray-new/basin-plan/murray-darling-basin-commission>

<sup>53</sup> Productivity Commission. (2018). *Murray-Darling Basin Plan: Five-year assessment*. Canberra: Productivity Commission. [Inquiry report - Murray-Darling Basin Plan: Five-year assessment Productivity Commission \(pc.gov.au\)](https://www.pc.gov.au/inquiry/murray-darling-basin-plan/five-year-assessment)

<sup>54</sup> NSW Government. (2018). *Water Sharing Plan for the Gwydir Regulated River Water Source 2016 (2015 S1 629)*, Appendix 3. Sydney: NSW Government. <https://legislation.nsw.gov.au/view/html/inforce/current/s1-2015-0629>

<sup>55</sup> Steinfeld & Kingsford. (2011). *Disconnecting the floodplain: Earthworks and their ecological effect on a dryland floodplain in the Murray-Darling Basin*. Regulated rivers research and management, Vol. 29. <https://onlinelibrary.wiley.com/doi/10.1002/rra.1583>

<sup>56</sup> Slattery & Johnson. (2021). *Floodplain water harvesting in the Northern New South Wales Murray-Darling Basin*. Canberra: Slattery & Johnson. <https://slatteryjohnson.com.au/floodplain-harvesting-report/>

<sup>57</sup> Bentley. (2021). *Update on the implementation of the floodplain harvesting policy in NSW from Jim Bentley, Deputy Secretary, Water, Department of Planning, Industry and Environment*. Sydney: DPIE.

<sup>58</sup> NSW Government. (2021). *Impact of floodplain harvesting growth in the Northern Basin*. Sydney: DPIE. [Impact of floodplain harvesting growth in the northern Basin - Water in New South Wales \(nsw.gov.au\)](https://www.nsw.gov.au/impact-of-floodplain-harvesting-growth-in-the-northern-basin)



These are worthwhile aspirations; however, the sections following indicate that NSW may not achieve them.

## 3.2 Changing the Cap

### 3.2.1 Valley Cap models

The baseline conditions for the Murray-Darling Basin Cap are represented in a hydrological model for each valley, known as that valley's Cap model. The Cap model for each valley was developed through a formal, rigorous process defined by the Murray-Darling Basin Agreement and the *Water Act 2007* and enforced by MDBA.

Each valley's Cap model contains a formula for calculating diversions. These formulae are defined in a Diversions Register required by the Murray-Darling Basin Agreement.<sup>59</sup> The Cap models are independently audited against the description of the Cap in the Murray-Darling Basin Agreement.<sup>60</sup> After auditing, Cap models are approved by the MDBA.<sup>61</sup> The process for updating or modifying a valley's Cap model is legislated in the *Water Act 2007*.

These official valley Cap models include the volume of extractions from regulated rivers and floodplain water harvesting. However, the floodplain water harvesting component of these models was not verified by the independent auditor, who made the following comment about the Gwydir model, and similar comments about the other models:

*It is understood that there is no historical data available on the extent of floodplain harvesting in the Valley. ....*

*Given the lack of recorded data, the auditor cannot verify this estimate.*<sup>62</sup>

That is, no volume of floodplain water harvesting has been verified by the official Cap process.

### 3.2.2 'Cap scenario' models

DPIE has created a new model, called the 'Cap scenario' model. The 'Cap scenario' model is a different model to the official Cap model and has not been subject to the processes in Schedule E of the Murray-Darling Basin Agreement. The 'Cap scenario' model has no official standing, and no relationship to the official Cap. DPIE uses the 'Cap scenario' model to claim that the volume of floodplain water harvesting licensed will be within Cap.<sup>63</sup>

---

<sup>59</sup> Commonwealth Government. (2007). *Water Act, Schedule 1 Murray-Darling Agreement, Schedule E Cap on Diversions, Clause 4: Diversion Formula Register*. <https://www.legislation.gov.au/Details/C2014C00194/Html/Text>

<sup>60</sup> Bewsher Consulting. (2009). *Gwydir Valley Independent Audit of Cap model*. Obtained via Standing Order 52: Order for Papers – Water projects and cap modelling

<sup>61</sup> Commonwealth Government. (2007). *Water Act, Schedule 1 Murray-Darling Agreement, Schedule E Cap on Diversions, Clause 11(5)*. <https://www.legislation.gov.au/Details/C2014C00194/Html/Text>

<sup>62</sup> Bewsher Consulting. (2009). *Gwydir Valley Independent Audit of Cap model*. Sydney: NSW Parliament. Obtained via Standing Order 52: Order for Papers – Water projects and cap modelling

<sup>63</sup> NSW DPIE. (2021). *Floodplain harvesting entitlements for the Gwydir Valley regulated river system*. Sydney: DPIE. [Floodplain harvesting entitlements for the Gwydir \(nsw.gov.au\)](https://www.nsw.gov.au/floodplain-harvesting-entitlements-for-the-gwydir)



The 'Cap scenario' model is not simply the official Cap model plus floodplain water harvesting estimated at the 1994 level of development. It assumes a different level of development at 1994 than those in the official Cap model. For example, the official Cap model for the Gwydir regulated river assumes a maximum irrigated area of 83,800 hectares to represent the 1994 level of development.<sup>64</sup> The 'Cap scenario' model for the Gwydir regulated river assumes an irrigated area of 121,030 hectares to represent the 1994 level of development.<sup>65</sup> The on-farm storage extraction rate in the 'Cap scenario' model was based on 2008/09 data and is not the same rate used in the official Cap model.<sup>66</sup>

The 'Cap scenario' model has different limits for the 1994 level of development than the official Cap model. The different extraction values generated by the 'Cap scenario' model provide scope to accommodate floodplain water harvesting extractions that would otherwise breach the official Cap.

A senior officer of DPIE raised concerns to colleagues about introducing an unofficial Cap number. He wrote:

*Our WSP links us to the MDB Agreement process under Schedule E, so we cannot simply pretend that all this doesn't exist and the FPH program has reset the Cap.*

*I strongly suggest that FPH structures its words carefully when talking about "Cap" models so that we do not inaccurately present this work to stakeholders as being the new formal Cap model, with all the inevitable reactions when they see a lower Cap number.<sup>67</sup>*

Despite this concern, DPIE presents the 'Cap scenario' as the official Cap. DPIE claims that the 'Cap scenario':

*Reflects agreements made under the Murray Darling Basin Ministerial Council Cap on diversions. For the Gwydir valley, as for most valleys in the basin, this refers to the development levels and management arrangements in place at 1993/94.<sup>68</sup>*

DPIE has created a 'Cap scenario' which is different to the official Cap. It has then presented the 'Cap scenario' as the new official Cap to imply that floodplain water harvesting will be within the official Cap.

Section 4 of this report explains this for the Gwydir Valley.

---

<sup>64</sup> Bewsher Consulting. (2009). *Gwydir Valley Independent Audit of Cap model*. Sydney: NSW Parliament. Obtained via Standing Order 52: Order for Papers – Water projects and cap modelling

<sup>65</sup> NSW DPIE. (2021). *Floodplain harvesting entitlements for the Gwydir Valley regulated river system*. Sydney: DPIE. [Floodplain harvesting entitlements for the Gwydir \(nsw.gov.au\)](https://www.nsw.gov.au/floodplain-harvesting-entitlements-for-the-gwydir)

<sup>66</sup> NSW DPIE. (2021). *Floodplain harvesting entitlements for the Gwydir Valley regulated river system*. Sydney: DPIE. [Floodplain harvesting entitlements for the Gwydir \(nsw.gov.au\)](https://www.nsw.gov.au/floodplain-harvesting-entitlements-for-the-gwydir)

<sup>67</sup> Brown. (2021). *Email: RE: Post FPH program – WRPs & LTAAELs*. Sydney: NSW Parliament. Obtained under Standing Order 52, Order for Papers – water Modelling, 5 May 2021.

<sup>68</sup> NSW DPIE. (2021). *Floodplain harvesting entitlements for the Gwydir Valley regulated river system*. Sydney: DPIE. [Floodplain harvesting entitlements for the Gwydir \(nsw.gov.au\)](https://www.nsw.gov.au/floodplain-harvesting-entitlements-for-the-gwydir)

## 3.3 The baseline diversion limit and sustainable diversion limit

### 3.3.1 Changing the baseline diversion limit based on best available information

MDBA has repeatedly stated that the baseline diversion limit will be changed to include 'best available information.'<sup>69</sup> A senior DPIE official confirmed with colleagues that MDBA:

*...did finally agree that ...states can submit BDL models at any time and as often as we like.*<sup>70</sup>

MDBA argues that changing the baseline diversion limit is a requirement under Section 10.49 of the Basin Plan.

*...the BDLs (see schedule 3 of the Basin Plan) are descriptions, not fixed volumes, and s10.49 of the Basin Plan requires WRPs to be based on the best available information.*<sup>71</sup>

However, section 10.49(1) of the Basin Plan refers to Water Resource Plans, not the baseline diversion limit. It says:

*A water resource plan must be based on the best available information.*

The *Water Act 2007* and the Basin Plan are Commonwealth legislative instruments, while the NSW Water Resource Plans are not. Water Resource Plans are required by the Basin Plan, and must be consistent with the Basin Plan, but are not legislative instruments in NSW or the Commonwealth.

---

<sup>69</sup> MDBA. (2020). *Trends in water use relative to the sustainable diversion limit in the southern Murray-Darling Basin*. Canberra: MDBA. <https://www.mdba.gov.au/sites/default/files/pubs/trends-in-water-use-relative-to-the-sustainable-diversion-limit%28SDL%29-in-the-southern-murray-darling-basin-2020-full-report.pdf>

<sup>70</sup> Brown. (2021). *Email: Draft notes – today's BDL/LTDLE meeting*. Sydney: NSW Parliament. Obtained under Standing Order 52, Order for Papers – Water Modelling, 5 May 2021. Document DPIE.WM.3028

<sup>71</sup> MDBA. (2021). *Rural and regional affairs and transport, Answers to Questions on Notice: Question No. 149, 26 March 2021*. Canberra: Australian Parliament House. [Rural and Regional Affairs and Transport – Parliament of Australia \(aph.gov.au\)](https://aph.gov.au)

There are significant consequences of changing the baseline diversion limit based on ‘best available information’ in a Water Resource Plan. If this is permitted, NSW Water Resource Plans will be given primacy over the Basin Plan and the *Water Act 2007*.

This is a matter of great concern because the requirement that Water Resource Plans are based on ‘best available information’ should not override the legislative description of the baseline diversion limits in Schedule 2 of the Basin Plan.

Further, increasing the baseline diversion limit based on information in a Water Resource Plan will increase the sustainable diversion limit so that it cannot give effect to the environmentally sustainable level of take.

The *Water Act 2007* and the Basin Plan are both silent on ‘best available information’ as applied to the baseline diversion limit.

Further, the test of what is ‘best available information’ is weak. As a senior DPIE officer explains to a colleague:

*You might have a list of 10 things you know are wrong with the model, fix one of them and it is still an improved model even with 9 other things you know are wrong still. A model doesn't even have to qualify to be fit for purpose to qualify as best available information.*<sup>72</sup>

### 3.3.2 Baseline diversion limit must represent State law at June 2009

The Basin Plan describes the method for calculating baseline diversion limits for regulated rivers and floodplain water harvesting as:

- a) summing the quantity of water that would have been taken by those forms of take for each year of the historical climate conditions under State water management law as at 30 June 2009; and*
- b) dividing that quantity by all of the years of the historical climate conditions.*<sup>73, 74</sup>

As at 30 June 2009 (or 1 July 2010 in the Namoi):

- there were no floodplain water harvesting shares in the Water Sharing Plans, and
- there were no floodplain water harvesting licences.

---

<sup>72</sup> Brown. (2018). *Email: Re: BDL definition*. Sydney: NSW Parliament. Obtained under Standing Order 52, Order for Papers – Water Modelling, 5 May 2021. Document DPIE.WM.2579

<sup>73</sup> Except the Namoi, which is 1 July 2010

<sup>74</sup> Commonwealth. (2012). *Basin Plan 2012, Schedule 3*. . <https://www.legislation.gov.au/Details/F2012L02240>

The DPIE Principal Legal Officer gave advice to the Water Minister, saying that floodplain water harvesting is likely to be an offence under the *Water Management Act 2000*, and that there are no circumstances where floodplain water harvesting would be permitted under the *Water Act 1912*.<sup>75</sup>

Therefore, it seems unlikely that floodplain water harvesting was State water management law as at 30 June 2009 (or 1 July 2010 in the Namoi).

If so, a revised baseline diversion limit that includes new volumes of floodplain water harvesting will not be consistent with the method for calculating baseline diversion limits defined in the Basin Plan.

### 3.4 Establishing a fixed relationship between the baseline diversion limit and the sustainable diversion limit

The Water Act requires the sustainable diversion limit to reflect an Environmentally Sustainable Level of Take. However, the Basin Plan was drafted with the sustainable diversion limit being calculated by subtracting the water recovery volume from the baseline diversion limit.<sup>76</sup> MDBA interprets the volume of water recovery as a constant:

*The formula for the sustainable diversion limit (SDL) is set out in schedule 2 of the Basin Plan 2012 (Cth). SDLs may also be amended following re-estimates of the baseline diversion limit (BDL) as part of the Water Resource Plan (WRP) accreditation process. This is because the BDLs (see schedule 3 of the Basin Plan) are descriptions, not fixed volumes...*<sup>77</sup>

This means that the difference between the baseline diversion limit and the sustainable diversion limit is fixed.<sup>78</sup> Using this interpretation, an increase in the baseline diversion limit automatically increases the sustainable diversion limit. Consequently, the sustainable diversion limit no longer reflects an Environmentally Sustainable Level of Take.

---

<sup>75</sup> DPIE Principal Legal Officer. (2020). *Briefing note – Sensitive legislation: Disallowance of the Water Management (General) Amendment (Exemptions for floodplain harvesting) Regulation 2020; impact on floodplain harvesting activities and the implementation of the NSW Floodplain Harvesting Policy*.

<https://drive.google.com/drive/u/1/folders/1k13W2LMEQ-kMGreH1Ov7gYD33kfRMPM1>

<sup>76</sup> Commonwealth. (2007). *Water Act*. <https://www.legislation.gov.au/Details/C2014C00194/Html/Text>

<sup>77</sup> MDBA. (2021). *Rural and regional affairs and transport, Answers to Questions on Notice: Question No. 149, 26 March 2021*. Canberra: Australian Parliament House. [Rural and Regional Affairs and Transport – Parliament of Australia \(aph.gov.au\)](https://aph.gov.au/aph.gov.au)

<sup>78</sup> Glyde. (2021). *Proof Committee Hansard: Management and Execution of the Murray-Darling Basin Plan, Multijurisdictional management of the Murray-Darling Basin Plan, Tuesday 9 February 2021*. Canberra: Australian Parliament House. [https://parlinfo.aph.gov.au/parlInfo/download/committees/commsen/e46f111a-9b7b-48ba-866b-d807fcf08ac/toc\\_pdf/Management%20and%20Execution%20of%20the%20Murray%20Darling%20Basin%20Plan\\_2021\\_02\\_09\\_8467.pdf;fileType=application%2Fpdf#search=%22committees/commsen/e46f111a-9b7b-48ba-866b-d807fcf08ac/0001%22](https://parlinfo.aph.gov.au/parlInfo/download/committees/commsen/e46f111a-9b7b-48ba-866b-d807fcf08ac/toc_pdf/Management%20and%20Execution%20of%20the%20Murray%20Darling%20Basin%20Plan_2021_02_09_8467.pdf;fileType=application%2Fpdf#search=%22committees/commsen/e46f111a-9b7b-48ba-866b-d807fcf08ac/0001%22)

The South Australian Royal Commission found that the proposal to increase the sustainable diversion limit by increasing the baseline diversion limit is inconsistent with the *Water Act 2007*, because the sustainable diversion limit should reflect the Environmentally Sustainable Level of Take, rather than be a function of consumptive use:

*Insofar as the MDBA may be proposing to raise SDLs by reference to increases in baseline diversion limits (BDL) as a result of new estimates for floodplain diversions, there appears to be no logic to such an approach. Any proposal to do so necessarily assumes that the ESLT can be determined (to increase) by reference to changes in consumptive use. The ESLT must be established independently from consumptive use, not because of it. If there is any logic or proper science to justify an increase to SDLs only by reference to increased BDLs, it has not been disclosed by the MDBA, or anyone else.<sup>79</sup>*

The sections above raise serious concerns about the legality of revising the baseline diversion limits to accommodate historic levels of floodplain harvesting that were not recognised at the time of formulating the Basin Plan. These issues should not be trivialised, and deserve proper scrutiny.

## 3.5 Increasing baseline diversion limits and sustainable diversion limits

Having increased the baseline diversion limit and claimed that the relationship between the baseline diversion limit and the sustainable diversion limit is fixed, MDBA will increase the sustainable diversion limit by the amount that the baseline diversion limit has been increased.

MDBA has stated that it intends to increase the baseline diversion limits and sustainable diversion limits by the floodplain harvesting volumes without making an amendment to the Basin Plan.<sup>80</sup>

That is, MDBA's approach to amending the baseline diversion limits and sustainable diversion limits is based on three arguments:

- There is a fixed relationship between the baseline diversion limit and sustainable diversion limit,
- The baseline diversion limits in the Basin Plan are not legislation, and

---

<sup>79</sup> Walker. (2009). *Murray-Darling Basin Royal Commission Report*. Adelaide: Government of South Australia, Department for Environment and Water, <https://www.environment.sa.gov.au/topics/river-murray-new/basin-plan/murray-darling-basin-commission>

<sup>80</sup> Glyde. (2021). *Proof Committee Hansard: Management and Execution of the Murray-Darling Basin Plan*, Multijurisdictional management of the Murray-Darling Basin Plan, Tuesday 9 February 2021. Canberra: Australian Parliament House. [https://parlinfo.aph.gov.au/parlInfo/download/committees/commsen/e46f111a-9b7b-48ba-866b-d807fc08ac/toc\\_pdf/Management%20and%20Execution%20of%20the%20Murray%20Darling%20Basin%20Plan\\_2021\\_02\\_09\\_8467.pdf;fileType=application%2Fpdf#search=%22committees/commsen/e46f111a-9b7b-48ba-866b-d807fc08ac/0001%22](https://parlinfo.aph.gov.au/parlInfo/download/committees/commsen/e46f111a-9b7b-48ba-866b-d807fc08ac/toc_pdf/Management%20and%20Execution%20of%20the%20Murray%20Darling%20Basin%20Plan_2021_02_09_8467.pdf;fileType=application%2Fpdf#search=%22committees/commsen/e46f111a-9b7b-48ba-866b-d807fc08ac/0001%22)

- The baseline diversion limits should be increased with changes in the ‘best available information’.

As argued above, these are spurious arguments.

## 3.6 Increasing the sustainable diversion limits without amending the Basin Plan

### 3.6.1 Amending the Basin Plan

The Basin Plan is a regulation, a legislated instrument delegated to the executive arm of government (Ministers and the public service). Amendments to the Basin Plan can be made by the executive arm, then tabled in Parliament. A motion to disallow the regulation can be moved by either House of Parliament within 15 sitting days of it being tabled. If the disallowance motion is passed the regulation is not made.<sup>81</sup>

The *Water Act 2007* sets out two ways to amend the Basin Plan:

- Subdivision F, or
- Section 23A.

Section 23A does not apply to the floodplain water harvesting volumes proposed and is not discussed further in this document.

Section 6.06 of the Basin Plan also includes requirements that must be met when the Basin Plan is amended.

### 3.6.2 Amendments under Subdivision F of the Water Act 2007

Subdivision F of the *Water Act 2007* (Sections 45 to 49) allows the MDBA to amend the Basin Plan.<sup>82</sup>

The process includes:

- preparing a plain English summary of the amendment, including scientific knowledge and socio-economic analysis that supports the amendment, and
- at least an eight-week period of public consultation.

---

<sup>81</sup> Parliament of Australia. (2021). *Delegated legislation*. Canberra: Parliament House.  
([https://www.aph.gov.au/About\\_Parliament/House\\_of\\_Representatives/Powers\\_practice\\_and\\_procedure/Practice7/HTML/Chapter10/Delegated\\_legislation](https://www.aph.gov.au/About_Parliament/House_of_Representatives/Powers_practice_and_procedure/Practice7/HTML/Chapter10/Delegated_legislation))

<sup>82</sup> Commonwealth. (2007). *Water Act, Subdivision F*. <https://www.legislation.gov.au/Details/C2014C00194/Html/Text>

### 3.6.3 Basin Plan requirements for amendment

Section 6.06 of the Basin Plan outlines additional requirements for review and amendment, including changes to the sustainable diversion limit. Section 6.06 stipulates that:

*A review must be undertaken having regard to the management of climate change risks and include an up-to-date assessment of those risks, and consider all relevant knowledge about the connectivity of surface and groundwater, the outcomes of environmental watering and the effectiveness of environmental works and measures.<sup>83</sup>*

However, MDBA proposes to amend the baseline diversion limits and sustainable diversion limits without adhering to the requirements of Subdivision F (Sections 45 to 49) or Section 23A of the Water Act, or Section 6.06 of the Basin Plan.

The baseline diversion limits are included as notes in Schedule 3 of the Basin Plan. MDBA interprets these notes as not being part of the legislation, arguing that a change to the baseline diversion limit does not require an amendment to the Basin Plan.<sup>84</sup>

*The definition of the baseline diversion limit, or the BDL, in schedule 3 of the Basin Plan is a definition in words for surface water regions. It's the role of the states, when they're drafting their water resource plans, to establish at any given point in time to the best available knowledge how that translates. The work that New South Wales has done in terms of flood plain harvesting, to increase their understanding of what that historic baseline diversion limit has been, will simply be assessed for accreditation, and if the number is different, if there is an increase in the baseline diversion limit to satisfy the plan, and therefore a consequential increase in the sustainable diversion limit, that does not require an amendment to the Basin Plan, because it's simply the best available understanding and information used to interpret the definition in the Basin Plan.<sup>85</sup>*

Despite the *Water Act 2007* and the Basin Plan containing formal procedures to amend the Basin Plan, including Parliamentary review, MDBA proposes to amend key dimensions of the Basin Plan without following these procedures.

---

<sup>83</sup> Commonwealth. (2012). *Basin Plan 2012*. <https://www.legislation.gov.au/Details/F2012L02240>

<sup>84</sup> Blacker. (2021). *Rural and regional affairs and transport, Cross-portfolio Murray-Darling Basin matters: 2020-2021 Additional Estimates*. Canberra: Parliament House. [2020-2021 Additional estimates – Parliament of Australia \(aph.gov.au\)](https://aph.gov.au/2020-2021-Additional-estimates)

<sup>85</sup> Goodes. (2021). *Official Committee Hansard, Management and execution of the Murray-Darling Basin Plan: Multijurisdictional management of the Murray-Darling Basin Plan: Tuesday 9, February 2021*. Canberra: Australian Parliament House. [https://parlinfo.aph.gov.au/parlInfo/download/committees/commsen/e46f111a-9b7b-48ba-866b-d807fcaf08ac/toc\\_pdf/Management%20and%20Execution%20of%20the%20Murray%20Darling%20Basin%20Plan\\_2021\\_02\\_09\\_8467\\_Official.pdf;fileType=application%2Fpdf#search=%22committees/commsen/e46f111a-9b7b-48ba-866b-d807fcaf08ac/0001%22](https://parlinfo.aph.gov.au/parlInfo/download/committees/commsen/e46f111a-9b7b-48ba-866b-d807fcaf08ac/toc_pdf/Management%20and%20Execution%20of%20the%20Murray%20Darling%20Basin%20Plan_2021_02_09_8467_Official.pdf;fileType=application%2Fpdf#search=%22committees/commsen/e46f111a-9b7b-48ba-866b-d807fcaf08ac/0001%22)



## 3.7 Water resource plans

Section 55 of the *Water Act 2007* requires Water Resource Plans to be consistent with the Basin Plan, including:

*any long-term annual diversion limit for the water resources of the water resource plan area.*<sup>86</sup>

Water Resource Plans are accredited by the Commonwealth Water Minister under Section 63 of the *Water Act 2007*. However, these Water Resource Plans are not Commonwealth legislative instruments, and are not listed in the Federal Register of Legislation.<sup>87</sup>

The decisions by the Commonwealth Water Minister to accredit the Water Resource Plans are legislative instruments.<sup>88</sup> It is the decisions to accredit the plans that are listed on the Federal Register of Legislation.<sup>89</sup>

The Water Resource Plans are not legislative instruments in NSW and no part of the Water Resource Plan is required to be legislated in NSW.<sup>90</sup>

In NSW, Water Resource Plans are considered to be over-arching plans. They consist of other plans, schedules, appendices, and various background and supporting documents.<sup>91</sup>

The Water Resource Plans submitted by NSW to MDBA do not include any quantified limits.

In NSW, Water Sharing Plans are one component of the Water Resource Plans.

## 3.8 Water Sharing Plans

NSW Water Sharing Plans are legislative instruments under the NSW *Water Management Act 2000*.<sup>92</sup> The Water Sharing Plans made in NSW between 2003 and 2012 will soon be replaced. The new Water Sharing Plans will be part of the NSW Water Resource Plans. The new Water Sharing Plans require the concurrence of the NSW Environment Minister.<sup>93</sup>

The Water Sharing Plans include a Plan limit and a sustainable diversion limit.

The Plan limit applies to extractions for all water shares in the Water Sharing Plan, regardless of their ownership (for example, an irrigator or an environmental water holder).

---

<sup>86</sup> Commonwealth. (2007). *Water Act, Section 55*. <https://www.legislation.gov.au/Details/C2014C00194/Html/Text>

<sup>87</sup> Australian Government. (2021). *Federal Register of Legislation*. Accessed 11 May 2021, (<https://www.legislation.gov.au/Browse/Results/ByTitle/LegislativeInstruments/InForce/Wa/0/0/principal>).

<sup>88</sup> Commonwealth. (2007). *Water Act, Section 63(7)*. <https://www.legislation.gov.au/Details/C2014C00194/Html/Text>

<sup>89</sup> Australian Government. (2021). *Federal Register of Legislation*. Accessed 11 May 2021, (<https://www.legislation.gov.au/Browse/Results/ByTitle/LegislativeInstruments/InForce/Wa/0/0/principal>).

<sup>90</sup> NSW Parliamentary Research Service. (2021). *Response to Research Request Prepared for Cate Faehrmann MLC, Subject: WRPs, WSPs and floodplain harvesting*. Sydney: NSW Parliament House.

<sup>91</sup> DPIE. (2021). *Planning Process*. <https://www.industry.nsw.gov.au/water/plans-programs/water-resource-plans/planning-process>

<sup>92</sup> NSW Government. (2000). *Water Management Act, Section 41*. <https://www.legislation.nsw.gov.au/view/pdf/asmade/act-2000-92>

<sup>93</sup> NSW Government, (2000). *Water Management Act 2000, Section 50(3)*. [http://www5.austlii.edu.au/au/legis/nsw/consol\\_act/wma2000166/s50.html](http://www5.austlii.edu.au/au/legis/nsw/consol_act/wma2000166/s50.html)



The sustainable diversion limit applies to extractions for all water shares in the Water Sharing Plan, except water owned by environmental water holders.

Unlike the first Water Sharing Plans, the new Water Sharing Plans will not include a gazetted model run, the volume of the plan limit or the volume of the sustainable diversion limit (see Section 2.6 this report).<sup>94</sup> That is, there will be no legislated, quantified limit to extractions in NSW legislation.

In addition, based on MDBA's interpretation that the baseline diversion limits and sustainable diversion limits in the Basin Plan are not part of the legislation, there will be no measure of NSW extractions in Commonwealth legislation.

In their entirety, the issues described above indicate the fragility of the policy instruments intended to achieve the objectives of the *Water Act 2007*. The coherence and alignment between State and Commonwealth instruments have been weakened. It appears that the Basin Plan is a 'paper tiger' dependent on a plethora of other related processes that can be altered when convenient to do so. This was not the intent of the *Water Act 2007*, which has strong objectives and aspirations for sustainable water management.

The next section provides a more detailed analysis of floodplain water harvesting and the sustainable diversion limits in the Gwydir Valley, a river system in Northern NSW with high productivity from irrigation and some Basin-significant Ramsar-listed wetlands.

---

<sup>94</sup> Pavey. (2020). *Water Sharing Plan for the Gwydir Regulated River Water Source Order 2020*. Sydney: DPIE. [https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0010/315478/final-wsp-gwydir-regulated-river-water-source-2020.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0010/315478/final-wsp-gwydir-regulated-river-water-source-2020.pdf)

## 4 Extraction limits in the Gwydir Valley

If the proposed volume of floodplain water harvesting in the Gwydir valley is licensed, the Cap and sustainable diversion limits will be exceeded. DPIE and MDBA seemingly intend to avoid confronting this reality by:

1. Presenting a 'Cap scenario' that is different to the official Cap.
2. Using the 'Cap scenario' to claim that floodplain water harvesting volumes will be reduced to the official Cap.
3. Increasing the baseline diversion limit to include floodplain water harvesting volumes.
4. Increasing the sustainable diversion limit by the increased baseline diversion limits.
5. Removing quantified extraction limits and reference to model runs from State and Federal legislation.
6. Amending the Basin Plan outside Parliamentary process.

### 4.1 Presenting a 'Cap scenario' that is different to the official Cap

The official Cap model for the Gwydir lists the Cap as 346 gigalitres.<sup>95</sup>

The MDBA states the official Cap volume for the Gwydir is 350 gigalitres.<sup>96</sup>

DPIE states that the extraction limit of the 'Cap scenario' model is 431.4 gigalitres.<sup>97</sup>

That is, DPIE are claiming that the 'Cap scenario' limit is 81.4 gigalitres higher than the official Cap.

---

<sup>95</sup> Bewsher Consulting. (2009). *Gwydir Valley Independent Audit of Cap model*. Obtained via Standing Order 52: Order for Papers – Water projects and cap modelling

<sup>96</sup> Murray-Darling Basin Authority. (2020). *Cap Register 2018-19*. Canberra: Murray-Darling Basin Authority. [cap-register-2018-19.pdf \(mdba.gov.au\)](https://www.mdba.gov.au/cap-register-2018-19.pdf)

<sup>97</sup> DPIE. (2021). *Floodplain harvesting entitlements for the Gwydir Valley regulated river system*. Sydney: DPIE [https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0013/350203/scenario-report.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0013/350203/scenario-report.pdf)

## 4.2 Using the 'Cap scenario' to claim that floodplain water harvesting volumes will be reduced to the official Cap

DPIE acknowledges that floodplain water harvesting in the Gwydir Valley exceeds Cap and states that it will be reduced to Cap.<sup>98</sup>

Table 2 shows DPIE's figures for extractions under 'current conditions scenario' and 'Cap scenario' in the Gwydir Valley Model.

Table 2: DPIE's figures for 'current conditions scenario' and 'Cap scenario' in the Gwydir Valley model

Extraction type	Volume generated by 'current conditions scenario' in the Gwydir Valley Model (GL)	Volume generated by 'Cap scenario' in the Gwydir Valley Model (GL)
General and High Security	213.4	216.5
Supplementary	92.9	111.3
Floodplain water harvesting	174.0	103.6
<b>Total</b>	<b>480.3</b>	<b>431.4</b>

Source: DPIE. (2021). Sustainable diversion limit scenario model for the Gwydir regulated river system. Sydney: NSW DPIE. [https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0003/178806/gwydir-surface-schedule-f-appx-c-sdl-scenario.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0003/178806/gwydir-surface-schedule-f-appx-c-sdl-scenario.pdf)

DPIE estimates that extractions under its 'current conditions scenario' in the Gwydir Valley are 480.3 gigalitres, including 174 gigalitres of floodplain water harvesting.

It estimates that extractions under its 'Cap scenario' are 431.4 gigalitres, including 103.6 gigalitres of floodplain water harvesting.

It claims that reducing extractions from 480.3 gigalitres to 431.4 gigalitres (48.9 gigalitres) will bring extractions within Cap.

However, the official Cap is 350 gigalitres, so that even when extractions in the Gwydir Valley are reduced by 48.9 gigalitres, they will still exceed the official Cap by 81.4 gigalitres.

<sup>98</sup> DPIE. (2021). *Floodplain harvesting entitlements for the Gwydir Valley regulated river system*. Sydney: DPIE. [https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0013/350203/scenario-report.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0013/350203/scenario-report.pdf)

## 4.3 Increasing the baseline diversion limit to include floodplain water harvesting volumes

The baseline diversion limits should include all forms of take, including floodplain water harvesting.

The current baseline diversion limit of regulated rivers and floodplain water harvesting for the Gwydir valley is shown in Table 3.

Table 3: Components of the baseline diversion limit for the Gwydir Valley

Components of the baseline diversion limit <sup>99</sup>	Volume (GL)
Regulated river extractions	296
Floodplain water harvesting	18
<b>Total baseline diversion limit for regulated rivers and floodplain harvesting</b>	<b>314<sup>100</sup></b>

The baseline diversion limit for regulated river extractions and floodplain water harvesting in the Gwydir Valley is 314 gegalitres.<sup>101</sup>

The DPIE 'Cap scenario' figure for regulated river extractions and floodplain water harvesting is 431.4 gegalitres (Table 2).<sup>102</sup>

MDBA and DPIE have said that floodplain water harvesting was not properly represented in the baseline diversion limit when the Basin Plan was made. MDBA officials have told Senate Committees that the baseline diversion limits, and sustainable diversion limits will be increased to incorporate the new floodplain water harvesting licence volumes.<sup>103</sup>

<sup>99</sup> The baseline diversion limit includes other types of take, such as extractions from unregulated rivers, interceptions by run-off dams and commercial plantations and basic landholder rights. This take is estimated and is not modelled.

<sup>100</sup> MDBA. (2019). *Murray-Darling Basin Baseline Diversion Limits – estimate for 2019/2020 water year*. Canberra: MDBA. [https://www.mdba.gov.au/sites/default/files/pubs/Baseline%20Diversion%20Limit%20%28BDL%29s%20for%202019\\_2020%20water%20year%20-%20surface%20water....pdf](https://www.mdba.gov.au/sites/default/files/pubs/Baseline%20Diversion%20Limit%20%28BDL%29s%20for%202019_2020%20water%20year%20-%20surface%20water....pdf)

<sup>101</sup> MDBA. (2019). *Murray-Darling Basin Baseline Diversion Limits – estimate for 2019/2020 water year*. Canberra: MDBA. [https://www.mdba.gov.au/sites/default/files/pubs/Baseline%20Diversion%20Limit%20%28BDL%29s%20for%202019\\_2020%20water%20year%20-%20surface%20water....pdf](https://www.mdba.gov.au/sites/default/files/pubs/Baseline%20Diversion%20Limit%20%28BDL%29s%20for%202019_2020%20water%20year%20-%20surface%20water....pdf)

<sup>102</sup> DPIE. (2021). *Floodplain harvesting entitlements for the Gwydir Valley regulated river system*. Sydney: DPIE [https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0013/350203/scenario-report.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0013/350203/scenario-report.pdf)

<sup>103</sup> Glyde. (2021). *Proof Committee Hansard: Management and Execution of the Murray-Darling Basin Plan, Multijurisdictional management of the Murray-Darling Basin Plan, Tuesday 9 February 2021*. Canberra: Australian Parliament House. <https://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;query=Id%3A%22committees%2Fcommsen%2Fe46f111a-9b7b-48ba-866b-d807fc08ac%2F0001%22>

That is, DPIE proposes to increase the baseline diversion limit for regulated river extractions and floodplain water harvesting by 117.4 gigalitres, from 314 gigalitres to 431.4 gigalitres.

## 4.4 Increasing the sustainable diversion limit by the increased baseline diversion limits

The fixed relationship between the baseline diversion limit and the sustainable diversion limit means that the sustainable diversion limit will also increase by 117.4 gigalitres.

Table 4 shows the current sustainable diversion limit for the Gwydir Valley and the revised sustainable limit, based on the latest floodplain water harvesting volumes proposed.

Table 4: Current and proposed sustainable diversion limits for the Gwydir Valley

	Current volumes GL	Increased volumes GL	Increase %
Total baseline diversion limit <sup>104</sup>	450	567.4 <sup>105</sup>	26
Water recovery <sup>106</sup> ,	49.6	49.6	-
<b>Total sustainable diversion limit</b>	<b>400.4</b>	<b>547.8</b>	<b>29</b>

## 4.5 Removing quantified extraction limits and reference to model runs from State and Federal legislation

The draft *Water Sharing Plan for the Gwydir Regulated River Water Source Order 2020*<sup>107</sup>,<sup>108</sup> specifies that water extractions are limited to:

- Sustainable diversion limit for the Gwydir regulated resource, and
- Plan limit for the Gwydir regulated resource.

<sup>104</sup> Includes all forms of take: regulated rivers and floodplain harvesting (314 gigalitres), unregulated rivers (11 gigalitres), runoff dams (124 gigalitres), and commercial plantations (1 gigalitre)

<sup>105</sup> Current baseline diversion limit plus increase of 117.4 gigalitres

<sup>106</sup> MDBA. (2019). *Murray-Darling Basin Sustainable Diversion Limits – estimate for 2019/2020 water year*. Canberra: MDBA. <https://www.mdba.gov.au/sites/default/files/pubs/sustainable-diversion-limit-2019-20-water-year-surface%20water-nov-19.PDF>

<sup>107</sup> Note that at the time of writing, the Water Resource Plan for the Gwydir surface water was withdrawn from the MDBA accreditation process to be resubmitted for accreditation later.

<sup>108</sup> Pavey. (2020). *Water Sharing Plan for the Gwydir Regulated River Water Source Order 2020*. Sydney: DPIE. [https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0010/315478/final-wsp-gwydir-regulated-river-water-source-2020.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0010/315478/final-wsp-gwydir-regulated-river-water-source-2020.pdf)

## 4.5.1 Sustainable diversion limit for the Gwydir regulated resource

The sustainable diversion limit in the draft Gwydir Water Sharing Plan is defined as:

- a) The baseline diversion limit for the Gwydir surface water area in Schedule 3 of the Basin Plan, less
- b) 42 gigalitres (being the local water recovery amount), less
- c) The shared water recovery component determined under section 6.05 of the Basin Plan.<sup>109</sup>

That is, the sustainable diversion limit is the residual of the baseline diversion limit and total water recovery.

Given that the baseline diversion limit for the Gwydir surface water area in the Basin Plan is a description and not a legislated volume, the sustainable diversion limit is also not a legislated volume in Federal legislation (the Basin Plan) or State legislation (the Water Sharing Plan).

## 4.5.2 Plan limit for the Gwydir regulated resource

The Plan Limit in the draft Gwydir Water Sharing Plan is defined as the lesser of:

- a) *average annual extraction calculated based on the following:*
  - i. *the water storages and water use development that existed in the 1999/2000 water year,*
  - ii. *the basic landholder rights and access licence share components that existed on 1 July 2004,*
  - iii. *the rules set out in the Water Sharing Plan for the Gwydir Regulated River Water Source 2002 as at 1 July 2004, excluding the rules in clause 39 of that Plan,*
  - iv. *a limit on supplementary water access licence available water determinations of 1 megalitre (ML) per unit share,*
  - v. *the level of development for plantation forestry that existed on 30 June 2009,*

---

<sup>109</sup> Pavey. (2020). *Water Sharing Plan for the Gwydir Regulated River Water Source Order 2020*. Sydney: DPIE.  
[https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0010/315478/final-wsp-gwydir-regulated-river-water-source-2020.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0010/315478/final-wsp-gwydir-regulated-river-water-source-2020.pdf).

*vi. the level of development for floodplain harvesting that existed in the 1999/2000 water year in connection with extractions from a regulated river in the water source, as assessed by the Minister,*

*b) average annual extraction calculated under Cap baseline conditions as agreed under the Murray-Darling Basin Agreement that was in place at the commencement of the Water Sharing Plan for the Gwydir Regulated River Water Source 2002.<sup>110</sup>*

There is no reference to the model run number used by DPIE to calculate the extraction limits or the volume of that extraction limit in the draft Water Sharing Plan.

The new Plan limit uses different time periods to assess extraction limits than those used for the baseline diversion limit in the Basin Plan. For example, the baseline diversion limit calculates take from regulated rivers and floodplain water harvesting based on:

*Water that could have been taken ...under State water management law as at 30 June 2009.<sup>111</sup>*

The Plan Limit for the Gwydir Regulated River Water Source Water Sharing Plan calculates limits to take from regulated rivers and floodplain water harvesting based on:

- water storages and water use development in the 1999/2000 water year,
- rules in the previous 2004 Water Sharing Plan, and
- floodplain water harvesting development in the 1999/2000 year.<sup>112</sup>

That is, the baseline diversion limit and the Plan limit are not calculated the same way and will therefore be different numbers. So, the Plan limit has no relationship with the baseline diversion limit and therefore does not give effect to the Basin Plan.

The MDBA oversees the sustainable diversion limit and the Cap, until the Cap is rescinded and replaced by the sustainable diversion limit. MDBA does not oversee compliance with the Plan Limit.

## 4.6 Amending the Basin Plan outside Parliamentary process

The baseline diversion limit for the Gwydir regulated water source can be changed based on 'best available information' (See section 3.3.1 *Changing the baseline diversion limit based on best available information*).

---

<sup>110</sup> Pavey. (2020). *Water Sharing Plan for the Gwydir Regulated River Water Source Order 2020*. Sydney: DPIE. . [https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0010/315478/final-wsp-gwydir-regulated-river-water-source-2020.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0010/315478/final-wsp-gwydir-regulated-river-water-source-2020.pdf).

<sup>111</sup> Commonwealth. (2012). *Basin Plan 2012, Schedule 3*. . <https://www.legislation.gov.au/Details/F2012L02240>

<sup>112</sup> Pavey. (2020). *Water Sharing Plan for the Gwydir Regulated River Water Source Order 2020*. Sydney: DPIE. [https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0010/315478/final-wsp-gwydir-regulated-river-water-source-2020.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0010/315478/final-wsp-gwydir-regulated-river-water-source-2020.pdf).

The baseline diversion limit can be changed ‘...*at anytime and as often as we like*’.<sup>113</sup>

These changes can be made outside any parliamentary scrutiny (See section 3.6 *Increasing the sustainable diversion limits without amending the Basin Plan*).

## 5 Conclusion

The effects of the actions outlined above are that:

- the proposed volumes of floodplain water harvesting will result in extraction limits exceeding the Cap or Plan limits,
- the sustainable diversion limit will not reflect an environmentally sustainable level of take,
- the Basin Plan will be amended without meeting the requirements of the Water Act and the Basin Plan, including:
  - considering climate change, or
  - any public scrutiny or Parliamentary control.
- baseline diversion limits, sustainable diversion limits and Water Sharing Plan limits are decoupled from the Basin Plan and the *Water Act 2007*, and
- when the Cap is replaced by the sustainable diversion limit, and the NSW Water Resource Plans are accredited under the Basin Plan there will be no quantified extraction limits in NSW or Commonwealth legislation.

The process described will undo the foundations of the water reforms that have been in place since 1995 (with the adoption of the Cap) and that were intended to be strengthened under the *Water Act 2007* and the Basin Plan.

The ability to change the baseline diversion limit and subsequently the sustainable diversion ‘...*at anytime and as often as we like*’<sup>114</sup> currently benefits a part of the irrigation industry, at the expense of others and the environment. Removing public scrutiny and Parliamentary review is short-sighted and removes long-term security for water users.

Water property rights will have no protection, as there will no longer be a legislated limit as a benchmark to measure devalued assets.

---

<sup>113</sup> Brown. (2021). *Email: Draft notes – today’s BDL/LTDLE meeting*. Sydney: NSW Parliament. Obtained under Standing Order 52, Order for Papers – Water Modelling, 5 May 2021. Document DPIE.WM.3028

<sup>114</sup> Brown. (2021). *Email: Draft notes – today’s BDL/LTDLE meeting*. Sydney: NSW Parliament. Obtained under Standing Order 52, Order for Papers – Water Modelling, 5 May 2021. Document DPIE.WM.3028