

# **MURRAY VALLEY PRIVATE DIVERTERS**

## **PRODUCTIVITY COMMISSION REVIEW – MURRAY DARLING BASIN PLAN**

**PUBLIC SUBMISSION July 2023**

### **Introductory Statement:**

Murray Valley Private Diverters (MVPD) represents predominantly family farming interests, that have access to relatively smaller volumes of water delivered primarily through Government regulated Trusts, small scale private water delivery organisations, and/or through approved individual metered access, in the NSW Murray Valley.

MVPD has members in the NSW Murray Valley from Tocumwal to east of Swan Hill and includes the Murray, Edward and Wakool River systems.

MVPD members due to their locations (adjacent to or vicinity of creeks/ivers) are also impacted by other aspects of the Basin Plan which were not recognised in the Basin Plan's (2012) Regulatory Impact Statement.

The RIS (2012) made incorrect assumptions with social and economic impacts. It focussed on how social and economic impacts would be offset eg Water for the Future Program – eg irrigation water acquired through buybacks, efficiency programs and/or SDL Adjustment Mechanism. Not only did the RIS not consider all relevant issues/factors and took a simplistic view on the effects of water removed from irrigated food production, it also failed to recognise the following:

- A substantive decline in reliability of Murray Valley General Security entitlements (approx. 82% down to 51%)
- Elevated flooding risk to the Murray Valley with direct impact to many members of MVPD, substantive economic impact to Local Governments which have direct flow on costs/or services cost to ratepayers; impacts on tourism, insurance premiums etc
- The NSW Government political deals, supported by the Murray Darling Basin Authority (MDBA) where decisions on the SDL Adjustment Mechanism projects (650G)L (eg *supply projects for water to SA & other projects*) were consistent and enabling to provide protection for some regions while apply disproportionately applying impacts to NSW Murray, Goulburn Valley and Lower Darling
- The Basin Plan's Regulatory Impact Statement (2012) described the social/economic impacts as 'modest'.

Beneficiaries of the Basin Plan include;

- Enhanced flow volume benefits for commercial and social and recreational outcomes for South Australia
- Economic and social benefits to the Northern Basin (Qld/NSW) as a result of the Basin Plan concentration of water recovery in the Southern Basin and Federal and State Governments and the MDBA's acceptance, of no substantive improvement in connectivity flows from the Darling River to Menindee Lakes and the Murray River.

- The largely un-recognised part of the Water Act 2007 is to “*remove impediments to water moving to highest value uses*”. Increasingly it appears the Basin Plan will also bring flow opportunity benefits, to new large scale corporate horticultural irrigation developments, in South Australia and the border regions of North Western Victoria, South Western NSW. Such outcomes could be viewed through the lens of the Water Act 2007 goal, of ‘*removing impediments to water moving to highest value uses*’
- The separation of land and water, water entitlement ownership, water markets and rule changes, including those proposed in the Basin Plan, are all issues that the public has raised as needing public disclosure and transparency. This should include:
  - Water Interests disclosure requirements for politicians and public servants, government engaged consultants and/or advisory bodies.
  - The lack of transparency should be the subject of high-level independent investigations

### Environmental Flows:

Murray Valley Private Diverter (MVPD) members have consistently and publicly supported the concepts of additional environmental flows. However, there is not support for flow targets that cannot be safely or sustainably delivered down a single Murray River from the Hume Dam and if there is no management in major storages for elevated flooding risks.

Since 2010, the concept of community collaboration, incorporation of local knowledge, ideas and collaborative partnerships to progress flow rates that are physically realistic, consistently have been thwarted by the rigidity of the Basin Plan and those making decisions. Such an approach is perverse to achieving enhanced environmental outcomes in a timely and cost effective way.

The journey of the Constraints Management Strategy since 2013, should be a lesson on Government and bureaucratic policy and process failures. Governments and MDBA continue to ignore realities and instead of working constructively with local communities on flows that are feasible, they retain intent to push their higher flow targets down the Murray, have compensation exclusions and Governments have moved to protect themselves from liability.

MVPD members also seek full transparency on the beneficiaries of Basin Plan flow targets described as ‘*end of system’ flows to the CLLMM*. Public perception remains that Basin Plan decisions are not based on the robust science, instead appear heavily influenced by politics, and/or economic targets for South Australia or other commercial interests.

The Basin Plan in its current form is not a whole of Basin Plan or a plan that has incorporated all relevant information, on which to make sustainable decisions.

MVPD welcomes the opportunity to provide information into the Productivity Commission’s five-year review of the implementation of the Murray Darling Basin Plan. Given the scale of community concerns and continued unsuccessful efforts to seek improvements to the Basin Plan since 2010, the Murray Valley region faces a difficult and uncertain future as result of politicisation of water and failures in bureaucratic processes, to provide accurate information on which improved political decisions could be made.

## Murray Darling Basin Plan

The Murray Darling Basin Authority (MDBA) was formed as an independent statutory agency. The concept of independent thinking and robust underpinning science is not evidenced by its decisions.

A range of documentary evidence has been provided to the MDBA, Governments and relevant reviews and/or inquiries. There appears little change in original goals and how they were to be achieved.

The Terms of Reference for this review appear designed to limit the capacity for this review to address long term issues of systemic failures. Instead, the Terms of Reference appear to confirm future MDBA and Federal Government's intention to proceed regardless.

This approach appears to cross all major political parties and either signifies political or bureaucratic failure at best, or an underlying concern, where the earlier separation of land and water leading to new commercial interests for movement of water to new regions, is influencing decisions.

The Murray Darling Basin Plan (2750GL) and proposal to obtain a further (450GL) appear consistent with the following objectives;

- To further deliver on political deals for South Australia
- To implement protections for specific regions at the expense of others
- To finalise steps with the separation of land and water and to implement political and commercial objectives to “*remove impediments to water moving to higher value uses*”

South Australia's political objectives are outlined in Securing the Future – A Long Term Plan of Management for the Coorong, Lower Lakes and Murray Mouth (May 2010). The Murray Darling Basin Plan and South Australia's political objectives are closely aligned.

Securing the Future Plan includes statements such as;

- 'large flows down the Murray River will maintain an open mouth and transport salt and other pollutants to the ocean via natural processes'. P 13
- 'When **flows are adequate to maintain the Lower Lakes at or near optimal operating range, minimal intervention is required** and adaptation actions that aim to build and maintain a resilient ecology at the site are possible':13

Section 6.5 (page 80)

'identifies that drawing from the best available information (CSIRO) it is **reasonable to base the plan for the Lower Lakes around fresh water**. The development of the **Basin Plan is a most significant initiative contributing to an adequate end-of-system freshwater flow**'.

'Given these **predictions for fresh water, the option of admitting seawater into the Lower Lakes by permanently opening the barrages is not seen as a necessary,**

Salinity targets for Lake Alexandrina are also mirrored in the MDBA's Murray Darling Basin Plan. Government of South Australia Technical Report (May 2010) **Development of Flow Regimes to Manage Water Quality in the Lower Lakes** states:

*'to achieve desired ecological character to meet salinity objectives for the Lower Lakes of 700 EC, **1000EC and 1500 EC** targets average annual inflows of 4850GL, **2850** and 1850GL were required'*

The Murray Darling Basin Plan mirrors South Australian salinity targets for Lake Alexandrina,

- 1000 EC 95% of years
- 1500 EC 100% of years

Pre basin plan, South Australia's already receives on average 4000GL, nearly double its minimum entitlement flow of 1850GL. The Basin Plan is South Australia's mechanism to cement this flow of 4000GL through environmental flow targets to the CLLMM.

Since 2010 to 2023, Murray Valley stakeholders have identified what are key errors in Basin Plan assumptions, including but not limited to evidentiary imperatives for more localised solutions within South Australia for the Coorong, Lower Lakes and Murray Mouth.

Despite parliamentary inquiries, extensive community submissions, meetings, advisory processes, parliamentary and or Productivity Commission inquiries, evidence of disproportional social and economic impacts to NSW Murray Valley, elevated flooding risks and wide ranging impacts to the security of irrigated food production, there has been no substantive change in intent.

Government and bureaucratic process failures in the implementation phase have created substantial waste of taxpayer's funds and diminished outcomes for the environment across the whole Basin.

In 2017 MDBA stated it will prepare a '**report card**' on social & economic impacts in the Southern Basin – but the MDBA advised during stakeholders meeting in Deniliquin, this will **NOT change decisions. The question is why?**

There is insufficient reasoning, why also the Basin Plan sets rigid and inflexible targets for the Coorong, Lower Lakes and Murray Mouth (CLLMM), to be achieved primarily by higher flows down the Murray River.

This is despite physical evidence including directly in the CLLMM region and also damage from the 2016 and 2022 Murray floods, published papers, multiple submissions and reports.

Example 1:

Despite La Nina wet conditions, there is little evidence of flood risk management. Water authorities did not activate Hume Dam 'airspace rule' which could have reduced height of the Dam to account for risks of major inflows. In October 2016 , when Hume Dam releases did occur, they were, combined with high flows from Victoria's Ovens River upstream of Yarrawonga Weir and resulted in major floods. Flows at Tocumwal were recorded at 204,000 ML/d at Tocumwal bridge site. It took 3 months for flood flows to reach the Murray Mouth in South Australia in late December.

Three weeks after flood waters reached the Lake Alexandrina and Murray Mouth, dredging of the Murray Mouth resumes.

This confirms current and historical warnings. The Murray Darling Basin Plan's reliance on freshwater flows down the Murray in the absence of any localised solutions in the Coorong, Lower Lakes Region, is not a sustainable and not an effective method to scour out incoming tidal sand deposits in the Murray Mouth.

Example 2: quote below; **Independent Review of Lower Lakes Science Informing Water**

**Management:** (2020-04-29) CSIRO Research Publications Repository

*“Under climate change, the management of the CLLMM would become increasingly challenging. Sea level rise would alter the hydrodynamics of the Coorong and Murray Mouth, as well as increase seawater ingression into the Lower Lakes. Evaporation from the Lakes would be higher under climate change. More freshwater inflow would therefore be needed to maintain lake water and salinity levels and flows over the barrages. However, catchment runoff in the southern Murray Darling Basin is projected to decline under climate change, and therefore future management of the CLLMM must be considered as part of whole-of-Basin planning and adaptation in response to climate change risk”<sup>1</sup>. (Pg 6)*

**Water Act 2007; Murray Darling Basin Plan (2750GL) + (450GL)**

The Federal Water Act 2007 has been subject to a number of amendments including in 2008 during the Millennium Drought, when legal interpretation of the Act identified that the environment had precedence over critical human water needs. The amendment (2008) gave higher recognition to critical human water needs.

In 2012 a further political deal for South Australia, led to announcement of an additional 450GL, the establishment of an Environment Special Account which also gave provision for acquisition of an additional 450GL and funding of \$1.7 billion over 10 years. This included \$200 million for constraints removal in a 3200GL Plan and makes particular reference to achieving benefits for the Coorong (salinity), Lower Lakes and Murray Mouth.

There are serious questions about why the Murray Darling Basin Plan and the 2012 amendments, continues to prioritise flow targets that are consistently aligned with South Australia's marketing campaigns for more water. The basis of these claims, water is needed for the Coorong, Lower Lakes and Murray Mouth in South Australia. Scientific, physical and documentary evidence already proves this is not a sustainable nor cost-effective solution.

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<sup>1</sup> [https://www.mdba.gov.au/sites/default/files/images/LowerLakesScienceReview\\_FINALREPORT\\_29Apr2020-web.pdf](https://www.mdba.gov.au/sites/default/files/images/LowerLakesScienceReview_FINALREPORT_29Apr2020-web.pdf) Pg

## Recommendation

- ❖ A full review of disproportional impacts of the Basin Plan and the development of new mechanisms in the Basin Plan to achieve an indisputable balance of social, economic and environmental outcomes, consistent with the listed objective of the Water Act 2007
- ❖ Review the adequacy of the MDBA's Basin Plan Regulatory Impact Statement (RIS 2012) to assess whether decisions in the Basin Plan and conclusions in the RIS, meet the objects of the Water Act 2007.
- ❖ Recognition of cumulative negatives impacts on the reliability of General Security irrigation entitlement holders in the Murray Valley;
- ❖ Recognition and action to avoid elevated flooding impacts on riparian landholders from concentrated water recovery in the Murray Valley, including no more water recovered for the environment in the Murray Valley. Flood risk avoidance strategies for Hume Dam and the Murray and Edward River systems (NSW Murray Valley) must be implemented.
- ❖ Amend the Sustainable Diversion Adjustment Mechanism to ensure a more flexible and adaptive approach achieving environmental (eg part revision of existing projects, scoring methodologies that are confined by measurement around original Basin Plan errors)
- ❖ Reject the basis of the Water Act 2007 Amendment (2012) which established the Environment Special Account (2012) – to recover an additional 450GL (\$1.7 billion)
- ❖ Full recognition that additional water recovery cannot be achieved with social and economic neutrality in NSW/Victorian Murray Valley and Goulburn Valley (Vic)
- ❖ Rectify political and departmental failures to acknowledge that the 450GL cannot be acquired or delivered in the Southern Basin
- ❖ Recognition there is a major error in public policy where further water recovery (450GL) has not been subject to any RIS Impact Statement and the existing neutrality is being interpreted inadequately
- ❖ Localised solutions for the CLLMM need to be developed and implemented in SA

**Question: What needs to change to ensure water recovery targets are met and that supply and efficiency measures are delivered? What lessons can be learnt from past experiences?**

### Southern Basin:

It is important that the Productivity Commission reflects on the information provided in this submission as identified above and does not focus on the questions themselves. To do so would misinterpret the responses or not give context to the answers provided.

## Efficiency measures: 450GL

This was a political announcement made without foundation in 2012 in order to ensure South Australia's commitment to the Basin Plan. The proposed 450GL is an additional benefit over and above benefits SA will receive in the 2750GL Basin Plan.

Efficiency measures as defined in Schedule 5 – Enhanced environmental outcomes referred to in paragraph 7.09 (e), which relate to the 450GL.

450 GL per year.

- (2) The outcomes that will be pursued are:
- (a) further reducing salinity levels in the Coorong and Lower Lakes so that improved water quality contributes to the health of macroinvertebrates, fish and plants that form important parts of the food chain, for example:
    - (i) maximum average daily salinity in the Coorong South Lagoon is less than 100 grams per litre; and
    - (ii) maximum average daily salinity in the Coorong North Lagoon is less than 50 grams per litre; and
    - (iii) average daily salinity in Lake Alexandrina is less than 1000EC for 95% of years and 1500EC all of the time;
  - (b) keeping water levels in the Lower Lakes above 0.4 metres AHD for 95% of the time and above 0.0 metres AHD at all times to help maintain flows to the Coorong, prevent acidification, prevent acid drainage and prevent riverbank collapse below Lock 1;
  - (c) ensuring the mouth of the River Murray is open without the need for dredging in at least 95% of years, with flows every year through the Murray Mouth Barrages;
  - (d) exporting 2 million tonnes per year of salt from the Murray-Darling Basin as a long-term average;
  - (e) increasing flows through the barrages to the Coorong and supporting more years where critical fish migrations can occur;
  - (f) in conjunction with removing or easing constraints, providing opportunities for environmental watering of an additional 35,000 ha of floodplain in South Australia, New South Wales and Victoria, improving the health of forests and fish and bird habitat, improving the connection to the river, and replenishing groundwater; and
  - (g) achieving enhanced in-stream outcomes and improved connections with low to middle level floodplain and habitats adjacent to rivers in the southern Murray-Darling Basin.

In assessing political proposals to recover further water for the environment (450GL). The following information should also be factored into reasons why this should not be proceeded with, nor stored in Hume or Dartmouth Dam. Murray & Goulburn Rivers headwater storages.

- ❖ 823GL of water entitlements for the environment was acquired Pre-Basin Plan
- ❖ 823GL + 2750GL Basin Plan + a further 450GL = 4200 GL (environmental entitlements)
- ❖ This is additional to environmental protections provided by rules, prescribed in Southern Basin Water Sharing Plans (*water set aside*). These include but are not limited to;
  - Held Environmental Water (HEW)
  - Barmah Millewa Environmental account + priority carryover provisions
  - Rules based water as described in Victorian Water sharing Plans

## The capacity limits of Murray and Victorian headwater storages

1. Hume Dam capacity = 3003GL
2. Dartmouth Dam capacity = 3856GL
3. Eildon Dam capacity = 3,390GL

## The physical capacity limits of the Murray and Edward River systems (NSW) and the Goulburn River (Vic)

1. Murray River at the Millewa and then Barmah chokes, flows above a relatively low threshold leave the Murray River and flow northwards to the Edward River system
2. Murray River above Torrumbarry Weir, water also leaves the Murray River and flows move northward adjacent to or within the Perricoota Forest
3. Murray River flows flows measured at Barham, are significantly less than the MDBA originally thought (approx. 35,000 ML/d capacity flows even in high floods.)

Cumulative water management rule changes combined with the Murray Darling Basin Plan decisions, already has and will continue to elevate flooding risks in NSW Murray and Edward/ Wakool river systems. This occurs because of the larger volume of water that is being retained in storages such as Hume Dam and Eildon Weir (Vic. Goulburn River) at the end of traditional irrigation periods, higher and longer in duration river flows.

If major storages such as Hume and/or Eildon (Vic) are filled to near capacity prior to or during wet years, there is little opportunity to manage flood risks downstream.

- Eg In 2020/21 water year, Hume Dam was 84% capacity at the commencement of winter
- Eg In 2022/23 water year, Hume Dam was 87% capacity at the commencement of winter
- Eg in 2022 Eildon (Vic) commenced winter at 99% of capacity
- MDBA's Basin Plan "piggyback" rule, environmental flows released from Hume Dam timed with unregulated flows from Ovens
- Environmental flows are targeted to occur for long durations in the Murray and Goulburn Rivers.
- Environmental flows will pre-fill & then maintain higher volumes in Barmah Millewa and Perricoota Forests over longer periods.
- Prolonged inundation of Barmah & Millewa Forests, or Perricoota Forests then mean there is little capacity for these forests to absorb additional flows from further catchment rainfall.
- If both the Murray and Goulburn Rivers go into major flood, between 50 to 80% of Murray Floodwater is pushed northwards into the Edward/Wakool River systems (Southern Basin)

Elevated flooding risk is the unrecognised consequences of the Murray Darling Basin Plan in the Southern Basin of NSW and Victoria.

The Basin Plan (**2750GL**) sets rigid targets for the Coorong, Lower Lakes and Murray Mouth of 2000GL over a 3-year rolling average with a minimum of 650GL per annum primarily using the Murray River. (Goulburn and NSW/Vic Murray Valleys)



## **Recommendations:**

- ❖ Federal and State Governments recognise the full range and disproportional social and economic of the Basin Plan to NSW Murray and Goulburn Valley (Vic)
- ❖ Review what water will remain available in NSW Murray and Victoria's Goulburn Valley for food production if the Basin Plan 2750GL and an additional 450GL is obtained. This must include pre basin plan environmental entitlement recovery of 823GL + Basin Plan targets of 2750GL + 450GL. In addition pre Basin Plan rule change protections for the environment
- ❖ Identify how elevated flood risks for NSW Murray Valley will be managed and why have Federal and State Governments and the MDBA , not addressed these risks to date and why elevated flooding risks to private businesses will be excluded from Constraints Management Programs funded by the Federal Government.
- ❖ Identify through a cost benefit analysis, whether the additional 450GL is actually feasible
- ❖ Assess whether South Australia's demand for the extra 450GL over and above flow benefits received in a 2750GL Basin Plan are valid
- ❖ Assess water wastage from the Additional Dilution Flow (ADF) rule for the Murray River (which SA negotiated based on modelled salinity assumptions in 1999). Salinity levels measured at Morgan are well below actual salinity risks and well below modelled levels of risk. The ADF wastes substantial water creating adverse social and economic impacts when Menindee Lakes are drained on a SA Additional Dilution flow rule which triggers releases without being linked to actual salinity levels in the Murray River.
- ❖ The ADF rule is now being interpreted by the MDBA as also being sourced and delivered to the SA Border from Hume Dam affecting Murray Valley communities,

## **Sustainable Diversion Limit Adjustment Mechanism (SDLAM)**

### **Supply measures: (650GL environmental projects /or 605 GL)**

The MDBA's 2023 Quality Assurance report identified a range of SDL projects to achieve equivalent or higher environmental outcomes as compared to held entitlements. The report identified the following:

- ❖ Projects currently operating or likely to be operable by 30.6.24
- ❖ Projects that are unlikely to be operable by 30.6.24
- ❖ Projects that are not operable or are not viable by 30.6.24

The scale of change being proposed by the Basin Plan plus an inability to meet original timelines should not be a surprised. A number of factors come in to play.

- 1) The Basin Plan was developed in tight timeframes with insufficient evidentiary science
- 2) Flow targets measured at the South Australia Lower Lakes that primarily relied on one Murray River to deliver, were theoretical concepts without proper evaluation and/or cost benefit analysis.
- 3) The MDBA was advised as far back as 2010 that problems with aspects of the Basin Plan were real, but a culture prevailed that ignored regional advice on how water actually moved in the Murray and Edward River systems. These were not accurately considered in the original Basin Plan assumptions
- 4) Major floods on the Murray in 2016 and again in 2022 occurred with resulting floods on the Edward Wakool system.
- 5) Government restrictions due to Covid, Victoria and NSW
- 6) Major floods on the Murray, Edward/Wakool River systems and Victoria's Goulburn River

The Implementation phase of the Basin Plan has also been impacted by incorrect assumptions. These included theories that amending existing Murray River legal easements Hume to Yarrawonga region on the Murray would allow the MDBA to run the Murray River at double the regulated flow height between Hume Dam and Yarrawonga Weir. (from 25,000 ML/d to 40,000ML/d) and this would deliver Basin Plan flow targets to SA.

There was no consideration of any other impacts to private property downstream of Yarrawonga.

Further mistakes occurred when the MDBA considered it was feasible to amend existing regulated flow conditions for the Murray River below Yarrawonga, through Tocumwal and the Barmah choke region from 15,000 ML/d up to 77,000 ML/day.

The MDBA has no understanding that flows of 77,000 puts the Murray River in substantial minor flood levels. There was also no demonstrated understanding that flows did not remain in the Murray itself above certain flow levels.

*Basin Plan original incorrect flow assumptions continue to guide the Basin Plan's water recovery targets*

*There remains no risk management plans or reviews to avoid elevated flooding risks as a result of Basin Plan water recovery targets or flow delivery targets to SA.*

Since the conclusion of the Millenium Drought and a return of wetter periods, there has been further evidence through direct recording of flow impacts, the sequences of how floods actually can occur, high river flow behaviour, and negatives environmental impacts to the natural banks of the Murray and Edward River of sustained high flows.

*Basin Plan original flow targets to South Australia remain in place. There has been no assessment of the historical co-contribution flows to South Australia's entitlement flow of 1850GL /year from the Northern Basin*

*Despite major floods in 2016 and 2022, the Basin Plan flow targets and water recovery objectives for NSW Murray Valley remain in place unchanged.*

To understand what has gone wrong with SDL Adjustment Projects, it is important to understand how rules around timeframes for states to lodge project actually occurred.

For example, MDBA required all SDL projects to be submitted by 30.6.2016.

After significant community concerns was raised with State Governments, the MDBA granted an extension to 30.6.2017.

However in that additional year, NSW Government relevant departments were undergoing major restructure. There was no effective capacity to implement new ideas or improve existing projects.

Restrictive MDBA timeframes to lodge projects, an inability to apply new learnings, new ideas and methodologies, is at odds with the concept of good practice in project development. Decision failures that continue today.

Not only would this lead to poor decision making, poor processes in public consultation with affected parties, but failure to allow project improvements, due diligence with underpinning advice and budgets preparation and expenditure.

SDL Adjustment Mechanism projects are still restricted by original MDBA decisions and goals for South Australian specified in the Basin Plan.

The MDBA's application of a mandated condition on SDL projects "limits of change" also means that no project submitted can undermine the flow targets to the Coorong, Lower Lakes and Murray Mouth.

Despite overwhelming evidence for the need for flexibility in ideas, rigid MDBA scoring system, limits of change rule, failure to allow amendments to existing projects or lodge new ideas to maximise environmental outcomes, remains a major impediment to common sense practice and prudent investment of taxpayers funds.

South Australian Government threats and demonstrated unwillingness to deviate from their original political claims, despite overwhelming evidence, is another failure of the Basin Plan and another impediment to maximising environmental outcomes across the whole of Basin.

## **Process and public consultation of SDL projects:**

Public consultation on a range of SDL projects affecting NSW Murray Valley has been strongly criticised.

- ❖ A range of SDL projects submitted by NSW and State Governments affecting the Murray Region did not include public consultation with directly affected parties and/or relevant stakeholders. Internal departmental or agency consultation was considered acceptable
- ❖ The Constraints Management Strategy (CMS) has been plagued with MDBA and State Government process failures, an approach that shows blatant disregard for the importance of valuing and including extensive local knowledge.

### **2013/14 MDBA Constraints Management Strategy (CMS)**

- MDBA is on public record (Hansard) stating that MDBA could deliver 2750GL Basin Plan without the need to remove constraints issues.
- Governments instructed the MDBA to prepare a Constraints Management Strategy following the MDBA's breach of regulated flow rules for the Mid Murray Region – Yarrawonga to Barmah choke.

- An advisory committee was established was established in 2013. At the end of that process, the MDBA admitted there was limited knowledge on the types/scale of private property and business impacts from the concept of *'relax constraints'*. MDBA staff at the time also considered that information was *"Back of the envelope quality"*
- The MDBA prepared a report (2014) which went to the Federal and State Governments stating in a table that *'there was community acceptance to investigate flows up to 77,000'*
- Advisory committee rejected Basin Plan original flow targets for the Murray River downstream of Yarrowonga Weir (77,000 ML/d, regulated capacity is 15,000)
- The advisory committee sought with detailed knowledge of the Murray and Edward Wakool River systems had proposed investigations up to 30,000 ML/d for environmental flow purposes only.
- The Advisory Committee sought a retraction of the MDBA's CMS report. MDBA would not do so. The Committee then asked for letters instead to go to the Federal & State Government, the MDBA refused.

### **2017, NSW Government Constraints Management Strategy (CMS) Yarrowonga to Wakool Junction**

In response to public concerns about the consultation methodology and handling of community/committee advice, the NSW Government took over the 2<sup>nd</sup> attempt at preparing a Constraints Management Strategy.

- Although this process progressed into a formal written draft concept plan, there were process failures again. Further details can be provided to the Productivity Commission separate to the written submission.
- The committee identified a flow option for further investigation of up to 30,000 ML/d for the Murray River, as potentially feasible to achieve Basin Plan environmental objectives, subject to all private property or business impacts being mitigated or compensated.
- This rates for the Murray was determined by stakeholders with localised and detailed knowledge of types of issues, risks and potential flow options that not only would be supported by affected communities, but were flows that were considered realistic and cost effective.
- The Concept Plan was submitted to Federal Government and MDBA. The committee received separate information the MDBA would not score the flow concept agreed. No copy of the final report submitted has been provided to the committee. It remains unclear whether any amendments were made.

### **2020, NSW Government announced the Mid Murray Accelerated Projects ( x 5 )**

This included a key constraints project.

- Ministerial statements on mitigation measures in one constraints pilot area are no longer included in the project framework
- The project budget became limited to progressing options for upgrading creek crossing only.
- It remains unclear how, when or if, the full suite of constraints related impacts to affected businesses would be addressed
- There are different types of business impacts depending on specific location.

- For example the Tuppall Creek project is associated with releases from Murray Irrigation Limited irrigation channel networks and relates to minor flow increases
- However for the Bullatale Creek, risks factors are distinctly different. Flow will come directly from the Murray River and will be substantially higher
- These landholders continue to express support for additional environmental flows at levels they consider safe and provided all adverse impacts are mitigated and there is no elevated flooding risk.
- Implementation of the final stages of the Perricoota Forest works remains challenged as issues raised by affected parties are still to be resolved.
- There is progress but it is unclear at this point what the timeframes would be

## **2022 NSW Government announced Reconnecting River Country Program (RRC) (name change from Constraints Relaxation )**

NSW Government and relevant Departments announced publicly and through documentation that they had acknowledged 'lessons learnt' from previous CMS programs (MDBA & NSW ) and would progress a new program in a more effective manner with affected people.

### Yarrowonga to Wakool Junction

- This new 'lessons learnt' approach is not evident in Government decisions or processes.
- Initial agreed concepts for investigating flows up to 30,000ML/d Yarrowonga to Wakool Junction appear amended to higher flow options, previously not supported.
- The RRC program is not being implemented in a manner that builds trust, instead there is already a high incidence of mistrust and an appearance of divide and conquer to achieve flow objectives that will give the highest scoring card from the MDBA.
- Despite actual and documented flow evidence in the Murray and Edward River system in 2022 and again in 2023 which reaffirms why the previous advisory committees put forward flow investigation options up to 30,000 ML/d, higher flow rates are being proposed
- A major impediment to successful implementation of the rebadged constraints program (now called RRC) is the repeated attempt by decisions makers (MDBA & now NSW) to implement flow rates that are not accepted by those negatively impacted
- A key risk for landholders, are the exclusions provisions identified in 'mitigation principles' and also the linking of the Landholder legal easements to the NSW Water Act 2000 amendment (2018) that removes the NSW & its related entities for any liability as a result of the releasing of environmental flows.
  - This is despite a high risk of exceedance of any new regulated flow rate for the Murray and Edward Wakool River system; and Goulburn River and known elevated flooding risks
- The Basin Plan in its current form, and the RRC Program (Constraints Program) is widely recognised by affected parties as increasing regional major flooding risks both in frequency and duration of flows.
- RRC mitigation principles are at this point specifically excluding compensation for elevated flooding risks. This is despite actual flood events in 2016 and 2022 and documented information provided which confirms how cumulative decisions influence the severity of those flood events.
- A mandated component of the Basin Plan once implemented, is the rule that environmental water will be released from Hume Dam, at the same time as natural and unregulated flows occur down the Ovens River. A concept called 'piggybacking'. This is a high risk strategy and there are

valid reasons for concerns by affected landholder. In addition to local and generational knowledge of such risk, refer below.

This submission refers to a joint NSW and Victorian Government (2019) report “**Murray Darling Constraints Modelling, Report prepared for the Victorian & NSW Governments 16.12.19**”

- ✚ *“The Panel considers that continuing with the existing approach given the current community concerns whilst maintaining the June 2024 deadline for completion, has a high chance of failure”*
- ✚ *“The Panel considers that the existing modelling undertaken for the Constraints Measures Program is insufficient to provide relevant and accurate information:
  - *about the costs and benefits of relaxing the constraints*”*
- ✚ *requirement for meaningful engagement and participation in the decision-making processes related to delivering the required flows needed to achieve the environmental benefits sought*
- ✚ *The current modelling is not suitable for assessing and communicating the 3rd party risks. The modelling has been undertaken at an aggregate scale for planning purposes. Landholders need to know the impacts of inundation at the property scale. The available modelling does not produce the information required to assess and communicate risks to landholders, local governments and infrastructure managers at that scale.*
- ✚ *The Panel found modelling information about changes in flooding risk have not been presented at a scale needed to build the confidence of landholders. The reports seen by the Panel have not focused on the changes expected in flooding risk to landholders1 .*
- ✚ *irrespective of improvements in real time river operation models, they will still require weather forecasts as an input, the accuracy of which falls away beyond several days. Given that it takes one to two months for water to flow through the length of the Murray system, a degree of uncertainty and residual risk will remain”*

Murray Valley communities and Constraints Reference Group members have consistently stated they are supportive of additional environmental flows provided they are realistic, all third parties impacts are addressed and there is no elevation in flooding risks to the region.

Murray Valley communities are also concerned that proposed high flow objectives for the Murray River are not exclusively for environmental purposes but are also linked to the Federal Water Act 2007 objectives which remain out of the public profile, ‘remove impediments to water moving to higher value uses’.

If higher above bank flows are to also provide commercial benefits downstream, Murray General Security entitlement holders should not incur further adverse liability impacts.

Riparian landholders impacted by Basin Plan objectives for higher flows than currently exist, should be fully compensated and there should be clear and permanent risks management strategies put in place to avoid the recognised and real elevated flooding risks from the Basin Plan

**Recommendation:**

- ❖ MDBA and State Governments must acknowledge past failings and recognise that experienced stakeholders associated with previous Constraints Programs identified flow investigation options up to 30,000 ML/d for environmental purposes based on informed knowledge, cost benefit analysis of potential mitigation measures, potential impacts on natural environments
- ❖ Federal and State Governments and the MDBA must acknowledge and activate flood risk avoidance measures in the Basin Plan and future management of the Hume Dam and Murray River.
- ❖ Full compensation for any risks to be incurred by businesses as a result of the Constraints Relaxation programs including elevated flooding risks, must be fully compensated.
- ❖ If Governments and MDBA intentions are enabling for new irrigation demands downstream to access higher flows as proposed within the Basin Plan documents, that such outcomes must be subject to fully disclosure, be transparent and any above natural bank flow losses are directly attributed to the commercial beneficiaries.
- ❖ There are specific areas below Yarrawonga Weir already experiencing negative flow impacts of the Basin Plan prior to any implementation of the Constraints Program.
- ❖ It is important to note that below Yarrawonga, a level of Constraints mitigation measures must be put in place urgently regardless of any other decisions on broader Constraints program – including Reconnecting River Country Program
- ❖ Any promotional of other project ideas that seek to deliver alternative environmental flow pathways cannot be seen as replacing the need for full mitigation measures and managing flood risk in the Yarrawonga to Wakool Junction zones
- ❖ Instead this submission recognises additional project options that enhanced the SDL Adjustment Mechanism methods to achieve higher environmental outcomes, but it would be incorrect for Governments and MDBA to assume that a project, for example Murray Irrigation Limited use of irrigation channels would replace constraints mitigation measures. This submission also only supports MIL project - stages 1, 2, 3.

**Question: Have the governance and institutional arrangements for the Plan – including the arrangements for compliance and monitoring, evaluation and reporting – proved effective? What changes would you recommend?**

Since the Murray Darling Basin Authority first released the Guide to the Murray Darling Basin Plan (2010) and subsequent finalised Basin Plan (2012), there are widespread community

concerns that it has not adequately demonstrated whether its acted according to its original charter of a an independent statutory agency. An agency that manages, in conjunction with the Basin States, the Murray-Darling basin's water resources in the national interest.

Community consultation and efforts to work constructively with Governments and the MDBA on improving the Basin Plan remains elusive. A clearer description would be that the Basin Plan remains rigid and inflexible.

The Murray Darling Basin Authority (MDBA) appears to have a culture that 'sticks to script' despite a range of review, inquiries, submissions, meetings, scientific or physical evidence.

This is not leading to a more sustainable Basin Plan either for the environment, social and economic wellbeing of negatively affected communities and achieves significant economic benefits for some regions at the expense of others.

Despite well documented and detailed information provided to Governments and the MDBA since 2010, this has not resulted in any substantive changes.

This raises the question, have politicians taken the necessary steps to truly understand its failings, do they rely primarily on the MDBA's information streams and advice, or is there lethargy in Federal and State Parliamentary processes, where they want to continue to support outdated political deals or underpin politically successful commercial interests.

In answering the question on governance, compliance, monitoring and evaluation, it is clear that such issues cannot be effectively addressed if the MDBA is establishing or overseeing monitoring, evaluation and compliance.

If monitoring and evaluating the success of the Murray Darling Basin Plan (2012) in its current form, is to be managed or overseen by the MDBA, then conclusion are easily reached that this would be '*monitoring ones own homework*' and that systemic failures will never be rectified.

Unless there is a complete review that is open and transparent, one where new information is not seen as a threat, but an advantage, to provides better outcomes for the environment, communities and for the taxpayers – then these questions as part of the Productivity Commission 2023 Review into the implementation of the Basin Plan are meaningless

**A full and independent Review of the Basin Plan incorporating new information and updated evidence since 2010**

**On this basis, the Murray Darling Basin should be a more adaptive plan, a plan that address new information and avoids rigid and inflexible thinking**

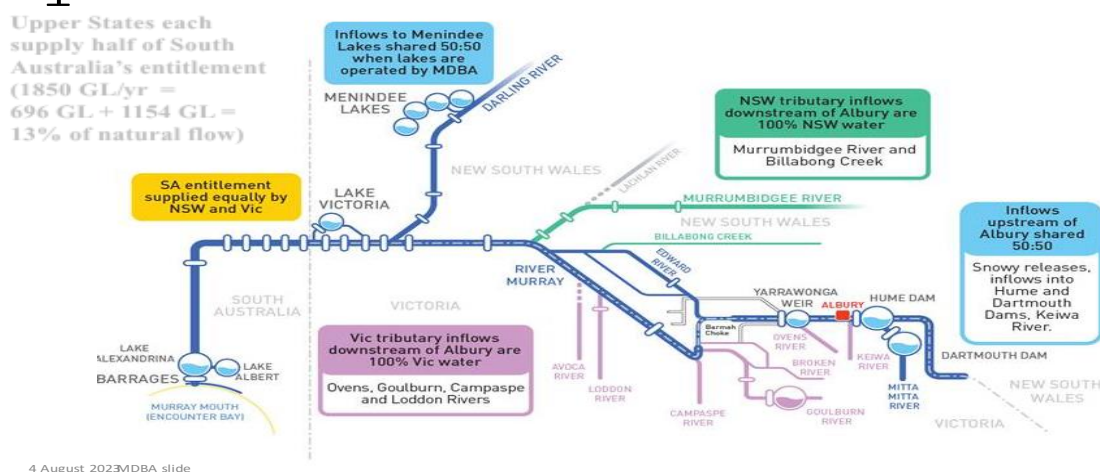
## **Question How well is the Plan responding to a changing climate? How should this be improved?**

- The Basin Plan's water recovery targets will provide increased protection for South Australia's commercial users of water (eg agriculture and intensive horticulture), higher social and economic benefits, higher tourism and recreational benefits particularly in the Lower Lakes/Coorong region.



- Positive benefits to South Australia however will be at the expense of other communities upstream who will have less resilience to climate change as a result of less availability of water. Less availability occurs not only as a result of the volumes recovered under the Basin Plan, but also if the Governments and the MDBA take an overly cautious modelled approach to decisions on water availability.
- To achieve South Australia's high flow goals to the Coorong, Lower Lakes and Murray Mouth however, will result in elevated flooding risks up in the Murray Valley. These communities (farming and tourism) will face less business and human resilience to risks of climate change.
- Food production in the Murray Valley will also become less secure with less water availability (annual allocations), but also with water trading markets. Less trade water equals higher prices and increased competition.
- In answering this question, in the Southern basin, rules of management pre- Basin Plan have substantive protections for seasonal or climate variations.
- Watering Sharing in Tier 1 also ensures SA entitlement flow has higher priority than extractions in the Southern Basin (NSW & Vic)
- A system of annual allocation on individual entitlements places further limitations on extractions, annual allocations are aligned with catchment rainfall, and volumes in major storages.

## The 'Recipe' for Water Sharing in Tier 1



### How well has community consultation and engagement been conducted? How can this be improved?

- Consultation on the Murray Darling Basin Plan is described by negatively affected communities as *'tokenistic'*; *top down*; and an MDBA and Government approach of *'ticking the box exercise'*.
- This approach ignores local knowledge, cements an inability and unwillingness to adopt new information and results in the continuation of major policy failures
- Poor levels of community consultation has also resulted in major budgetary failures of the Federal and State Governments in both the development and implementation phase of the Basin Plan.

- This submission has not included the breadth and depth of such failures, however it draws attention of the Productivity Commission to issues raised in earlier questions

**Community consultation at a community or stakeholder level has attracted strong and continued criticism.**

**The Murray Darling Basin Authority refusal to develop a more adaptive approach to the Basin Plan, its failure to provide more updated advice to the Governments remains a major impediment to a sustainable Basin Plan.**

**Equally it must be raised, why has the Federal and State Governments when presented information independent of the MDBA, also failed to act.**

## **What lessons should be learned from programs aimed at helping communities adjust to the Plan?**

This question should be framed, can communities or businesses disproportionately impacted by the Basin Plan adjust to the Plan in a manner that sustains communities, and economic viability.

A further question is, what will be the true, social and economic impacts to the broader Australian taxpayers and the national interest of this Basin Plan whose total costs will well exceed the public stated costs of \$13 billion?

This includes major changes to Australia's primary food bowl in the Southern Basin. Regions that have created significant and sustainable economic wealth that has underpinned regional communities.

The Murray Darling Basin Plan in its current form will lead to a reduction in the diverse agricultural production systems that have dominated the Southern Basin's Murray and Goulburn Valley and which have created corresponding value adding economic wealth for regions.

Adjusting to the economic changes the Plan will implement on adversely affected communities will further lead to winners and losers. Large regional centres closer to metropolitan centres can attract new investment opportunities, but will still lose the safety of a diverse economic base that food production and localised associated manufacturing currently provides.

Structural adjustment packages are political solutions, not community or business solutions. Invariably investments do go to the people or regions least affected.

- ❖ The Basin Plan's Regulatory Impact Statement (RIS) can only be regarded as incomplete, inadequate and a failure identify the full suite of people or issues impacted by decisions.
- ❖ Even with those sectors of the community who were actually identified (eg irrigators), the RIS has failed adequately identify the range of risks and social and economic impacts for regions who were disproportionately affected.

- ❖ A wide range of other impacted sections of communities were not considered at all. These include riparian landholders (elevated flooding risks/or property access issues) tourism impacts, value adding business impacts

Previous economic support packages associated with the Basin Plan showcase why regions most negatively impacted, do not receive actual benefits from such programs.

The criteria for applications

- ❖ exclude business or people from eligibility for applying for funding in areas most impacted,
- ❖ businesses or individuals incurring the highest risks, remain outside Government packages and/or any compensation or support packages.
- ❖ Areas with the least impacts are often included in such support packages , eg SA – a major economic beneficiary of the Basin Plan

**Government support packages are political solutions not community or business solutions. There should be a comprehensive review on the failures in design, eligibility and implementation decisions**

**Question: Does the implementation of the Plan reflect a commitment to the best available scientific knowledge? How well is this knowledge communicated? What improvements should be made?**

After years of documented evidence that has identified major errors in the Basin Plan, it is not possible to describe the Basin Plan as a plan based on 'best available science'.

This submission has not gone into details of once again explaining the scientific failures of the Basin Plan. Evidence has already been presented to Governments, the MDBA and the Productivity Commission with no results or changes to the Basin Plan.

For negatively affected communities in the Murray Valley – the community with major of social and economic impacts, advocacy Groups and the South Australian Governments continued claims for the Basin Plan to be implemented in its current form, including the additional 450GL, is causing major social stress.

Their public statements are ill informed and the MDBA and Governments had a role to ensure improved public understanding of scientific and affected community concerns, to help improve general understanding of people from different regions.

Sadly, the standards of Australian politics and the MDBA's failure to ensure more accurate and updated evidence on why the Basin Plan in its current form is not in the National interest, is unlikely to ever reflect a commitment to the best available science.

## **Question: Are there any other issues with the Basin Plan implementation that you wish to raise**

The Productivity Commissions report could progress improvements to the Basin Plan, a plan that was developed in response to the Millennium Drought leading in to the Federal election (2007). The Basin Plan is not adaptive and politicians and the MDBA have not enabled meaningful improvements based on updated information to be incorporated.

The plan in its current form, therefore remains a political plan. There is no acceptable explanation why the Basin Plan primarily seeks water recovery from the Southern Basin, and in doing so, relies primarily on one river to meet political flow objectives for South Australia.

The upper region of the Murray River from Hume Dam to Barham, cannot physically deliver the flow volumes to South Australia as the current Basin Plan proposes.

## **Conclusion:**

### **The Federal Water Act 2007 objectives are listed below (Attachment A)**

The Basin Plan is not consistent with the majority of the Act's objectives. The 2012 Murray Darling Basin Plan:

- Does not optimise economic, social and environmental outcomes across the Basin,
- Does not return overallocated or overused water resources in those specific zones that were already identified pre basin plan.
- Focused on political objectives for South Australia which resulted in water recovery being concentrated on the NSW Murray and Goulburn Valley (Vic), the very regions that were already highly regulated with a strong regime for compliance and controlled access to water.
- This Plan is not a whole of Basin Plan. The 2012 Basin Plan does not resolve long term issues of over extraction in the Northern Basin (Qld/NSW), and the Plan does not even require connectivity flows from the Darling to Menindee lakes in median rainfall years. Connectivity to Menindee Lakes and the Murray River therefore would only occur in major flood years
- The Murray Darling Basin Plan is a political plan, one that is not in the national interests, nor a plan that underpins food production or community resilience. It is a plan for political beneficiaries.

## ATTACHMENT A

**Water Act 2007;** The objects of this Act are:

- (a) to enable the Commonwealth, in conjunction with the Basin States, to manage the Basin water resources in the national interest; and
- (b) to give effect to relevant international agreements (to the extent to which those agreements are relevant to the use and management of the Basin water resources) and, in particular, to provide for special measures, in accordance with those agreements, to address the threats to the Basin water resources; and
- (c) in giving effect to those agreements, to promote the use and management of the Basin water resources in a way that optimises economic, social and environmental outcomes; and
- (d) without limiting paragraph (b) or (c):
  - (i) to ensure the return to environmentally sustainable levels of extraction for water resources that are overallocated or overused; and
  - (ii) to protect, restore and provide for the ecological values and ecosystem services of the Murray-Darling Basin (taking into account, in particular, the impact that the taking of water has on the watercourses, lakes, wetlands, ground water and water-dependent ecosystems that are part of the Basin water resources and on associated biodiversity); and
  - (iii) subject to subparagraphs (i) and (ii)—to maximise the net economic returns to the Australian community from the use and management of the Basin water resources; and
- (e) to improve water security for all uses of Basin water resources; and
- (f) to ensure that the management of the Basin water resources takes into account the broader management of natural resources in the Murray-Darling Basin; and
- (g) to achieve efficient and cost effective water management and administrative practices in relation to Basin water resources; and
- (h) to provide for the collection, collation, analysis and dissemination of information about: