



Coleambally Irrigation Co-operative Limited

**Submission to the Productivity Commission -
Five year assessment of the
Murray Darling Basin Plan**

April 2018

Executive summary

The Basin Plan is a complex and challenging reform. It is only part way through its implementation and the impacts of the Basin Plan on the environment, communities and the irrigation sector are only just emerging. These factors need to be taken into account by this review.

CICL supports the implementation of a Basin Plan which delivers a balance between social, economic and environmental objectives. A Basin Plan which does not impact on the yield and reliability of water entitlements.

The northern Basin Review and the Sustainable Diversion Limit Adjustment Mechanism (SDLAM) are key elements of the Basin Plan. The successful progression of both of these elements is essential to providing irrigation dependent communities with stability and confidence to continue to invest. In addition the SDLAM projects are vital to improving the effectiveness of significant volumes of held and planned environmental water.

Given the complexity of the Basin Plan, the timeframes for its implementation are ambitious. The governance arrangements, which are by necessity multilayered, reduce flexibility and impact on streamlined implementation including execution of plans and projects within the SDLAM.

There are multiples risks to SDLAM projects. Controls of these risks lie in funding certainty, excellence in project management and implementation, and a willingness to be adaptive. The risk of failure to complete projects that achieve the 605GL of “off sets” at reconciliation in 2024 is borne by irrigators and their communities because the volume of water to be recovered from the consumptive pool will increase by the quantum of the “off sets” not achieved. These risks create uncertainty and concern in communities.

CICL would support recommendations that allow for more streamlined decision making and project execution provided the process protects the interests of the States and stakeholders.

CICL considers this review is an opportunity for the Productivity Commission to highlight the dynamic nature of change which is occurring in irrigation dependent communities and to outline how Basin Plan implementation can be improved, in a way which minimises the risk of further recovery of productive water from irrigation communities.

This review is also an opportunity to reinforce the role that non-flow measures could take to improve the effectiveness and complement the Basin Plan outcomes. Non-flow options are important to communities as they present an opportunity to deliver improved environmental outcomes without the negative impacts of water recovery from the productive water pool.

CICL does not agree with the narrow definition of “neutral or improved socioeconomic outcomes,” but supports the principle that where water can be recovered with confidence that there are no negative social and economic impacts, investment in efficiency measures is warranted.

CICL supports and considers it is imperative there is a widening of the social and economic definition of neutrality.

CICL believes the stop-start nature of the governance around constraints management has contributed significantly to the delays in the progress of constraints removal. The constraints management projects also form part of the SDLAM, which is subject to disallowance. The next steps for this project assuming, the SDLAM is successful, is to adequately resource planning and implementation of this project. The project needs to have excellent stakeholder engagement with

project planning prioritising having one-on-one discussion with individuals to address their concerns and include mechanisms for addressing objections.

The Basin Plan is contributing to the structural change pressures on communities with virtually no funding available to assist these communities. Some communities are more vulnerable than others. Assistance should be developed in consultation with communities and seek to provide enduring diversification of the economic base of communities.

CICL considers there are multiple opportunities to better integrate water planning and management into natural resource management frameworks.

The Water Resource Plan (WRP) timeframe pressures are an issue for NSW. Planning assumptions are key components of the WRP process. CICL's key concern is that the WRP will be finalised on time but the Planning process will not have allowed sufficient time to explore opportunities for improvements, test modelling adequacy or confirm confidence in the Planning Assumptions, in particular the Long Term Average Annual Yield assumptions.

CICL's experience in the Murrumbidgee Catchment is that the framework for delivering environmental water is effective. However, CICL emphasises the two most important tools for achieving improved environmental outcomes in the Murrumbidgee from held water are the implementation of Pre-requisite Policy Measures (PPMs) and relaxation of constraints.

In relation to Critical Human Water Needs (CHWN) CICL's concern is not with the human consumption priority but how the non-human consumption may be prioritised. Given the expansion in irrigated agriculture, the water trade options available in the market, CICL's view is the planning for CHWN should prioritise ensuring the operation of the water market and these principles should be embedded in the Plans being developed as part of the WRP process.

In relation to compliance which is important and essential for effective regulation, CICL emphasises the issues in NSW are an example of regulatory failure which all NSW irrigators have been implicated in. The circumstances in Murrumbidgee Catchment, where flows and extractions are highly regulated, is a very different to what has been portrayed in the media. In addition, for CICL irrigators, all diversions are measured including stock and garden water, with the co-operative having a rigorous approach to water measurement having adopted the "philosophy of if you cannot measure it you cannot manage it."

In many ways CICL considers this evaluation of the implementation of the Basin Plan is premature because of the scale and complexity of the Basin Plan and its governance.

The impacts of water recovery to date are still emerging in communities. The impacts on businesses are often confounded by other changes in irrigated agriculture independent of Basin Plan water recovery. The permanent effect of the water recovery on farm businesses, as they adjust to the opportunities and threats, including uncertainty, will take many years.

CICL encourages the Productivity Commission to consider the issues raised in this submission to identify improvements in the Basin Plan's implementation, to strengthen the Plan's capacity to achieve its objectives, and delivery of balanced social, economic and environmental outcomes.

Opportunities for improvement exist in the following key areas:

- governance arrangements that allow for more continuity,
- resourcing adequately resourced implementation, including human and financial resources and ensuring there is sufficient time,
- engagement that genuinely involves stakeholders influencing the outcomes,
- refining the test for social and economic neutrality,
- including non-flow options to improve environmental outcomes,
- integration of natural resource management.

1. Introduction

CICL welcomes the opportunity to make a submission to the Productivity Commission five year assessment of the Murray Darling Basin Plan (the Basin Plan). In assessing the progress of the Basin Plan, CICL emphasises that the Basin Plan is a large and complex water reform that will result in significant and enduring changes to both the health of the Basin water resource but also the social and economic fabric of the irrigation dependent communities in the Basin.

Its implementation by necessity is complex, involves multiple jurisdictions and agencies and is impacting on the social and economic fabric of inland communities across the Basin. The amount of work to be completed by the Murray Darling Basin Authority (MDBA), State and Australian Governments to implement the Basin Plan is enormous. Delivering effective community consultation and involvement, which is essential, compounds the challenges facing governments. Our townships are collateral in the water reform and Basin Plan process, impacted but without extensive knowledge of the water sector.

The implementation arrangements are complex with multiple layers and for many stakeholders difficult to follow. The adjustments irrigation businesses will need to make to their businesses to survive in the new business environment is substantive.

Our communities including irrigation organisations and irrigators expect open and transparent engagement which provides them with a genuine opportunity to influence the outcomes.

CICL encourages the Productivity Commission to explore these issues in their review and to include recommendations that provide sufficient time for the Basin Plan to be implemented in a mode consistent with its guiding principles, but also in a way that respects and takes into account the views of stakeholders and communities directly impacted.

CICL also notes the impacts of water recovery to date are still emerging in communities. The impacts on business are often confounded by other changes in irrigated agriculture independent of Basin Plan water recovery. The permanent effect of the water recovery on farm businesses, as they adjust to the opportunities and threats, including uncertainty, will take many years. The concerns currently being expressed across the Basin about the adjustment pressures and consequences of further removal of productive water by the Basin Plan are genuine and provide strong signal about the importance the next phase of Basin Plan implementation.

Environmental water managers are learning how to manage their significant volumes of environmental water. In the Murrumbidgee Catchment 15 percent of all general security holdings is owned by governments for environmental use. Our water management framework has shifted from decades of focus on water conservation and storage for productive use to also managing for

environmental outcomes. It is going to take time and consistent effort to develop and implement improved arrangements for delivery of environmental water.

CICL also requests the Productivity Commission recognise the Basin Plan's effectiveness can be improved by the inclusion of non-flow actions or complementary measures. These options will achieve environmental outcomes with reduced impact on the productive sector. These opportunities have been identified in the "toolkit" measures recommended as part of the Northern Basin Review¹. The importance of non-flow measures to improving river ecology and health is not new. In 2000, the River Murray Scientific Panel identified 22 activities which threatened river and floodplain ecology and two related to reduced volume.² This does not mean flow isn't important but emphasises that non-flow options are also essential to improving the health of our rivers and are needed to achieve the Basin Plan's objectives.

CICL understands the purpose of this inquiry is to focus on progress with implementation within the legislated timeframes and the adequacy of current arrangements for monitoring, compliance, reporting and evaluation.

Our responses to the Productivity Commission's information requests are informed by our experience and observations as an irrigation infrastructure operator in the southern Murray Darling Basin in the Murrumbidgee Catchment.

2. Background to CICL

CICL is based in the Riverina and supplies irrigation and drainage services to nearly 500 farms via an open, earthen, gravity fed channel network. Coleambally Irrigation has a dual governance arrangement, CICL and Coleambally Irrigation Mutual Co-operative Limited (CIMCL).

The Co-operatives were formed on 21 January 2000 when ownership of the Government owned Coleambally Irrigation Area was transferred to its irrigator customers/members, but the irrigation infrastructure is 50 years old, with CICL celebrating its 50th birthday this year. Each Co-operative has their own rules and separate boards. The CICL area of operations is 456,821ha including 317,281ha which is serviced by the West Coleambally Outfall Channel. The intensively irrigated area is approximately 80,000ha.

CICL is a member owned co-operative supplying irrigation services to its members and customers. CICL operates and maintains the irrigation supply and drainage system and delivers a range of corporate services on behalf of its members. CIMCL has responsibility for the future replacement of the major assets within/under/over the supply and drainage systems. CICL's charges to members exclude the cost of major asset replacement, whereas CIMCL's levy is specifically focused on providing for those assets' replacement.

Since 2001, we have invested in modernisation of our channel regulators and water supply points to improve our water supply service and efficiency. CICL's delivery system is managed under Total Channel Control (TCC) and automated water delivery system developed by Rubicon Water™.

CICL is highly regulated by both State and Commonwealth legislation.

¹ MDBA (2016) The Northern Basin Review.

² Benson, L. Markham, A., & Smith R. (2003) The Science Behind the Living Murray.

3. Commissions' assessment approach - Information request 1

The Commission welcomes feedback on its approach to assessing the Basin Plan

The Basin Plan was delivered with bi-partisan support in 2012 after several years of public, at time colourful, discourse. The Basin Plan strives to balance social, economic and environmental outcomes across the Basin. CICL recognises that the final Basin Plan was a compromise at the time between competing objectives, at a scale not previously contemplated by government.

CICL welcomes the Productivity Commission's approach to focus on evaluation of progress with agreed actions and not to open the debate on the volume to be recovered in order to balance social, economic outcomes or determine the environmentally sustainable level of take.

CICL is concerned; however, that just focussing on progress with implementation of the components of the Basin Plan including the water recovery, on its own **is not** a measure of the effectiveness of delivering on the outcomes sought by the Basin Plan. Social, economic and environmental outcomes at a local, catchment and Basin scale are material to measuring the success of the Basin Plan.

CICL agrees the progress against targets or a schedule is one measure of effectiveness. However CICL thinks measurement of effectiveness has more dimensions than just being completed or on track.

For example, a measure of the effectiveness of Basin Plan water recovery is not just the volume available for the environment but what outcome(s) were achieved from the use of environmental water.

CICL also encourages the Productivity Commission to consider the results of the MDBA evaluation of the Basin. The Basin Plan objectives and outcomes include:

S5.02 (2) (b) productive and resilient water dependent industries, and communities with confidence in the long term future.³

The analysis completed to date by the MDBA on the irrigation dependent communities across the Basin for some of the Basin communities, including Coleambally, shows a decline in our SEIFA⁴ between 2001 and 2011⁵. The size of this decline is significant and concerning, showing a decline in our community's resilience. This profile will be updated by the end of April to include the results of the 2016 Census. CICL isn't optimistic that the 2016 SEIFA will show an improvement. Whilst many will argue these changes are not a direct consequence of the Basin Plan, CICL argues the Basin Plan has not, or will not, help build community resilience because of its quantum impact on water availability.

CICL also argues this evaluation is an important opportunity to identify the benefits of a shift in the focus from flow targets and volume to identifying where complementary or non-flow measures can assist to deliver on the Basin Plan objectives.

³ Ibid

⁴ MDBA Basin Plan Evaluation, February 2018. SEIFA is an Australian Bureau of Statistics indices, they can be used to indicate how the social condition of a community are shifting relative to the index decline scores observed in other places.

⁵ Basin Plan Evaluation, Coleambally Community, February 2018.

4. Sustainable diversion limits and adjustments - Information request 2

The Commission is seeking information on:

a) Risks that may prevent Basin States from successfully implementing SDL adjustment projects

The SDLAM is a critical component of the Basin Plan made in 2012. CICL supports the Basin States taking a lead role in the development, refining and implementation of these projects.

There are multiple risks that may prevent these projects being successfully implemented. Obviously if the Australian Parliament decides to disallow the 605GL adjustment the opportunity of reducing social and economic impacts of the Basin Plan by reducing the volume of productive water to be removed from the consumptive pool will be lost.

Risks to the States ability to successfully implement these projects include:

- Capability and access to suitable expertise and resources.
- Competing demands for resources.
- Financial resources available to progress projects.
- The efficiency of bilateral agreements to ensure timely resourcing.
- The effectiveness and sophistication of the design of program delivery including stakeholder engagement.
- The ability/willingness of governments to pursue an adaptive management approach to design and implementation.
- The timeframe available and the quantum of the work involved to successfully develop and implement the projects.
- The effectiveness of the relationship between the MDBA and the States to ensure consistent understanding of the assessment process.
- Self Interests groups advocating against projects.

CICL notes the risk of failure to complete projects that achieve the 605GL of “offsets” at reconciliation in 2024 is borne by irrigators and their communities because of the volume of water to be recovered from the consumptive pool will increase by the quantum of the difference.

b) The extent to which adopting a different definition of “neutral or improved socioeconomic outcomes” for efficiency measures to what is in the Basin Plan would affect the likelihood of projects being delivered on time and on budget.

CICL does not agree with the definition of “neutral or improved socioeconomic outcomes”. The additional 450GL to be resourced through efficiency measures was included very late in the Basin Plan development. CICL supports the principle that where water can be recovered with confidence that there are no negative social and economic impacts, investment in efficiency measures is warranted.

The recent work completed by EY⁶ includes multiple references to the industry and community impacts of existing on-farm efficiency programs. For example EY note that on-farm projects have the potential for distributional impacts i.e. non-participants are disadvantaged and that the viability of particular industries is impacted through the distributive impact pathway and this may result in long term job losses. EY suggest that this should be monitored (pg. 16). The potential distributive effects

⁶<https://www.mdba.gov.au/sites/default/files/Analysis-of-Efficiency-Measures-Final-Report-v2.pdf>

are mentioned multiple times and EY notes that given the geographic clustering of commodity production in certain communities, these communities will be disproportionately impacted, potentially accelerating existing structural changes (pg. 27).

CICL supports and considers it is imperative there is a widening of the social and economic definition of neutrality. CICL argues that during the finalisation of the Basin Plan, when this addition was announced, stakeholders would not have expected social and economically neutrality to have such as narrow definition as voluntary participation by individuals.

Whilst altering the definition may place pressure on the time and the budget, this change will ultimately delivery a Basin Plan which is consistent with its objectives and more likely to have sustained community support.

If it takes more time to achieve the Basin Plan volume, it will provide more time for environmental water holders to learn how to most effectively manage their significant volumes and for river operators to learn how to modify their operations to assist with delivery of the environmental outcomes sought.

c) Whether there are other novel approaches to recovering water for the environment, such as purchase of entitlement options that may contribute to Basin Plan outcomes while achieving neutral socioeconomic outcomes.

CICL supports consideration of alternative options for providing environmental water including the Commonwealth Environmental Water Holder developing commercial options with irrigator's to access a share of their allocation in certain circumstances. Options would need to provide commercial benefits to individual irrigators, targeted to match environmental demand and be supported by enforceable contracts.

CICL does not have any specific examples of options which may be suitable, other than work undertaken but not implemented under the National Irrigators' Council banner several years ago.

5. Northern Basin review - Information request 3

The Commission is seeking information on actions governments should now take to achieve SDLs in the Northern Basin.

The Australian Government should explore alternative mechanisms for seeking legislative change to the Basin Plan to provide for the outcomes of the northern Basin review and the changed Sustainable Diversion Limits.

The Northern Basin review formed part of the Basin Plan agreed in 2012. The MDBA is an independent organisation which spent nearly four years collecting data and information and consulting to develop their recommendations. The proposed changes to the northern Basin Sustainable Diversion Limits are an outcome of this project and important to delivering on the Basin Plan objective of balancing social, economic and environmental outcomes.

Linked to the Northern Basin Review is agreement to implement a range of "tool kit" or non-flow measures to improve environmental outcomes. The disallowance of the reduction in the Northern Basin recovery volumes now places at risk the implementation of these sensible measures.

6. Constraints management - Information request 4

The Commission is seeking information on:

a) Why progress to remove constraints has been slower than expected

The removal of constraints is a contentious issue; there are many facets to this project which if not executed well will cause delays or cause the project to fail. Components include consultation, legal – including risk protection, financial and technical.

The landholders directly affected are beneficiaries of the flood mitigation offered by the upstream storages, for example Burrinjuck and Blowering Dams in the Murrumbidgee catchment and Hume Dam in the Murray catchment and have developed businesses around this protection. The removal or relaxation of constraints will have direct impacts on these landholders and they need to be consulted with, one-on-one to identify the implications on their landholdings and business operations of the proposed changes. Including the interaction between constraints relaxation and changes in the frequency of flooding, if any.

However, to progress these discussions there needs to be certainty about the funding and policy options. In NSW the constraints projects are including the SDLAM. The development of the SDLAM is delayed and is now subject to disallowance. These issues, because of the linkages with the SDLAM, contribute to delays in the constraints management projects.

A consequence of the decision making and funding arrangements is that work on constraints management is not continuous. For example the MDBA Final Reach Report for the Murrumbidgee was released in July 2015. NSW completed its concept proposal in 2016 and progress to the next stage is captured by the SDLAM. For such an important and difficult initiative this disjointed process is problematic and the major cause of the slow progress.

b) The implications of the slow progress

Slow progress does not result in streamlined project management. There is uncertainty for landholders and governments with government exposed to loss of corporate memory and landholder trust eroded.

The relaxation of constraints relies on arrangements and all works being completed or in place before the higher flows can be implemented. Constraints projects expenditure will be weighted to the end of the projects as agreed mitigations are constructed.

Slow progress increases the pressure on the backend of the project. The implication of slow progress is it contracts the time available for options to be explored, negotiations completed and the works implemented, potentially concentrating construction works.

c) What can be done to ensure that constraints are removed in a more timely manner while managing impacts on third parties?

Assuming the SDLAM is not disallowed the Australian Government and NSW Government need to expedite finalisation of the funding agreement for implementation to provide certainty for project funding and to allow NSW to lead the next stage of the project.

CICL also considers it is essential the Department of Industry has a collaborative and inclusive approach which involves WaterNSW, the Office of Environment and Heritage and the

Commonwealth Environmental Water Office and in the Murray, River Murray Water. There needs to be clarity on what is being proposed in terms of flows, and mitigation options, there also needs to be clarity on how often and what type of circumstances higher flows will be delivered. The project needs to have excellent stakeholder engagement with project planning prioritising having one-on-one discussion with individuals to address their concerns and include mechanisms for addressing objections. Given the stop start nature of this project, delivery models that provide certainty and consistency is required. CICL considers outsourcing components of these projects to the private sector will have merit and may provide more continuity of personnel

d) Strategies that are, or could be, put in place to increase the extent to which Basin Plan objectives are met when constraints cannot be removed.

In the Murrumbidgee the Office of Environment and Heritage is considering commercial options with the Irrigation Corporations to assist meeting higher flow targets in the mid-Murrumbidgee on a case by case basis. However, the benefits of these potential options are small compared to constraint relaxation.

Failure to address constraints strengthens the case for implementation of non-flow options.

7. Recovery of water for the environment - Information request 5

The Commission is seeking information on:

a) The extent to which the Australian Government's strategy to recover water in areas where gaps remain will be cost effective, align with Basin Plan's environmental objectives, and be transparent.

In the Murrumbidgee catchment, assuming the adjustment mechanism is successful, there are no gaps remaining in water recovery for the Murrumbidgee catchment, including the assumed Murrumbidgee contribution to the shared recovery target.

CICL argues recovery to date in the Murrumbidgee Valley which has included a significant component for infrastructure investment has provided important opportunities for the irrigation companies and some irrigators to make improvements to their infrastructure which has helped mitigate the impact of the Basin Plan.

CICL does not support any further water recovery from the productive sector. Constraints relaxation in the Murrumbidgee is important to achieving improved environmental outcomes from both held and planned environmental water and is more important than recovering any additional water for the environment.

b) Risks to achieving water recovery targets by 1 July 2019 and, were not already addressed under current arrangements, how any shortfalls will be resolved.

In the Murrumbidgee catchment the risk is that the SDLAM will be disallowed and if not, that the individual projects, when implemented do not deliver the volume anticipated by the SDLAM at reconciliation in 2024. If this is the case the productive sector and their communities will bear the risk, if governments in response seek to recover further water from the productive pool.

c) Examples of water recovery (both infrastructure projects and purchases) that have been either well implemented or had major deficiencies, including risks to securing contracted but not yet delivered water from water saving infrastructure projects.

CICL has participated in three rounds of the Private Irrigation Infrastructure Operators program with conveyance entitlements transferred to the Australian Government. One round included a number of On-Farm Irrigation Efficiency Projects which involved the transfer of landholder's irrigation right (water entitlements).

CICL has also been a Delivery Partner in multiple rounds for the Commonwealth On-Farm Irrigation Efficiency Program.

Our arrangements have been directly with the Australian Government and in the case of the On-Farm Program; the irrigator is contracted to the Australian Government for the water entitlements and to Coleambally for the delivery of the infrastructure works.

CICL believes the contractual arrangements developed by CICL in conjunction with the Australian Government are robust and accountable, with governments able to have high certainty that the contracted volume will be transferred to government. Contract payments can be used as an effective incentive to ensure water entitlements are transferred and work is completed based on the contract. In our experience, the process in place also allowed for contract variations to be agreed, where, with improved knowledge the projects could be improved or modified. (This statement largely applies to CICL's infrastructure project not the On-Farm projects).

8. Structural adjustment assistance - Information request 6

The Commission is seeking information on:

a) What specific assistance has been provided to help communities adjust to the Basin Plan?

CICL considers the funding available to assist communities adjust to the Basin Plan is inadequate, with only one percent of the nearly \$13 billion investment available for structural adjustment.

CICL has not been directly involved in the adjustment projects funded via the Regional Economic Diversions Fund.

There is some information on projects funded available from the following link <https://www.industry.nsw.gov.au/business-and-industry-in-nsw/assistance-and-support/strengthening-the-murray-darling-basin-economy>

This article also includes information on the first round of funding not delivered via Local Government <http://www.abc.net.au/news/2015-05-21/diversify-projects/6485646>.

CICL notes the projects funded are diverse with no obvious logic towards whether the projects were targeted or where the greatest need for assistance was. For example projects funded in non-irrigation areas, Albury and Orange.

b) The length to which assistance has supported particular industries or regions.

Refer above.

- c) Evidence that this assistance has facilitated structural adjustment that would otherwise not have occurred and has contributed to meeting the intended outcome of the Basin Plan, including more resilient industries in those communities with confidence in their long term future.***

CICL is not aware of any evidence that structural adjustment funding has achieved this outcome in the southern Riverina.

- d) Whether future structural adjustment assistance is warranted, and if so, what lessons can be learnt from past programs.***

CICL's view is that Basin Plan is contributing to the structural change pressures on communities with virtually no funding available to assist these communities. Some communities are more vulnerable than others. The evaluation work being completed by the MDBA⁷ to understand change in Basin communities would be a logical starting point to better target additional assistance.

CICL's observation is that funding should be targeted to communities where the need is greatest and be recognised as structural adjustment. Assistance to commercial businesses should be subject to significant scrutiny to avoid providing a commercial advantage to one business where there are competitors.

Assistance should be developed in consultation with communities and seek to provide enduring diversification of the economic base of communities.

9. Water Resource Plans - Information request 7

The Commission is seeking further information on:

- a) The main risks to remaining WRP being finalised and accredited by mid-2019.***

CICL is a member of the Murrumbidgee Stakeholder Advisory Panel (SAP) for the Murrumbidgee WRP. NSW has the largest task when it comes to preparing WRPs. Whilst NSW Water Sharing Plans include elements of what is required under the WRP, there are major differences and additional requirements.

CICL considers the main risk to completion of the WRPs on time is the volume of work that is required by NSW, this risk is elevated by NSW loss of water expertise and continuing organisational change.

The work involved in integrating the modelling for the SDLAM by the States has redirected modelling resources in the southern Basin from WRPs; this has not assisted with providing confidence in the WRP modelling adequacy.

CICL observes the consequence of the timeframe for accreditation of the WRP in the Murrumbidgee as there will be insufficient time to explore opportunities for improvements to the existing Water Sharing Plans which may have provided benefits to both irrigators and also the environment.

CICL considers the test for "no net reduction" of planned environmental water will be crucial to the WRP assessment process. For example all stakeholders agree the Murrumbidgee Planned Environmental Rules are unnecessarily complex and there should be opportunities to improve these

⁷ <https://www.mdba.gov.au/publications/mdba-reports/southern-basin-community-profiles>

rules. Assuming changes are proposed to these rules, the MDBA's assessment of the "no net reduction" test will be crucial.

In addition CICL has no visibility, at this point, to the Planning Assumptions being used by NSW including whether these assumptions are agreed to by the MDBA. Failure to reach agreement on the Planning Assumptions will be an issue and presents a risk that the States will be pressurised to change their Planning Assumptions in order to achieve accreditation by the MDBA. This may not be in NSW interests, with implications for entitlement holders.

b) How and to what extent, recent measures to make the WRP accreditation process more efficient and streamlined have sped up the preparation of WRPs and whether there are opportunities to further streamline the accreditation processes for WRPs.

The involvement of the MDBA in SAP meetings is a positive, the MDBA and the Department of Industry are aiming to have a "no surprises" approach and in the case of the Department of Industry their timeframe assumes the MDBA approval process will be progressive.

NSW is also looking at a template approach with a consistent framework for WRP. This approach is logical and supported by CICL. However, the release of the first draft plan using this template is behind schedule.

The effectiveness of these changes is yet to be tested.

c) Other ways WRPs or associated planning processes (e.g. consultation on modelling inputs) could be changed to better meet the objectives of the Basin Plan.

Given the timeframes for completion of the WRP, CICL does not see any merit in introducing changes to the current process. NSW just needs to progress with their approach and utilise the knowledge of the resources that exists within the SAP.

d) How effective Basin States have been in consulting with all relevant stakeholders?

The effectiveness of consultation has varied over time. The MDBA processes involving the Ministerial Council, MDBA, Basin Official Committee is complex. Governance arrangements need to respect the confidentiality of government and bilateral discussions. These factors combine together to impact on consultation and its effectiveness.

Stakeholders have different expectations of consultation. In many cases stakeholders, particularly those directly impacted, are looking to be involved in determining the decision. Often governments are only seeking to inform not to involve. This is not necessarily clear and it certainly isn't understood. There are opportunities to improve effectiveness by investing more resources including improving the quality of understandable information to stakeholders.

The employment of the Regional Engagement Officers by the MDBA is a positive to improving the flow of information between the MDBA and regional stakeholders.

Directly CICL has been provided with opportunities to be involved with the MDBA processes, in particular their work to evaluate the social and economic impact of the Basin Plan. This opportunity is valued and should be encouraged to apply to other parts of the Basin Plan.

e) The main risks to planning assumptions being finalised on time.

Differences in opinion between the States, MDBA and irrigation stakeholders is the main risk to these being finalised on time. Planning assumptions should not be a surrogate for disguising the impacts on entitlement holders of the Water Resource Plan.

CICL has often raised its concerns with the potential changes to the Long Term Average Annual Yield factors which are a component of the planning assumptions used to measure progress with water recovery. These “factors” are being resolved through the WRP process, at this time SAP members have no visibility of any proposed changes to these factors.

CICL does not support changing planning assumptions in a way which reduces the volume of water recovery achieved to date. CICL is concerned that changes to the planning assumptions in the model may be pursuing a definitive output that cannot be justified, given the limitations of modelling.

10. Environmental water management and planning - Information request 8

The Commission is seeking information on:

a) How environmental water planning under the Environmental Management Framework is, or is not, facilitating achievement of the Basin Plan’s environmental objectives within legislated timeframes, and what improvements should be made.

CICL’s experience in the Murrumbidgee catchment is that the framework is effective for the Murrumbidgee catchment. This contribution and collaboration by individuals within organisations is a driver of this effectiveness.

The two most important tools for achieving improved environmental outcomes in the Murrumbidgee from held water are the implementation of Pre-requisite Policy Measures (PPMs) and relaxation of constraints. CICL’s observation from involvement in the Murrumbidgee Environmental Advisory Group is that implementation of these arrangements will be more important to environmental outcomes in the Murrumbidgee than recovery of additional water.

b) How effective and efficient the delivery of environmental water is including through coordination among owners of held environmental water, managers of planned environmental water and other stakeholders – and how any barriers could be reduced.

CICL’s experience is that there is good co-ordination and collaboration in the Murrumbidgee.

c) Whether Australian and State Government objectives for the delivery of environmental water align, any examples where this has not been the case, and how differences are resolved through the Environmental Management Framework.

CICL is not aware of this being an issue in the Murrumbidgee.

d) The extent to which Prerequisite Policy Measures (PPMs) assumed to exist under the Basin Plan will be in place by the target date of 30 June 2019, so that the Plan’s environmental objectives can be achieved under SDLs agreed by the governments, and how any identified concerns should be addressed.

CICL understands NSW policy principles for implementing the PPMS have been agreed with the MDBA and that some trials of the PPMs have been implemented. CICL supports this approach in the

Murrumbidgee. The SAP is to consider how the PPMs will be written into the WRP. Current planning is expected to meet the deadline.

CICL emphasises that one of the guiding principles outlined in the Basin Plan, together with principles set by NSW is: there will be no adverse impacts on water available to a water access license holder.⁸

It is essential, through implementation of the PPMs, this principle is adhered to and not glossed or pressure placed on stakeholders or the States to agree to changes which do not adhere to this principle.

e) Any opportunities to better integrate environmental water planning and management with natural resource management programs and complementary works to facilitate achievement of the Basin Plan's environmental objectives.

CICL considers there are multiple opportunities to better integrate water planning and management into natural resource management frameworks. A common complaint in the Murrumbidgee is the issues associated with feral animals and weeds in sites where they have either been converted to National Parks or sites which have benefited from environmental water delivery.

These issues and problems detract from community support for environmental water and achieving environmental outcomes.

Who is responsible and therefore who should pay is the question? CICL's observation is that answers to these questions are unclear.

In addition the funding of natural resource management is fragmented with multiple organisations and agencies involved. For example in NSW alone without considering the Commonwealth, State agencies include, Local Land Services, Landcare, DPI – Fisheries, Office of Environment and Heritage, National Parks & Wildlife (within the Parks).

Other measures such as complementary measures, carp control, cold water pollution, fish passage and improved grazing management of flood plains are other tools to improve effectiveness.

11. Water quality and salinity management - Information request 9

The Commission is seeking information on

- a) Any inconsistencies between the various national water quality guidelines and the water quality management plan requirements in WRPs and whether these inconsistencies are being resolved or managed.***
- b) The adequacy of the actions of water managers to achieve the water quality objectives of the Basin Plan.***

CICL does not have the expertise to answer these questions, however we encourage the Productivity Commission to access expertise that resides with the States answer these questions.

CICL is concerned that water quality targets in the Basin Plan will influence community expectations and become hard targets for jurisdictions outside of the Murray Darling Basin Agreement.

⁸⁸⁸ http://www.water.nsw.gov.au/__data/assets/pdf_file/0008/682334/wrp-overview-factsheet-2.pdf

12. Water trading rules - Information request 10

The Commission is seeking information on:

- a) Whether the Basin Plan trading rules advance the water trading objectives and outcomes stated in chapter 5 of the Basin Plan.**

Water trading rules have been modified by States to remove barriers that cannot be justified, for example early trading deadlines in NSW and the removal of trade limits in Victoria that protected Victorian irrigators unfairly in comparison to the protections applying in NSW and SA.

- b) Whether changes to the state trading rules made to date as part of the implementation of the Basin Plan adequately recognise and protect the environment and third party interests.**

CICL supports the decision that the Inter Valley Trade (IVT) limit from the Murrumbidgee Valley is justified on the basis of protecting third party interests and the impacts, also on third parties of high delivery losses that would arise from a higher IVT volume.

CICL is aware that some parties (often water brokers) will argue the IVT is a trade barrier. Increasing the IVT volume in some years will result in additional undelivered IVT water (Murray water) in Murrumbidgee storages at the end of the season, reducing airspace for new water to be held in storage in the Murrumbidgee potentially impacting all Murrumbidgee Water Access Licence holders, not just those who have participated in the IVT trade.

- c) Whether implementation of the Basin Plan has improved access to market information and what further actions Basin States, irrigation infrastructure operators or the MDBA need to take.**

CICL does not consider the Basin Plan has improved the information and accessibility of market information. The information of value is within state registers and these registers have variable accessibility and usability. Efforts to improve should focus on the state registers.

The Victorian Water Register <http://waterregister.vic.gov.au/> and the Northern Victorian Resource Manager <https://nvrn.net.au/> are examples of sites where water information is more easily accessed compared to the NSW registers.

- d) Whether processes for reviewing Basin State trading rules – including the roles of the MDBA and the water trade working group are sufficiently transparent, evidence-based and consultative.**

The MDBA has provided reports on their review and priorities. The reports are opaque and provide limited detail on their areas of concern. CICL understands the MDBA's concerns primarily relate to the States but what the concerns are or whether they are material is not transparent.

13. Critical human water needs - Information request 11

The Commission is seeking information on:

- a) Risks to meeting critical human water needs (CHWN) under the Basin Plan, how the Plan addresses these risks, and what, if any, further measures are required.**

The CHWN provisions in the Basin Plan primarily apply to the River Murray and the tiered Water Sharing arrangements primarily impact on River Murray water users not the Murrumbidgee Catchment. CICL therefore will not comment on these provisions.

CICL does support the requirement for State based planning to address CHWN and would not support the expansion of this section of the Basin Plan to tributaries.

- b) Any concerns about provisions in WRPs relating to CHWN under extreme conditions.**

CICL is concerned with the definition of CHWN in particular S82 A (2)

- (2) **Critical human water needs** are the needs for a minimum amount of water that can only reasonably be provided from Basin water resources, required to meet:
- (a) core human consumption requirements in urban and rural areas; and
 - (b) those non-human consumption requirements that a failure to meet would cause prohibitively high social, economic or national security costs⁹.

CICL's concern is not with the human consumption priority but how the non-human consumption may be prioritised. Given the expansion in irrigated agriculture, the options available in the water market, CICL's view is the planning for CHWN should prioritise ensuring the operation of the water market and these principles should be embedded in the Plans being developed as part of the WRP process. This is preferable to Governments prioritising some industries over others to access water as CHWN.

Anecdotally there are major irrigation developments in the southern Basin which are not supported by water entitlements. These developments are using a range of options to plan for and access their annual water needs and to plan for their inter-year water needs. There is no case for these developments, irrespective of their economic importance being given preferential treatment for access to water in a resource constrained environment.

It is important that signals are provided to industry that it is their responsibility to manage for extreme events.

14. Compliance - Information request 12

The Commission is seeking information on:

- a) Risks to the MDBA's ability to monitor and enforce compliance with the Basin Plan and WRPs from July 2019, and what if any changes should be made to address these risks**

The recent work completed by the MDBA has identified the opportunities for improvements in the MDBA's approach to compliance and monitoring and enforcement.

⁹ Water Act 2007 (Cth).

CICL encourages the Productivity Commission to scrutinise the work, consult with the Basin states and the MDBA when considering changes which should be made.

b) The extent which non-compliance with the Basin Plan will be addressed by recent changes to the compliance and enforcement announced by governments.

The changes in progress should deliver significant improvements in NSW.

One of the questions for the Basin Plan is, will there be consistency in approach across states in relation to measurement standards and protection of environmental water? While the focus is on NSW currently, similar scrutiny should apply to Victoria, South Australia and Queensland processes.

CICL emphasises the issues in NSW are an example of regulatory failure which all NSW irrigators have been implicated in by the public debate on water measurement and extraction of environmental water. In the Murrumbidgee Catchment, where flows and extractions are highly regulated, there is a very different reality in terms of measurement of diversions and environmental water management.

The NSW metering scheme has been implemented in the Murrumbidgee valley. CICL has progressively implemented Total Channel Control developed by Rubicon Water™ across our footprint. We take a rigorous approach to water measurement which is detailed in figure 1, having adopted the ‘philosophy of if you cannot measure it you cannot manage it’.

c) Any further changes that should be introduced to increase water take compliance across the Basin.

CICL considers there is merit to states having a consistent approach to metering standards and compliance, for example 95 percent of take in a water source being measured.

15. Monitoring, evaluation and reporting - Information request 13

The Commission is seeking information on:

- a) How well current arrangements for monitoring, evaluation and reporting support the delivery of the objectives of the Basin Plan; and how they could be improved to increase the likelihood of the objectives being met.***
- b) Whether there is a clear delineation of responsibilities for monitoring and evaluating and reporting on the Basin Plan, and, if not, how it could be improved***
- c) The usefulness of the MDBA’s Framework for Evaluating Progress and its recent application in evaluating the Basin Plan***
- d) How data and information obtained through monitoring, evaluation and reporting could be made more useful for decision making and evaluation of the Basin Plan (including how to make this data and information more outcomes focussed).***
- e) The general information required to provide confidence to communities and others that the plan is being implemented well and is achieving its objectives***
- f) Whether the processes are in place to monitor key risks to the continued availability of Basin water resources.***

The Basin Plan is a long term reform that will deliver a significant increase in the volume of water available for the environment and a reduction in the volume extracted for productive use. The annual natural variability in water availability in the Basin will strongly influence the quantum available for the environment each year. Measurement of the environmental improvements,

productivity changes and social and economic impacts will take time and require a continuing commitment to funding measurement over time.

CICL has been most closely involved in providing input into the social and economic evaluation. CICL observes the MDBA is taking a thorough approach to data collection and consideration of the change which is occurring in our community. There needs to be on-going funding certainty for measuring the outcomes of this reform.

It is essential the MDBA takes a lead role in providing independent and factual information with fair interpretation into the public arena to assist provide confidence in the implementation of the Basin Plan.

The MDBA and Commonwealth Environmental Water Holder have an important role in sharing robust, unbiased, factual information into the public arena. It is also important to celebrate successes.

For regional communities such as ours, rigour around reporting on the outcomes of environmental water and also the impacts of the Basin Plan on industries, irrigators and communities is important.

Table 1 CICL approach to measurement and quality assurance

What CICL does to measure and manage its water

1. Water measurement by CICL

CICL has one extraction point from the Gogelderie Weir pool on the Murrumbidgee River. This extraction point (offtake) has undershot gates that are remotely controlled by CICL.

CICL receives credits from WaterNSW for its releases into Coleambally Catchment Drain (capacity 250ML/day) and Drainage Channel DC800 (capacity 150ML/day). WaterNSW place an order for the volume to be released from each of these escapes with CICL.

CICL owns its meters and has two meters at its offtake, a primary and a back-up meter.

CICL's offtake and farm irrigation meters and escape flows are consistent with "NSW Interim Water Meter Standards for Open Channel Metering".

The volume released into each of these escapes is measured via calibrated Flumegates™.

2. Metering at CICL's offtake

The meters installed at the offtake are Accusonic (brand name) Acoustic Transit Time Meters. This type of meter is considered best in its class for accurate metering of offtakes of our type.

CICL have two meters at the offtake – one upstream (original, installed approximately 15 years ago) and a new one installed 500m downstream of the regulator at the end of 15/16 irrigation season.

3. Verification of offtake readings

CICL use a contractor (hydrographer) to undertake an independent gauging once per month. If any individual gauging varies by more than five percent from the flow record by the offtake meter a second measurement is taken.

WaterNSW do not routinely undertake any auditing of CICL's offtake. However, during 2017 CICL commissioned and paid WaterNSW to undertake a verification of gauging at the river offtake for transparency and validation integrity.

4. Quality assurance of CICL's offtakes

CICL cross checks the two meters on a daily basis as well as comparing the cumulative total of each meter. In addition to monitoring the recorded flow of each meter, there are a multiple parameters recorded, reported and alarmed. These all assist in ascertaining the health and integrity of the metering arrangements.

CICL also plots the meters surveyed cross-section with gauged cross-section to monitor the stability of the cross-sectional area. At the end of each season when the channel is drained, a full survey of the metering cross-section is completed. The velocity and water level sensors are inspected and tested annually when the channel is dry.

5. Sharing of data

WaterNSW have access to our offtake meter through our SCADA system.

6. Tombullen storage

This is a storage owned and operated by WaterNSW. CICL delivers water to this storage from the top section of its main canal, based on WaterNSW's daily order. This volume delivered to Tombullen is not subject to any loss credits.

7. Water measurement onto farm.

CICL measures its irrigation water deliveries onto farm using Rubicon meters; the most common meter is the Flumegate™. CICL has installed a small number of Slipmeters™.

These meters are all equipped with telemetry and their opening and closing is controlled via CICL's TCC network.

CICL's system from its offtake, through the regulators and the farm outlets is automated.

TCC is enabled by the hardware, communications network and complex hydraulic modelling software. It is an integrated package.

The infrastructure is powered by solar panels on the regulators and farm offtakes.

8. Quality assurance of farm outlets

The main two parameters used for the computation of flow through a Rubicon Flumegate™ are gate position and water depth upstream and downstream of the gate. At the start of the irrigation season and again mid-season, every customer gate has the water level sensing and gate positioning measurement checked. This is commonly referred to as a "tip test". During this twice yearly tip test calibration, the gate installation is visually checked to ensure measurement integrity.

In addition to the twice yearly "tip test" calibration, CICL fully "commissions" 20 percent of its farm meters each year. This commissioning is a full survey of the site and where required, upgrades of firmware and components. CICL's field technicians, who are qualified meter validators, perform this task.

Each year CICL also engages an external certified meter validator to audit a representative sample of our gates. The external auditor randomly selects customer gates and completes a "tip test" at each site.

9. Measurement of Stock and Garden water use

CICL measures all take by our members. CICL has installed small propeller type meters on all its stock and garden outlets (up to four ML per annum). These meters are manually read once a year.

10. Water ordering

CICL uses Rubicon's Demand Management System (DMS) for water ordering and operation of the channel system.

CICL customers can only place an order for the water in their annual allocation account. This means that customers are only able to order water they have available, i.e. the DMS will not register a water order that will take the account into the negative.

16. Basin institutional and governance arrangements - Information request 14

The Commission is seeking information on:

- a) Whether the current institutional and governance arrangements provide for sufficient oversight of the Plan and support engagement with the community*
- b) Whether there are risks to the achievement of the objectives of the Plan that arise from the current institutional and governance arrangements*
- c) What improvements can be made to ensure that institutional and governance arrangements are fit for the next phase of implementing the Plan.*

The governance arrangements for implementation of the Basin Plan are by necessity complex. States have an essential role in water regulation and management and CICL does not support this changing. This means that the States are responsible for key elements of the implementation, for example SDLAM projects and development of WRPs. The held environmental water is delivered via State based operators, for example in NSW Office of Environment and Heritage.

The Australian Government made a commitment to fund the Basin Plan, this means that funding agreements need to be negotiated, and this process appears to be tedious and slow.

Governance arrangements that cause delays, impact negatively on funding or cause uncertainty all place at risk the Basin Plan achieving its objectives.

Assuming the SDLAM is successful the governance arrangements for next phase of implementation of the Basin Plan should provide long term certainty to Basin states to empower them to progress with confidence the important SDLAM adjustment projects.

CICL also considers there is merit in whether the governance around the CEWH and Office could be strengthened to a stand-alone organisation and to avoid the risks of the CEWH and Office having access to information which is not available to other entitlement holders.