

## **Submission**

### **Senate Select Committee on the Murray-Darling Basin Plan**

**Inquiry into the positive and negative impacts of the Murray-Darling Basin Plan and associated Commonwealth programs on regional communities**

150924

## Introduction

NSW Irrigators' Council (NSWIC) represents more than 12,000 water access licence holders across NSW. These licence holders access regulated, unregulated and groundwater systems. Our Members include valley water user associations, food and fibre producers, irrigation corporations and commodity groups from the rice, cotton, dairy and horticultural industries.

This submission represents the views of the Members of NSWIC with respect to the Senate Select Committee on the Murray-Darling Basin Plan for the *Inquiry into the positive and negative impacts of the Murray-Darling Basin Plan and associated Commonwealth programs on regional communities*. However, each Member reserves its right to independent policy on issues that directly relate to their areas of operation, or expertise or any other issues that they may deem relevant.

## Executive Summary

NSWIC welcomes the opportunity to provide comments to the Senate Select Committee on the Inquiry into the positive and negative impacts of the Murray-Darling Basin Plan and associated Commonwealth programs. NSWIC has been involved in the discussions around the Federal water reform process since the outset and actively advocated on behalf of irrigators and the irrigation industry to ensure the protection of irrigators' water rights.

Water is of crucial importance for irrigated agriculture and many rural communities as well as the national economy. According to the Australian Bureau of Statistics, the total value of irrigated agricultural production in Australia was \$13.4 billion with a significant portion of that produced in the NSW Murray-Darling Basin. Irrigation production directly influences employment, economic growth and prosperity across the Murray Darling Basin.

The removal of productive water has, and is having, a direct and long-lasting effect on the economic and social fabric of irrigation communities and each of these communities have different tipping points beyond which the environmental water recovery causes irreversible damage to that economic and social fabric.. NSWIC stresses that there needs to be productive and sustainable irrigated agriculture in order to support viable rural communities in the Basin. This is the reason why there needs to be balance between the social, economic and environmental objectives in the Basin Plan and other Commonwealth programs relating to the Basin.

Before NSWIC elaborates on the negative impacts of the water reform process, we would like to acknowledge the positive aspects of the Basin Plan and other Commonwealth Government programs:

- NSWIC supports the Federal government's commitment that any reduction in security of any class of water entitlements and any reduction in reliability or availability of water is fully compensated.
- NSWIC also supports the Federal Government's commitment to prioritise water saving infrastructure investment over buybacks to 'bridge the gap' by 2019. The Council and its members welcome the financial commitment made by the Commonwealth government to infrastructure investment and NSWIC acknowledges the significant investment by the Commonwealth in more efficient water supply and on-farm water management infrastructure across the Basin, which underpins the optimising of water delivery for irrigation.
- NSWIC welcomes the bipartisan support for the Water Amendment Bill 2015 which has placed a cap of 1500GL of Commonwealth water recovery through 'buyback..
- NSWIC also supports the Sustainable Diversion Limit (SDL) adjustment mechanism which enables equivalent environmental outcomes to be achieved with less water or allow for an increase in the volume of water available for environmental use with neutral or improved social and economic impacts.
- NSWIC is pleased that the Federal Government recognises and acknowledges that there are physical constraints within the Murray-Darling Basin and that many of the existing rules governing the management of water throughout the Basin are a consequence of those constraints.
- NSWIC appreciates the Federal Government's commitment to drawing upon the 'best available science' to inform the implementation of the Basin Plan..

NSWIC believes that we have come a long way since the earliest water purchases made by the Federal Government and hopes that the ongoing dialogue between all stakeholders will lead to a more balanced and more achievable Plan..

However, despite these positive aspects of the Basin Plan and associated Commonwealth programs, NSWIC emphasises that the water reform process, the Basin Plan implementation and other associated Commonwealth programs have had a range of negative impacts on irrigators and Basin communities and pose ongoing risks as the Basin Plan is fully implemented :

- NSWIC stresses that the non-strategic water purchases at the beginning of the water recovery process have had significant impacts on irrigated agriculture and rural communities and led to an over-recovery of environmental water in some valleys, in particular the Gwydir, Macquarie and Lachlan valleys. This over-recovery has affected the water available and reliability of supply for food and fibre producers and continues to have a direct impact on the future productive capacity and economic viability of irrigated agriculture in these valleys. The extent of over-recovery in the Gwydir and Macquarie river systems is masked to a large degree by the adoption of the Long Term Diversion Limit Equivalence factors that underestimate the average annual reliability of environmental water entitlements held in these valleys. Despite numerous NSWIC and regional irrigator organisation representations to the responsible Commonwealth agencies, the erroneous cap factors in these valleys have not yet been addressed (although a process is now in place under the Northern Basin Review to assess the cap factors in the Gwydir and Macquarie systems, it is not yet possible to evaluate the impact of any adjustment in SDLs in these valleys on 3rd parties - including irrigators in other valleys).
- The 'no regrets' water recovery process implemented by the Rudd Government has resulted in an environmental water portfolio that is not necessarily suitable to achieve the environmental targets detailed in the Basin Plan. Irrigators and Basin communities are concerned that the Commonwealth Government has in many instances acquired the wrong type or mix of entitlement/s or entitlement in the wrong areas of the Basin to optimise the impact of environmental water recovery. A significant volume of the Government's water recovery was undertaken before the Basin Plan was finalised and therefore little consideration was given to matching the water product recovered to the environmental targets. Unfortunately there is no mechanism to correct this inefficiency.
- NSWIC is deeply concerned about how the Murray Darling Basin Authority (MDBA) is undertaking the implementation of the Murray-Darling Basin Plan. While the MDBA has held hundreds of meetings throughout the Basin, the feedback given by communities is rarely reflected in the Basin Plan implementation reports or summary materials provided to the Ministerial Council and where it is, it is expressed in overly-sanitized forms. This has led to a lack of faith in the MDBA planning and implementation process.
- In correspondence to the Chair of the MDBA on 2 August 2015, NSWIC voiced its deep frustration with the Authority's performance and advised that NSWIC had lost confidence in the Authority for the following reasons:
  - Irrigators and Basin communities in NSW are alarmed that the 'goalposts' around the Basin Plan targets and programs have been moved dependent on the audience or the stage of implementation the Plan is in. Not only were irrigators and Basin communities told that the 2750GL Basin Plan could be

delivered without the removal of major constraints, but they were also told that the Plan could be implemented without changing the operational rules (i.e. shepherding) - both of which seem to be not the case. In addition, NSWIC was told that the valley by valley Sustainable Diversion Limits had been set using accurate scientific analysis, however the MDBA now claims that there must be a review of all valley Long-term diversion equivalence factors (cap factors) to ensure the SDLs can be met. NSWIC does not accept this premise.

- Irrigators and Basin communities in NSW are frustrated by the MDBA's overreliance on theoretical modeling. Basin communities - particularly in the Southern Connected System - remain deeply concerned that the flow rates and subsequent flooding of land (without acknowledgment of significant third party impacts) are being promoted as achievable, despite the fact that they do not align with the local knowledge of irrigators and local communities.. Authority Managers' assurances that they will not flood property beyond 'minor flood levels' seems to ignore widespread community feedback that the proposed flow rates in river reaches will cause more serious flooding and impacts on communities. It is alarming that irrigators and Basin communities (as well as State Governments) have been asked by the MDBA to accept the scientific basis of this modeling without sufficient availability of the planning assumptions employed by the Authority. At a minimum, NSWIC wants more ground-truthing of models to ensure adequate consideration of the impacts and alternatives.
- Irrigators and Basin communities in NSW are deeply concerned about the MDBA's apparent obsession with 'end of system' flows and the objective of keeping the Murray Mouth open 9 years out of 10. Most of the flow assumptions that the Authority are using to achieve this aim are simply not feasible under the current physical and operational constraints, or without potential significant negative third party impacts on Basin communities.
- Irrigators and Basin communities in NSW are angered by the failure to meaningfully engage with Basin communities throughout the drafting of the Basin Plan and also in its implementation to date. There is a disconnect between the MDBA's public statements on the extent of progress to date and the realities of associated with the implementation of the Constraints Management Strategy and the Northern Basin Review and the lack of meaningful community engagement around these components of the Basin Plan.

NSWIC and its members have concluded that the MDBA has failed to deliver on key responsibilities under the Water Act 2007 (Cth) - in particular the objectives of the Act - which require the Basin Plan to be implemented giving equal weight to social, economic as well as environmental outcomes. The Council holds the view that from the outset, the MDBA has been primarily concerned about the environment and that remains its pre-occupation.

Much of the MDBA's effort in the area of social and economic analysis was rushed and lacked focus. It has only been in recent times that a meaningful attempt is being made by the MDBA to understand the social and economic assessment of the actual and potential impacts of the Basin Plan. This has led to a situation where there is a very significant gap between the Authority's environmental planning and its understanding of the social and economic consequences of that planning. NSWIC questions how the Commonwealth can

consider acquiring 450GL of 'upwater' when it does not yet understand what it will achieve with 2750GL of environmental water and the related social and economic consequences.

The apparent delay in social and economic analysis has led NSWIC to pass the following motion at its General Meeting on 2nd July 2015.

*That NSWIC request the Federal Government to amend the foundation stone of the Murray Darling Basin Plan - the Water Act (2007) - to indisputably give equal balance to the triple bottom line i.e. Social (people), Economic and the Environmental values, when considering Basin Plan implementation options and their associated consequences.*

In addition to the impacts the water reform process have had on irrigators and Basin communities to date, NSWIC strongly believes that there are significant ongoing risks with the implementation of the Murray-Darling Basin Plan. These risks include:

- The ongoing funding of the Basin Plan, the Commonwealth Environmental Water portfolio and associated Commonwealth programs. As the 2015-16 budget papers outlined, there are currently no further funding commitments made to the agencies tasked with implementing the Murray-Darling Basin Plan or allowance for the fees and charges that will be levied on the Commonwealth Environmental Water portfolio.
- The Constraints Management Strategy poses a significant risk to irrigators and Basin communities. Not only has there been too much focus on physical constraints but the assessment of these constraints has been limited to an analysis of 'lateral connectivity' of rivers and streams with floodplains. Rule change constraints have been given little attention despite the potentially very significant implications that might have for irrigators' reliability of supply, and access to, water. Rule changes constitute a particular risk as they have the capacity to undermine irrigators' property rights and change the characteristics of the Commonwealth's water entitlements to give environmental water holdings precedence over other water entitlements - in direct contravention of the commitment of the Commonwealth that water recovered for the environment would retain the licence characteristics at the time of purchase or transfer.
- The SDL adjustment mechanism poses both an opportunity and risk to irrigators. While NSWIC supports the 650GL 'down water' to be recovered from SDL offset projects under the Plan, we are concerned that the SDL offset projects might not yield the full 650GL, requiring further water recovery from Basin communities. In this context, NSWIC welcomed the release of the Independent Stocktake Report which outlined that 508GL of offsets are likely to be achievable under project business plans submitted to the review date by the States - meaning the full 650GL is within reach. NSWIC is more apprehensive about the 450GL 'up water' allowed for under the Special Environmental Account, as we remain unconvinced that it can be achieved without negative social and economic consequences.
- Finally, NSWIC remains concerned about the rigid time timeframes around the Basin Plan implementation. Given the complexity of the task, some of the timeframes are simply unachievable, or will result in Plan components, being modelled and implemented under pressure, with negative consequences for Basin communities and irrigators.

**In light of these impacts and ongoing concerns, NSWIC provides the following recommendations:**

- A review of the Commonwealth Environmental Water holdings and the suitability of the entitlements to (efficiently) achieve the environmental targets. Consideration must be given to how any misalignment or inefficiencies can be corrected.
- The successful finalisation of the planned review of the Long Term Diversion Limit Equivalence factors in the Gwydir and Macquarie to accurately reflect the required environmental water holdings. Consideration must be given to how any over-recovery of environmental water can be adjusted. Further, the review of the LTDLE should be confined to the Gwydir and Macquarie valleys only.
- A commitment by the Federal Government to the ongoing funding of the Basin Plan and associated Commonwealth programs, including the agencies tasked with implementation the Plan and the fees and charges levied on the Commonwealth Environmental Water portfolio without any increase in the charges levied on irrigators.
- Provision of structural adjustment funding for Basin communities in NSW as promised by the current Federal Government. Availability of further structural adjustment packages for communities across the Basin that can show a reliance on irrigated agriculture and a social and economic vulnerability due to the negative impacts created by the loss of productive water for agriculture under the Plan provisions.
- Flexibility around the implementation timeframe for the Basin Plan and associated Commonwealth programs in order to ensure that all risks and potential impacts have been thoroughly assessed and mitigated.
- An independent investigation of the accountability, performance and independence of the Murray-Darling Basin Authority with emphasis on the basis and validity of its consultation and recommendations to Government in the development and implementation of the Murray Darling Basin Plan.
- A comprehensive cost benefit analysis of all proposed constraints management programs and initiatives (both physical and rule based) and further stakeholder engagement around the potential impacts of the constraints adjustments on irrigators and Basin communities
- The completion of the Northern Basin Review, including in-depth engagement with northern Basin communities and irrigators on the initiatives and programs arising from the Review, with a particular view to assessing potential negative 3rd party impacts.

## Specific Comments

NSWIC would like to make the following specific comments to the Terms of References.

ToR 1: *'That a select committee, to be known as the Select Committee on the Murray-Darling Basin Plan be established to inquire into and report, on or before 26 February 2016, on the positive and negative impacts of the Murray-Darling Basin Plan and associated Commonwealth Programs on regional communities, with a particular reference to:*

*a) the implementation of the plan, including:*

*i. its progress.*

NSWIC has long supported a balanced Basin Plan that adheres to the triple bottom line objective of the Water Act 2007 (Cth). The implementation of the Plan must occur in line with this objective and in a manner that ensures the ongoing viability of irrigated agriculture in the Basin. Furthermore, the implementation of the Basin Plan must take place in line with the Commonwealth Government commitments to:

- prioritise infrastructure funding over water buybacks.
- maintain the characteristics of the Commonwealth environmental water entitlements.
- avoid/mitigate third party impacts.
- improve the efficiency of environmental watering.
- rely on localism and ongoing stakeholder engagement.

As we outlined earlier, the rushed implementation in the early 'no regrets' phase of water buybacks has increased the social and economic impacts in some valleys. The fact that the Commonwealth commenced water purchases prior to the Basin Plan SDL reduction targets being set, resulted in an over-recovery in the Lachlan, Gwydir and Macquarie valleys and the SDL targets which were subsequently set were not based on 'best available' science. As such, there was no attempt made to minimise the social and economic impacts by assessing the minimum volume of SDL reduction required to meet the environmental targets for those valleys. The Commonwealth Government should now be required to make good on any over-recovery.

Furthermore, at this stage of the Basin Plan there needs to more consideration given to the feasibility of the timetable for implementation. NSWIC believes that many of the targets set in the implementation timetable are unachievable and too inflexible. NSWIC stresses that care should be taken not to rush through reforms without insuring that all risks and impacts have been identified and mitigated. Given the complexity of the task and the impact the water reform process has already had on irrigators and Basin communities, greater flexibility must be incorporated in the Basin Plan implementation phase and the associated Commonwealth programs.



ii. its costs, especially those related to further implementation,

The cost burdens associated with the Basin Plan are significant, ongoing and will likely increase with increased environmental water holdings. The costs include the ongoing planning and management costs of the Commonwealth environmental water and the fees and charges imposed on the Federal environmental water holdings (for example bulk water charges). Irrigators and Basin communities need assurance that there is an ongoing funding commitment by the Federal Government for the implementation of the Basin Plan and other Commonwealth Government programs.

The Basin Plan was heralded as national reform undertaken in the national interest and therefore must continue to be funded by the nation through Commonwealth funding on behalf of the community and not have associated costs passed back to irrigators through increased bulk water and other service charges designed to offset MDBA operational costs and the operations of the Commonwealth Environmental Water Office .

Aside from direct costs associated with the Basin Plan, Federal agencies and other Commonwealth programs, there are evident and potentially greater significant costs to Basin communities and the national economy if the Basin Plan is not implemented with a true triple bottom line objective.

Irrigators must be assured that the Basin Plan implementation does not cause negative third party impacts. NSWIC is deeply concerned that the Basin Plan implementation will involve changes to the operational rules without adequate consideration of the impact on reliability and accessibility of water for irrigators. We must also be assured that there will be no changes in the licence characteristics of the Commonwealth environmental water entitlements from operational rules changes.

iii. its direct and indirect effects on agricultural industries, local businesses and community wellbeing, and

As we have outlined earlier in this submission NSWIC believes that the Basin Plan has already had wide scale impacts on irrigated agricultural industries and Basin communities.

The ultimate removal of 2750GL of productive water will cost the Australian economy between **\$5 and \$7 million dollars a day** in lost irrigated agriculture production every day into the future<sup>1</sup>. This value is the lower bounds of the cost of the Basin Plan as the loss in irrigated agricultural production has a flow-on effect to rural communities through loss of employment and revenue to local economies . It is estimated that in some instances that 'multiplier effect' could be as

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<sup>1</sup> based on ABS data.

large as 7. To date the MDBA has done very little to identify these impacts despite the overriding imperative of the Water Act 2007 (Cth) for the Basin Plan to be implemented against triple bottom line objectives of optimising the social and economic outcomes as well as the environmental objectives of the Plan.

iv. any evidence of environmental changes to date:

Despite the extensive work of the Murray-Darling Basin Authority to assess the environmental outcomes of the water reform process, NSWIC is unable to truly assess any environmental changes to date. NSWIC believes it is extremely difficult to disentangle the environmental changes that are a result of climate variability and those that have resulted from the Basin Plan. Too much emphasis has been placed on environmental benefits of environmental water deployment without recognising that a large number of the environmental outcomes might be a direct result of the climate events in 2011/12. It is too early to assess the success of the deployment by the Commonwealth Environmental Water Holder of large volumes of water to meet the Plan's environmental targets.

Further, the monitoring undertaken to date does not appear to recognise any of the negative environmental outcomes that anecdotally have been observed including:

- River bank erosion and bank slumping;
- increase in feral animals and fish including pigs and European carp populations that have resulted as a result of wetlands and floodplains being wetter for longer periods;
- The impact of cold-water pollution<sup>2</sup> on native fish populations

In addition, the Commonwealth has been slow to establish a comprehensive environmental monitoring program. In the case of the Lachlan valley, the Commonwealth commenced its water purchases in 2008/09 but the Long Term Intervention Monitoring did not start until 2014, indicating that the Commonwealth cannot accurately assess the environmental changes resulting from their watering vs. what would have occurred naturally.

b. the effectiveness and appropriateness of the plan's Constraints Management Strategy, including:

i. the progress of identifying constraints and options to mitigate the identified risks, and

As NSWIC outlined earlier in this submission, the consideration of constraints (both physical and rule based) is critical and must be refined. Too much focus is currently placed on physical constraints (i.e. inundation modelling) addressed by simplistic overbank flow modelling while too little emphasis is placed on rule based constraints. Both of these constraints are important and need to be

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<sup>2</sup> <http://www.dpi.nsw.gov.au/fisheries/habitat/threats/cold-water-pollution>

thoroughly examined to ensure that the all risks and impacts are identified and addressed. For that reason, further stakeholder engagement on the local impacts of relieving constraints must be undertaken.

The Constraints Management Strategy should be about producing a comprehensive cost-benefit analysis of the cost of achieving incremental environmental outcomes. To date the work done by the MDBA has been about identifying broad cost estimates for whole river reaches without clearly identifying the incremental environmental benefits that can be achieved. It is our contention that there may be cheaper options that achieve significant outcomes, but are carried out through a more considered, localised environmental watering strategy.

ii. environmental water flows and river channel capacity:

While NSWIC does not support the current inundation modelling of the MDBA, we recommend that the MDBA must engage with our members on specific examples of environmental water flows and river channel capacity constraints in each river system, as well as potential alternative water delivery solutions where channel constraints exist.

c. the management of the Coorong, Lower Lakes and Murray mouth, including the environmental impact of the locks, weirs and barrages of the Murray River; and

NSWIC is of the view that the management of the Lower Lakes is inefficient and employs old and out of date barrage technology. NSWIC contends that the South Australian Government is not meeting its obligation in this regard which was evident in its decision not to proceed with the Lake Albert connector to the Coorong.

Irrigators in NSW believe that there has been little progress made in improving the management of the Lower Lakes since the significant end-of-system flows in 2011 and 2012. The Barrages are close to reaching their end of design life and will require replacement and/or upgrades in the near future. As such, considerably more work needs to be done to ensure that water management of the Lower Lakes is improved to meet the environmental and end-of-system objectives of the Basin Plan, rather than simply requiring greater contributions of water from the upstream States.