



National
Irrigators'
Council

Submission in response to:
Productivity Commission five-
year review of the
Murray Darling Basin Plan
March 2019

Steve Whan
CEO, National Irrigators Council
ceo@irrigators.org.au
02 6273 3637
0429 780 883

Contents

Introduction	2
Chapter 3 — Recovering water for the environment.....	3
Chapter 4 — Supply measures and Toolkit	7
Chapter 5 — Efficiency measures	12
Chapter 6 — Water resource planning	18
Chapter 7 — Indigenous values and uses.....	19
Chapter 8 — Water quality	20
Chapter 9 — Critical human water needs.....	21
Chapter 10 – Water trading rules	22
Chapter 11 — Environmental water planning and management	24
Chapter 12 — Compliance	28
Chapter 13 — Reporting, monitoring and evaluation.....	29
Chapter 14 — Institutions and governance	31



Introduction

The National Irrigators Council (NIC) broadly welcomes findings and recommendations of the Productivity Commission's five-year review of the Murray Darling Basin Plan. Our comments on the findings should be read in conjunction with our [original submission to the enquiry, which is available on the NIC website](#).

NIC was pleased to participate in the stakeholder working group for this review and notes the Commission undertook extensive face to face consultation as well as receiving submissions from a large range of organisations and individuals.

The Basin Plan is just over half way through implementation, and as this report correctly acknowledges a large part of the water recovery task has already been achieved. That work is producing early positive environmental benefits – although it should be very clear that environmental recovery will take decades.

This review rightly points to major challenges in implementation of several remaining elements of the Basin Plan. NIC acknowledges those challenges but notes that the Productivity Commission has provided recommendations which give a way forward toward successfully implementing the Plan overall.

This is the most comprehensive review undertaken into the Plan. It should form the basis of future action by Government.

There are many remaining challenges - but it is entirely appropriate for this review to also highlight achievements and say, as it does, *"significant progress has been made:*

- *About 20 percent of the water that was available for consumptive users a decade ago is now dedicated to the environment. About \$6.7 billion has been spent to recover about 2000 gigalitres (GL). Water recovery is within five per cent of the July 2019 target.*
- *The arrangements for managing environmental water are working well, with evidence of improved ecological outcomes at the local and system scale."*

NIC welcomes the report confirming that achievements are being realised in relation to water recovery, and with early environmental benefits. We also strongly welcome the recognition of the impact on community due to the implementation of the Plan so far, and the need to appropriately estimate and deal with flow on impacts in future work.

The report provides a timely call to consider whether the very complex remaining tasks are on track. NIC supports the report's focus on the ability to meet certain tasks within the specified time frames. That concern is reflected in comment on the Sustainable Diversion Limit (SDL) Adjustment Measures projects, the Water Resources Plans and efficiency projects.

NIC's strong view is that these tasks should be completed in a thorough and comprehensive way, and not rushed to meet deadlines set six years ago without the full knowledge and

appreciation of what would be involved. At the same time, we strongly emphasise the need for Government to properly resource the remaining tasks; and most critically from NIC's perspective, the need to resource the proactive engagement with communities and interest groups.

NIC strongly supports recommendations around considering extended time frames for the delivery of supply measures. In relation to efficiency measures, the report recommends a serious consideration of planning and achievability, and we support those related recommendations. We would note however, that if the work on efficiency measures was to result in extending time frames for that program, this must be accompanied by extending the supply projects as well.

In contrast to those who view that getting a headline should take precedence over achieving results, NIC does not see the findings of this report as indicating failure or imminent disaster for the Plan. We see the report as a timely wakeup call that the remaining tasks are extremely difficult and will require maximum engagement and commitment from everyone with an interest in the health of the Murray Darling Basin and social and economic wellbeing of Basin communities, reflected in the broader objectives of the Basin Plan.

NIC welcomes the focus on the need for maximum flexibility and consultation in implementing the SDL Adjustment Measures projects. These projects must achieve the environmental benefits intended; if not, we risk more water being taken out of productive use.

Chapter 3 — Recovering water for the environment

NIC welcomes the appropriately positive picture painted in the report on progress towards achieving water recovery goals. It is important to take an overall look at this progress, given that water recovery towards the Basin Plan started well before the Plan was put in place and has included recovery through a variety of means.

We note that the quantities mentioned are held water; that means real water which is being used for environmental flows and to achieve real environmental outcomes already.

NIC also welcomes the discussion in the report on the need to address the extent of over-recovery; this provides some guidance on how that will be dealt with. We note also the strong focus on ensuring that environmental water recovery is appropriately focused and targeted to achieving genuine outcomes. This is particularly relevant when discussing the 450GL of efficiency savings intended to achieve additional environmental outcomes. Further comment on specific findings and recommendations are below:

RECOMMENDATION 3.1

Once Water Resource Plans are accredited, the Murray Darling Basin Authority (as Basin Plan Regulator) should assess which (if any) resource units are over recovered against the Sustainable Diversion Limit.

As soon as practicable, the Commonwealth Environmental Water Holder, in co-operation with Basin Governments, should develop a process and an appropriate timeframe to return any identified over recovery to consumptive uses in accordance with Sustainable Diversion Limits.

3.1: AGREE: a high priority to provide certainty to water users and affected valleys

There does need be clarity on who has responsibility for dealing with over recovery. In the past, NIC has experienced some degree of buck passing on this between state and federal authorities. NIC looks forward to a Government response which provides clarification on this point. We would also encourage consultation with water users in affected valleys prior to finalising a position.

RECOMMENDATION 3.2

The Department of Agriculture and Water Resources should ensure that water recovery aligns with environmental requirements and its processes for doing so are transparent.

To support accountability, it should commit to publishing all advice provided by the Commonwealth Environmental Water Holder and the Murray Darling Basin Authority (including advice on strategic purchases) once transactions are complete in a Sustainable Diversion Limit resource unit.

3.2 AGREE

DRAFT FINDING 3.2

The Department of Agriculture and Water Resources has accounted for the impacts of improving irrigation efficiency on return flows in some major water recovery projects, but has not done so in all cases. The Department has committed to monitor impacts in future water recovery programs, but the framework for doing this is not yet clear.

The overall impact of improved irrigation efficiency on water resources is not precisely known, but recent independent work indicates it to be relatively small. The Murray Darling Basin Authority (as Basin Plan Regulator) is responsible for monitoring the risks to Sustainable Diversion Limits from changes in return flows.

NIC welcomes the consideration of issues around efficiency programs and claims made in the media, and in some submissions, about their impacts on return flows. In particular we note, and agree with, the comments regarding analysis of return flow impacts from efficiency projects.

The Commission has correctly rejected exaggerated arguments about return flows. Those arguments which suggest that no ‘real’ water has been recovered make generic assumptions for all water recovered through efficiency, failing to differentiate between differing projects, regions and destinations for previous return flows.

In particular, we point out that a return flow analysis of efficiency work is fundamentally flawed if it makes a Basin wide calculation or broad conclusion without differentiating:

- different types of efficiency projects;
- the region, scheme or soil type the scheme takes place in;
- whether the program is on or off farm; or

- if it draws on international examples of programs which did not return water to the environment.

On that basis we strongly agree with the Commission's conclusion relating to claims of 'no real' water being recovered that "independent work indicates it to be relatively small." NIC is comfortable with finding 3.2 because we don't believe systematic accounting will in any way jeopardise the water recovery achieved. In assessing return flows, it is also important to include the positive impact reducing some forms of return flows has on salt mobilisation.

3.2 AGREE: noting that the evidence disproves claims made by some academics in the media about efficiency programs having no benefit for the environment.

FINDING 3.3

The size and speed of water purchases has had negative socioeconomic impacts on some regional communities.

Recovering water through infrastructure modernisation programs has partially offset pressure for structural adjustment in some communities, but at a significant cost to taxpayers.

Water recovery is only one factor of many driving change in regional communities. Higher water prices, water trade, and other pressures on the agriculture sector mean that some structural change is inevitable and ongoing.

FINDING 3.4

The Department of Agriculture and Water Resources has not always demonstrated that water recovery has been cost effective in meeting its goal of mitigating adjustment pressures caused by sourcing water entitlements. It has:

- ***paid a substantial premium above market prices to recover water through infrastructure modernisation***
- ***not systematically released information for strategic water purchases acquired by direct negotiation***
- ***not undertaken a comprehensive assessment of benefits and costs of these approaches.***

Finding 3.3 makes it clear that buyback does have negative socio-economic impacts and that the flow on effects have been negative in many communities. As the MDBA's detailed – peer reviewed – analysis of communities has confirmed, there can be a very big difference between Basin Plan impacts on communities where they have used efficiency measures to recover water compared with buyback.

Although the cost to taxpayers is higher from recovery via infrastructure improvement, the flow on impacts to communities are much more positive, potentially eliminating or ameliorating the need for structural adjustment assistance.

We note in this section's discussion, acknowledgement of the trend in trade of water from the upper Goulburn to lower Murray and its potential negative impact for the district that loses the production. It is hard to see how this is exacerbated, or facilitated, by infrastructure modernisation. It is more likely it would be ameliorated by modernisation as it would mean greater productivity in the region. However, it is pleasing to note the report giving an explicit acknowledgement of the potential negative impacts of reduced delivery volume on the viability of infrastructure operators and remaining water users. This is a key point that must be considered in any future on farm programs.

It is recognised that there is other structural adjustment occurring in rural communities and within the agriculture sector, and that assessment needs to differentiate to the extent possible. However there is also a strong argument that the Basin Plan change adds to and makes that overall change even more difficult for some communities. The MDBA's socio economic assessment went into great detail separating out Basin Plan impacts from other structural change occurring in communities. The more superficial basin wide economic analysis, used by some (including the South Australian Royal Commission) as an argument for buyback over efficiency, completely fails to make this differentiation and instead resorts to an intellectually dishonest dismissal of negative impacts by suggesting they are all due to other structural change.

In a scenario where Government is seeking to assist communities with structural change, then the whole picture must be examined, and programs tailored to take into account the prior and concurrent change.

If the Government is to make structural adjustment programs available (which are different to efficiency programs for irrigation) they must be directed at specific communities, and fund projects that provide real economic returns for the area in the long term.

NIC disagrees to some extent, with the Commission's comment leading up to finding 3.4 which suggests that there has not been substantiation that infrastructure projects help sustain regional communities. The Commission has noted the work undertaken by the MDBA on socio-economic impact. NIC contends this clearly demonstrates the much better socio-economic impact for communities from water recovered via efficiency, versus buyback.

This broader community impact work has clearly shown differences in impacts of the Basin Plan between communities that have had substantial quantities of water recovered through buyback (examples being the Wakool area and Dirranbandi) and those where recovery has taken place via efficiency programs such as Qld Border Rivers.

Specifically, on draft finding 3.4, dot point one – this does not adequately recognise that water recovery takes place in a market and that the market is quite different depending on the location and the amount of prior recovery. It is logical to expect that the cost of water is going to increase as willing sellers diminish and that it will be more expensive in some areas. On dot point three, NIC again suggests there is clear evidence of the negative flow on impact for communities from buyback, and resultant loss of production. This is well proven.

FINDING 3.5

There is little evidence to indicate that structural adjustment programs have been effective at supporting communities adjust to the Basin Plan.

- ***Assistance was not targeted to those areas considered most vulnerable to the Basin Plan.***
- ***Some projects considered to provide community assistance have not done so.***

RECOMMENDATION 3.3

If provided, the Australian Government should target any further assistance to communities where substantial adverse impacts from water recovery have been identified. This should:

- ***have clear objectives and selection criteria***
- ***be subject to monitoring and evaluation.***

Any support for regional development should align with the Productivity Commission's strategies for transition and development, set out in its report on Transitioning Regional Economies.

Feedback from NIC members who live in the impacted communities would agree with the finding at 3.5. Structural adjustment funding available in the early buyback part of the lead up to the Basin Plan was almost non-existent, and where it was later made available, it would be difficult to prove its effectiveness.

We stress that our members and their communities would prefer that in the continuing implementation of the Basin Plan, the commitment to "no negative impacts" will be kept and that there would be no need for separate structural adjustment funding to address new programs. It is important to note however, that in some areas, earlier damage to regional economies has not been adequately rectified and there is an existing need for that to be addressed.

We however, support in-principle, recommendation 3.3 but add that should structural adjustment assistance be necessary (we would hope it would not be), then it must be designed in collaboration with communities to suit their needs rather than be a model imposed from above.

3.3 SUPPORT in principle, but query whether all effort will be made to avoid negative impacts that require such programs

Chapter 4 — Supply measures and Toolkit

As NIC outlined in our initial submission to the Commission, the supply measures are a critical component of the Basin Plan. If successfully implemented, these measures promise better environmental outcomes along with better economic and social outcomes. At the time of our original submission there was still some doubt over the overall 605GL figure for equivalent benefit, with Parliamentary consideration of the issue still to occur.

It was critical to the future of the Basin Plan that this overall figure be upheld and the agreement between the Government and Opposition was a very welcome development. Focus now must turn to actual implementation and as we argued in our initial submission, that must take place with genuine community and stakeholder engagement and with maximum adaptability of the projects.

NIC strongly shares the Commission's concern regarding the risks to these projects being delivered. As pointed out in our earlier submission, the projects are being delivered by Governments, but the risk largely lies with irrigators and Basin communities.

This separation of risk and responsibility has become even more apparent over recent months. There have been several worrying developments in particular in political debate that indicate very little concern about flow on implications for the irrigated agriculture sector and communities.

NIC is concerned about slow progress on projects. But as the Productivity Commission report makes very clear on page 127, the core reasons for lack of progress rest with Government. The report highlights four points about governance and funding that are not resolved.

NIC's concern is that while responsibility for resolving these issues rests with Government, the cost of failing is borne by communities and irrigators.

It is particularly worrying to see people interested in political point scoring using this lack of progress to talk down the prospects of the projects meeting expectations.

NIC notes the politicisation of projects, including the Menindee Lakes reconfiguration, with political debate and less balanced criticism from other reviews, which ignore the real impact of failing to achieve these projects for both irrigation communities and the environment.

We would agree with the summation on page 135 of the report which says:

"The package of agreed supply measures is potentially more cost effective than recovering 605 GL of water entitlements to achieve the environmental outcomes. Successful implementation could save Basin Governments and taxpayers in the order of half a billion dollars by avoiding further water recovery, which is a concern for many communities. These measures could also provide additional benefits to improve the long-term health of the Basin, such as the ability to provide additional delivery capacity, greater flexibility for river operations and capacity to water new areas of floodplain."

NIC strongly agrees with the conclusion on p.138 that "Governments should confront the reality that some projects may require more time". In fact, NIC would suggest Governments and Oppositions should confront that reality and ensure that in their actions or alternative policies they are not suggesting taking a big stick to people who will suffer most if the projects fail to produce their anticipated benefit. Government and Opposition must put the

pressure on Basin Governments to deliver, and not propose punishing the communities by threatening buyback if projects are not fully delivered by 2024.

FINDING 4.1

It is likely that some key projects in the approved supply package will not be fully operational in 2024.

- ***They are behind schedule and the timeframe for implementation has been compressed due to delays in developing the projects.***
- ***They are still in an early stage of development.***
- ***History has shown that these types of projects are complex, interdependent and require extensive consultation to implement.***
- ***A range of issues still need to be resolved between Governments before these projects can proceed. These include project risk sharing, monitoring, governance and funding.***

As noted above, NIC does not disagree with finding 4.1 on supply projects. We have consistently argued that Governments must genuinely engage with communities and all interested parties with adequate resources and with maximum flexibility to get these underway.

We strongly endorse the points made in Chapter 4 about improving implementation, and in particular, references to meaningful engagement with communities and local planning.

These mirror the points we raised in our submission and are critical to ongoing success. We do have a concern regarding the more recent decision to tie federal funding for these projects to progress on efficiency measures for the 'up-water' component of the Plan. It is vital this does not become counter-productive, which it will if it prevents state governments proceeding with planning and consultation for supply projects.

RECOMMENDATION 4.1

Basin Governments should, as soon as practicable:

- ***resolve governance and funding issues for supply measures, including risk sharing arrangements***
- ***develop an integrated plan for delivering supply measures to improve understanding and management of interdependencies within the package of supply measures***
- ***develop clear mechanisms for consultation on the package and individual projects with Traditional Owners and local communities.***

4.1 AGREED, with some additional points.

NIC agrees with this recommendation, but it is critical that it is read with the broader commentary in the report about community engagement. NIC does not doubt the commitment of state and federal Governments to these projects. However, we are concerned that if Government fails to make timely allocation of resources and fails to put the necessary effort into planning, then irrigators and regional communities will be left facing a

loss of productive water as a result of failure to achieve the 605GL target. The Commission might consider whether recommendations in this area should be broadened to ensure that Government decisions to make funding for supply measures dependent on progress on efficiency measures, do not hamper the capacity to get supply projects underway.

It is imperative these issues are resolved; in the absence of robust governance and planning and the past record of poor transparency, community concerns about projects are understandably growing. Government, when they finally are in a position to properly consult and plan these projects, will be disadvantaged presenting significant risks to the potential success of projects.

RECOMMENDATION 4.2

Basin Governments should be open to the possibility of extending the 30 June 2024 deadline for specific supply measures to be operational where an extension would be necessary to allow worthwhile projects to be retained.

Basin Governments should make this position clear to project proponents early enough to inform the finalisation of detailed business cases for supply measures. It should be clear that extensions would need to be well founded, only apply in limited circumstances, and not alter the requirement to make good if a project ultimately fails.

4.2 STRONGLY AGREE

RECOMMENDATION 4.3

The Murray Darling Basin Authority (as Basin Plan Regulator) should, as soon as practicable, devise a strategy for undertaking the reconciliation of supply measures that accommodates projects to be delivered in realistic timeframes.

4.3 AGREE

RECOMMENDATION 4.4

The Department of Agriculture and Water Resources should, as soon as practicable, establish a clear gateway process that determines whether proposed supply measures proceed to implementation.

The Department should appoint an independent panel to provide advice throughout the gateway review. The panel should consider:

- ***any material decrease in the anticipated net benefits of projects since their initial business case (to ensure projects represent a prudent and effective use of public money)***
- ***whether project timeframes and milestones are credible.***

Based on the above assessment, the panel would make a recommendation on whether projects should proceed to implementation. The Department should publicly respond to the advice of the independent panel, including justifying instances where it elects to not accept that advice.

Throughout implementation, the independent panel should also advise on whether projects are meeting their milestones, and projects that fail to make reasonable progress should be removed.

4.4 AGREE in principle but with additional comment

We agree in principle but note that the burden of any failure to meet the projected target falls on irrigators and communities. We strongly suggest on that basis that these projects should not be allowed to fall short because of capped funding or an arbitrary decision about what is a reasonable price to pay for recovered water. In other words, a value for money determination should take into account the serious impacts of failure on communities, productivity and the environment. It may therefore be necessary to outlay funds that are well over what might otherwise be considered to be 'value' for a megalitre of water.

It must also be recognised that some of the projects (for example Rules changes) are at no capital cost. How are these projects to be considered in an assessment of value for money? In addition, the MDBA have previously emphasised that the projects are a collective package with interactions between projects, therefore making an individual project assessment more difficult.

RECOMMENDATION 4.5

Northern Basin Governments should, as soon as practicable, put in place transparent and accountable governance arrangements for implementing the Northern Basin Toolkit. These arrangements should include:

- ***a mechanism to establish clear milestones to ensure the Toolkit measures are implemented within reasonable timeframes***
- ***an independent assessment by the Murray Darling Basin Authority (as Basin Plan Regulator) of progress and effectiveness in implementing the measures.***

4.5 AGREE: strongly support effective implementation of toolkit measures

As NIC has frequently advocated, irrigators are very keen to see the Northern Basin toolkit measures implemented. In this regard, we refer the Commission to the suite of measures highlighted in NIC's earlier submission and noted as 'complementary' measures. NIC and our members believe these types of measures have the potential to significantly improve environmental outcomes right throughout the Basin. We also suggest a far greater focus on these types of measures in the Southern Basin as well.

There must be recognition that improving river health is about more than just flow. This concept must be maintained, and we support measures to ensure that the toolkit is implemented and monitored.

NIC notes that over the period between the Productivity Commission's draft report and the release of its final report there has been quite a lot of debate around the Northern Basin amendment and the toolkit measures. This includes criticism of the amendment by the South Australian Royal Commission and the Australian Academy of Science review into fish deaths. It is noted that neither of these inquiries properly considered the important role that the toolkit measures can play in improving the health of the river system.

The Government's independent scientific review of fish deaths did include scientists with expertise on native fish and flows and it strongly endorsed the need for measures to improve native fish passage. These are key components of the toolkit measures in the Northern Basin review and they need to be strongly supported.

Chapter 5 — Efficiency measures

In general, NIC supports the thrust of the conclusions in Chapter 5. The efficiency measures component of the Basin Plan remains controversial. NIC has taken the view that in our support for the Basin Plan, as a whole, that also includes being willing to work with Government to achieve the 450GL of efficiency measures as long as that genuinely comes, as promised, with improved or at least no negative impact on communities.

For that reason, our initial submission did focus strongly on the need for a wider socio-economic impact test. Over the intervening period, we have been pleased to see the agreement from Ministers to an enhanced socio-economic test.

It is noted that the Federal Opposition however, suggests that the test should be as it is included in the legislation – that is effectively a single property test based on willingness to accept funding for efficiency.

NIC strongly agrees with the Commission's conclusion on this that "the voluntary participation test in the Basin Plan will not guarantee that there are no negative impacts from additional water recovery" (p. 158).

There have now been a number of reports and independent reviews which confirm that there are negative flow on impacts for community and regional production from an individual test. NIC detailed these in our original submission.

The 450GL efficiency program remains a real concern; it is very uncertain and remains largely directionless. NIC continues to be concerned that there is little visibility of any work occurring on the ground in communities to design projects which might provide mutual benefit.

Our focus in this program has been to strongly urge the pursuit of off farm measures first. We continue to advocate that position. Many such projects have been suggested, but again, progress on them is opaque.

These issues remain a significant concern. Despite some positive progress we are concerned about these projects and the prospects of success. As such we support the theme of some of the Commission's conclusions.

We have some concern about how state governments will engage and whether the burden will fall in an equitable manner. In our submission to the draft report, NIC indicated a concern particularly with whether South Australia would be actively pursuing potential contributions. Since then it has been good to see the South Australian Government indicating that it is

willing to consider savings from Adelaide's urban water consumption and ideas for better operation of the lower lakes.

Given the environmental targets listed for the efficiency program are almost all in South Australia, it makes much better sense to recover the bulk of the water as close as possible to its destination (to minimise losses).

The report also highlights the need to be effective in targeting measures to achieve the 'Schedule 5' enhanced environmental outcomes. NIC notes that Schedule 5 includes descriptions of outcomes but that there is an assumption that it is only increased flow that will achieve these. NIC suggests (and elements of the draft report back this up) that some simply will not be achieved by increased flow, no matter how much there is.

This report quite rightly questions the practical limitations of achieving the flow targets outlined for enhanced flood plain outcomes.

NIC notes Box 5.3 on page 155, which says in part:

"Building a flow event that achieves 80 000 ML/day for 30 days at the South Australian border requires sizeable upstream flows from the four major river reaches in the southern Basin (Upper Murray, Goulburn, Murrumbidgee and Darling). Previous floods indicate that the sum of these four flows (measured at Yarrawonga, McCoy's Bridge, Balranald and Weir 32 respectively) must add to about 150 000 ML/day to produce a flow of up to 80 000 ML/day at the border (MDBA 2014g). A regulated flow under the proposed constraints projects at those four points could only add up to 96 000 ML/day. Meeting the target, even under the assumption of eased constraints, is reliant on sizeable, unregulated flooding in at least one river reach, with water released in other reaches to 'piggyback' on that flow (MDBA 2014g). This represents a significant challenge for river operators."

A "significant challenge for river operators" seems to be an understatement of the challenge this scenario places. There appears to be 'a head in the sand' approach from some advocates on the 450GL, where the focus is only on achieving the GL and flow rates without considering practical issues. In that respect, NIC strongly supports the elements of the Commission's report which urge a much greater focus on these practical issues.

Irrigators are willing to work with Government on the 450GL of efficiency measures but Governments and advocates for these outcomes must be willing to examine all options to see whether other measures, including engineering solutions and changes to the lower lakes, might produce better results.

The report makes a very valid point about how water recovered in systems only marginally connected to, or disconnected from, the River Murray in South Australia, can contribute to meeting South Australian flow targets outlined in Schedule 5. This acknowledgement by the Commission is refreshing. Again, it appears that this issue is being avoided by even the strongest advocates of the enhanced outcomes.

As a final general point, NIC welcomes the Commission advocating the taking of a long and overdue, serious look at the practicality of delivering targeted flows. Relaxation of constraints is practically difficult, and even with the best will in the world, it is not clear what is physically possible and what risk management arrangements there might be to gain community support.

FINDING 5.1

The Basin Plan requirement for neutral or improved socioeconomic outcomes, which is based on voluntary participation in infrastructure projects, does not fully address stakeholder concerns about the impacts of additional water recovery on regional communities.

However, requiring efficiency projects to have no adverse impacts is impractical. Any additional test that aims to ensure there are absolutely no negative impacts will, in effect, block additional water recovery, including projects that may recover environmental water cost effectively and with relatively limited socioeconomic impact. Potential adverse impacts of further water recovery would be better addressed through program design that aims to minimise the socioeconomic impacts of recovering the additional 450 GL.

NIC welcomes this conclusion that the impact test included in the Basin Plan does not prevent negative impacts.

We also note the comment that a no negative impact test is “simply unworkable”. NIC agrees with the comment that: “In the Commission’s view, any potentially significant adverse impacts of further water recovery are better addressed through program design.

This would involve Governments or delivery partners clearly identifying upfront the likely magnitude and nature of impacts from water recovery (which will likely vary by region). Then (if warranted), Governments should devise options for mitigating those impacts, in consultation with local communities and industry (water users and irrigation infrastructure operators).” As argued in our submission, the key here is to design programs with the community, accounting for and reflecting specific community needs, focusing first on all off-farm options.

NIC agrees in part with the finding but does note that the commitment to “no negative impact” was very clearly made when the Basin Plan was put in place. Nevertheless, we welcome the endorsement of the concerns of many irrigation groups and communities regarding a single property test and the clear indication that flow on impacts must be considered.

NIC argues that instead of just focusing on irrigation infrastructure operations for off-farm efficiencies, Governments should consider opportunities to improve river operations.

FINDING 5.2

There is a high risk that the efficiency measures program will not achieve the enhanced environmental outcomes of the Basin Plan by 2024 or within the current budget.

- ***There has been no update to the 2012 modelling to estimate what environmental benefits can be realistically achieved under the revised constraints proposals.***
- ***It is possible that the proposed projects to ease or remove constraints may not be fully operational by 2024.***
- ***Despite not having re modelled the objectives or targets, the Australian Government is rolling out a water recovery program Basin wide, which risks recovering water in the northern Basin that may not contribute usefully to achieving the enhanced environmental outcomes in the southern Basin.***
- ***Basin Governments have not yet agreed on an efficiency measures work plan to recover 450 GL by 2024. Proposed additional criteria to manage socioeconomic impacts remain contested and risk unduly delaying planning for the program.***
- ***There is a material risk that recovering a further 450 GL could be significantly more expensive than anticipated. The benefits and costs of the program as a whole have not been assessed (and there is no requirement to do so).***

5.2 brings out some serious practical concerns about achieving 450GL of efficiency measures. NIC has no disagreement with the points made and recognises these challenges.

RECOMMENDATION 5.1

As soon as practicable, the Murray Darling Basin Authority (as the agent of governments) should comprehensively update and publish modelling to confirm the enhanced environmental outcomes that can be achieved with additional water recovery. This modelling should use up to date information on constraints proposals, the effects of supply measures, and the volume of held environmental water.

The Murray Darling Basin Authority should also model the benefits of additional environmental water within existing delivery constraints, and use this information to establish which Sustainable Diversion Limit resource units should be the priority for additional environmental water recovery.

5.1 SUPPORTED

Implicit in this recommendation should be clarity on current versus easing or constraints.

RECOMMENDATION 5.2

By early 2019, the Department of Agriculture and Water Resources should release a strategy for the efficiency measures program to achieve the Schedule 5 environmental outcomes while minimising adverse socioeconomic impacts. To ensure that the recovery of the 450 GL is effective and efficient, this strategy should:

- ***prioritise recovering water that can usefully contribute towards achieving Schedule 5 outcomes***

- ***plan for a range of scenarios for constraint easing***
- ***phase water recovery to ensure that, as new information becomes available, it aligns with both revised constraint proposals and progress in easing constraints, and contributes towards specific Schedule 5 outcomes***
- ***consider all available options for recovering water in the development and assessment of projects, including community designed initiatives***
- ***clearly outline how it will address adverse socioeconomic impacts through the design of its program (recommendation 5.3)***
- ***be transparent, and regularly publish information on successful projects, prices paid and overall progress against program objectives***
- ***outline clear processes to ensure ongoing engagement with local communities and industries.***

NIC welcomes the comments on page 177 on additional impact test criteria, regional engagement with community and industry, adaptive management and phased implementation over time. We note that Ministers have now agreed a criteria and that needs to form the basis for implementation.

We seek to engage in good faith, in the Plan as a whole including the 450GL efficiency target. It will however, require all Basin Governments to make serious decisions about whether it is an “at any cost” target. We also advocate a serious look at whether increased flow targets are really the most effective solution to the environmental objectives for the lower lakes and the Coorong.

5.2 AGREE

We agree with dot points one, two and three - though noting that narrowing the location of water recovery will put more burden on some communities closer to South Australia and that it is critical that the South Australian Government recognise, that as a major water user, Adelaide must play its part.

NIC strongly agrees that program design and implementation must explicitly consider potential impacts and should include close engagement with affected communities and industries. This is critical and the process must be resourced adequately and quickly by Government. Mitigation strategies are also important as part of a program design but we would be concerned if mitigation strategies became (ineffective) structural adjustment funding.

It is to be expected that prices will increase significantly, as the easy gains have already been made. There needs to be clear scope for above market prices to be paid, where that comes with a much more focused impact on the Schedule 5 targets and no impact of reducing production. For example, the potential to recover water from Adelaide was flagged in the Ernst and Young report. It would clearly come at a very high cost, but it would also have a much more direct impact on achieving the objectives and without reducing South Australia’s capacity to produce the food and wine that generates so many local jobs.

RECOMMENDATION 5.3

The Department of Agriculture and Water Resources' (DAWR's) water recovery strategy should explicitly outline how it will seek to address adverse socioeconomic impacts through program design. DAWR should require project proponents to provide information on:

- ***the likely benefits to, and adverse impacts on, the local district and any potential flow on impacts***
- ***the degree of engagement with community and/or industry***
- ***alignment with irrigation network plans, including any planned rationalisation.***

The purpose of collecting this information would be to identify possible cumulative socioeconomic impacts across different combinations of projects under consideration, as part of a broader decision about which projects to fund. This information should not be used as pass or fail criteria for individual projects.

DAWR should also implement a regional level monitoring and evaluation program to identify (over time) which regions are subject to substantial socioeconomic impacts from additional water recovery.

5.3: STRONGLY AGREE

We agree in particular with dot point two. It is important that there is proper consideration of whether the environmental outcomes can be achieved through non-flow measures. That might include further engineering works for key areas in South Australia including in the lower lakes. It might also include the complementary measures advocated by NIC that could bring significant improvements in river environments not achieved by fast flowing cold water.

RECOMMENDATION 5.4

The Australian Minister for Water should specify that the 2021 review of the Water for the Environment Special Account review the benefits, costs and impacts of pursuing the enhanced environmental outcomes in Schedule 5 on the basis of new and updated information. This should include:

- ***identifying which, if not all, of the Schedule 5 outcomes can be achieved, given progress in easing or removing constraints, and how much environmental water would be required to do so***
- ***assessing the benefits and costs (and feasibility) of other approaches to achieving those environmental outcomes.***

This review should be supported by modelling provided by the Murray Darling Basin Authority (as the agent of governments) and any additional information from Basin States.

The Australian Government should use the outcome of this review to determine whether there is a need to amend the Schedule 5 outcomes, or adjust the water recovery strategy to pursue those outcomes efficiently and effectively.

5.4 STRONGLY AGREE

This recommendation is a critical reality check that must occur sooner rather than later. Governments must be able to focus on achievable outcomes and determine, before spending huge amounts of tax payers' money, whether outcomes are practical or whether there are better ways to achieve them – other than just simplistic flow measures.

Chapter 6 — Water resource planning

RECOMMENDATION 6.1

The Australian Minister for Water and Basin States should as soon as practicable negotiate extensions to the timelines for accrediting Water Resource Plans in areas where there is clearly insufficient time for adequate community engagement before 1 July 2019 (particularly in areas of New South Wales).

Extensions should only be given in limited circumstances, particularly where substantive changes to state based water management rules are proposed that may have material impacts on entitlement holders and/or the environment.

6.1 SUPPORT limited extension of time for WRPs

NIC was among many organisations to express concern about the likelihood of completion of Water Resource Plans (WRPs) by the 30 June 2019 deadline. We therefore support recommendation 6.1. In supporting the recommendation, we note the commentary in the draft report, which would make the extension quite limited.

It is noted that since this report was drafted, Ministers have agreed to limited extensions. This is welcome.

Clearly, we want to see quality plans that are tailored to the catchments they cover and the key to that is ensuring that the states responsible, provide an appropriate level of resources to undertake quality consultation and produce well considered plans.

NIC highlights however, the need for adequate resources including, in particular, staff resources to get the job done. And we note over recent months NSW, in particular, has undertaken substantial engagement with a view to getting plans in place, but concerns remain.

The process and the timeframe means that in developing the WRP the outcomes from all sources of environmental water may not be optimised.

RECOMMENDATION 6.2

Before 1 July 2019, the Murray Darling Basin Authority (as Basin Plan Regulator) should:

- ***clarify what Basin States are required to self report annually to show compliance with Water Resource Plan (WRP) obligations***
- ***articulate the compliance assessment regime relevant to WRP obligations***
- ***consult with Basin States in developing guidance on how it proposes to assess future amendments to WRPs.***

6.2 AGREE in principle with proviso that consultation is required.

NIC has been exposed to the MDBA's preliminary consideration of its compliance framework. Further information is required on the reasonable excuse provisions and also consideration of where there is variability in annual water use and how the assessment process deals with this. For example, a valley may be within the long-term plan limit but exceed the annual limit, triggering a compliance action. In valleys where there is significant annual variability in water use, experience with compliance with the Cap on diversions is that both credits and debits have accumulated. The assessment process should have a mechanism for testing for 'false' breaches. Compliance will be tested against a modelled volume, which has inherent errors in particular consideration of irrigators' behaviour which may result in reduced water use in one year and higher water use in another.

RECOMMENDATION 6.3

The Murray Darling Basin Authority (as Basin Plan Regulator) in consultation with Basin Governments should finalise and publish a detailed terms of reference to assess the effectiveness and efficiency of Water Resource Plans in preparation for the five yearly evaluation in 2020.

This evaluation should enable an assessment of the utility of Water Resource Plans for delivering on the objectives and outcomes of the Basin Plan.

6.3 AGREE noting that WRPs are expected to be in place for 10 years

Chapter 7 — Indigenous values and uses

NIC has consistently made it clear that our objective is to see a Basin Plan in place which meets the triple bottom line promised by the Plan's framers. This includes a healthy environment, healthy communities and a continuing capacity to produce food and fibre for the nation.

Our desire for healthy communities includes Indigenous communities, and we recognise those legitimate aspirations from the Basin's Indigenous communities.

We are keen to engage in the work to develop and implement the cultural flows project. We agree with the tenor of findings in this chapter and welcome the positive approach the Commission has taken in this report and in the prior National Water Initiative (NWI) report on working to engage Indigenous communities.

FINDING 7.2

Basin Governments have developed, in partnership with Indigenous Australians, a range of tools and processes to support the recognition of cultural values and uses in state water planning, and environmental management and planning.

The Australian Government has also committed \$40 million to administer a program to support Indigenous investment in cultural and economic water entitlements in the Basin. The objectives and principles guiding the implementation of this program have not yet been articulated. It is unclear why this funding is limited to Indigenous

communities in the Basin, rather than being available to all Indigenous communities in Australia.

We note finding 7.2 and will leave Indigenous groups to respond specifically but note that the \$40 million provided by Government was in the context of an agreement on the Northern Basin particularly. NIC is happy to work with communities on the Cultural Flows project and we anticipate that as this develops, additional Government funding may be required.

Chapter 8 — Water quality

FINDING 8.1

Salinity targets for flow management have been met at four of the five reporting sites. The salt export objective has not been met. In periods of low flows, there can be an inherent conflict between meeting site specific salinity targets and meeting the salt export objective.

Water quality is vitally important to the irrigated agriculture sector as well as to communities. It is important to note the great progress that has been made on salinity in the Basin as a result of more efficient irrigation and salinity schemes running over recent decades. Irrigators have played an important role in significantly reducing the mobilisation of salt previously caused by overwatering and rising water tables.

Overall, the Commission's findings on water quality are very positive and they show again that the Basin Plan is achieving many of its objectives already.

The discussion in the report of the salt export objective is particularly relevant. Figure 8.1 shows decreasing salinity in the River Murray and provides a welcome confirmation of the success of programs and schemes to date. NIC would note that changed irrigation practices, including efficiency programs, share some of the credit for those positive outcomes.

Table 8.2 shows that the export objective has not been met even in years with very high flows. This suggests it is not realistic. On that basis the finding in 8.1 is very relevant and should be taken seriously.

RECOMMENDATION 8.1

The Murray Darling Basin Authority should review the Basin Plan salt export objective in its 2020 review of salinity and water quality targets. This review should consider:

- ***the relationship between the salt export objective and site specific salinity targets that require a higher prioritisation to meet water quality objectives***
- ***whether there are any additional environmental benefits associated with achieving the salt export objective that are not covered by achieving the environmental outcomes of the Basin Plan***
- ***whether the objective should be respecified or abolished.***

8.1 STRONG SUPPORT for consistent and realistic salinity objectives.

NIC strongly supports recommendation 8.1 noting in particular the consideration in the draft report of inherent conflict between site specific salinity targets and the salt export objective.

FINDING 8.2

Communities across the Basin are justifiably concerned about the management of water quality during periods of low flow in the Lower Darling. The development of the Water Quality Management Plan for the New South Wales Murray and Lower Darling Water Resource Plan is the process to resolve this concern.

NIC notes the legitimate concerns of Lower Darling water users reflected in finding 8.2. We note the comment that the WRP is the mechanism to address this, but also believe it is reasonable to expect that in planning for the Menindee Lakes reconfiguration, the provision and operational rules relating to low flows in the lower Darling should be a key consideration.

It is important to consider the barriers to fish movement. NIC has long advocated for the removal of barriers to improve fish passage for fish mobility and migration to support native fish stocks and broader ecosystem function.

This matter was also picked up in the interim report following the Independent Assessment of the 2018-29 Fish Deaths in the Lower Darling¹. The report notes *emerging initiatives within the Basin to remove barriers to fish movement, particularly in locations with high stratification potential and locations that act as refuges during low flow events*. And that investigation indicates *stratification in artificially created weir pools inhibits fish movement and is the root cause of the fish deaths*.

Chapter 9 — Critical human water needs

NIC does not have comment in relation to this chapter, beyond agreeing that priority should be given to Critical Human Water Needs in water planning. We welcome the conclusion that existing provisions are 'robust'. Our comment on draft finding 9.2 regarding the Lower Darling is the same as our comment at 8.2.

NIC supports the planning requirements for Critical Human Water needs being included in the WRP providing clarity to water users on the priorities and mechanisms during extreme events.

RECOMMENDATION 9.1

The New South Wales Murray and Lower Darling Water Resource Plan (WRP) should recognise the direct link between the management of Menindee Lakes, flows to the Lower Darling and the risks to the provision of water for critical human water needs. The WRP should set out how key operational plans (including the Murray Darling Basin Authority's River Murray System Annual Operating Plan and the WaterNSW

¹ Independent Assessment of the 2018-2019 Fish Deaths in the Lower Darling; Interim Report, with provisional findings and recommendations, 20 February 2019; Vertessy & ors.

Lower Darling Operations Plan) interact with each other to provide for critical human water needs.

9.1 SUPPORT

NIC supports the thrust of recommendation 9.1. The operation and potential reconfiguration of Menindee Lakes has become very controversial; it is a real concern that in the controversy we may lose the opportunity to make changes which could result in more reliable water supply from the lakes, including more reliable low flows along with savings from evaporation which can contribute to achieving Basin Plan objectives. This is a critical project and Government must focus on consultation and planning to ensure it is achieved.

Chapter 10 – Water trading rules

The system of ownership of water is the backbone of the Murray Darling Basin Plan. In general, the system works well to provide the opportunity for water available for extraction to go toward growing the crop that provides the water owner with the best return.

Of course, the ability to trade water and the rising price of water does cause concern to some areas, and there is a tendency at times, for some things to be blamed on the Basin Plan which are more accurately the natural result of having a water market.

It is welcome that the report appropriately focuses on aspects of operation of the market rather than taking up some of the more populist and inaccurate commentary that we see in some media about the market.

This is summarised by the comment that “these trade reforms have enabled water to move to higher value uses and given water users greater flexibility to respond to changes in commodity prices and water availability”.

We note however, that there is still a very strong need to improve information about, and the transparency of, the market. There are still far too many parts of the market that have slow or poor information, including no audit or verification process for recording prices. Despite the expenditure of large sums of public money on systems intended to improve this, there remains an inadequate information system.

With current dry conditions there are also concerns about what might constitute dominance of a thin market. It is hard to make judgements on this when market information is not easily available.

RECOMMENDATION 10.1

The Murray Darling Basin Authority (as Basin Plan Regulator) should:

- ***finalise and publish an assessment framework for evaluating the consistency of trade restrictions against the Basin Plan trading rules, which gives guidance about how to estimate the costs and benefits of removing trade restrictions***
- ***specify the timeframes that it will endeavour to meet in resolving trading rule compliance matters***
- ***notify Basin States about whether the 11 unresolved matters raised with them amount to non-compliance and what action is required by Basin States to resolve them***
- ***publish the reasons given by Basin States for restrictions on surface water trade***
- ***publish its compliance determinations and the assessments that support each determination.***

10.1 SUPPORT work to provide more information on water market issues.

FINDING 10.2

New information and reporting requirements specified under the Basin Plan trading rules are largely in place.

NIC notes draft finding 10.2 and suggests this finding is somewhat over optimistic. The information and reporting on trades are still difficult to follow and there are still quite big differences in processing times. NIC would welcome a continuing focus on bringing the standard of information closer to the sort of performance we see with the ASX.

The number of zero trades reported on the annual market is high; regulators need to consider mechanisms to limit circumstances where a zero value trade is reported. Price and volume are important information to the effective operation of the market.

FINDING 10.3

Growth of trade has increased demands on delivery capacity and put pressure on delivery constraints in some parts of the Basin. A range of community members are concerned about the effects on third parties and the environment.

Basin States and the Murray Darling Basin Authority are aware of this strategic policy issue, but the process to resolve it is unclear to the market.

The section in the report on emerging risks from more open trade is very relevant. NIC and a number of other organisations have raised issues about the impact of delivery constraints on the ability to trade water. In particular, we remain concerned about whether delivery constraints will affect the reliability of supply to existing users if significant new developments continue in the lower parts of the Murray.

Our focus on this is the very practical and physical constraints on delivery, and we are not arguing for restrictions that might act as barriers to trade for the purposes of protecting particular areas or artificially keeping prices down.

The Commission's comment that 'trade restrictions may not be the best policy response' is noted. It is the role of the MDBA to confirm the validity of trade restrictions or limits. Trade restrictions apply for both deliverability and resource reliability reasons, which are quite different reasons. Irrigators are using trade to manage their annual allocation water demand between years. It is this trade, leaving large volumes of undelivered water in IVT (inter-valley trade) accounts which impacts on third parties.

In relation to deliverability, it is critical that in the first instance we are getting a clear idea of delivery constraints and the way that new development and transfers might be changing their impact, as well as impacts on river losses and the riparian zone.

NIC notes that two of its members, in recognition of separation of land and water and potential for significant shifts in water use within their networks, have developed access to flow share based on delivery rights held. This policy provides irrigators with a clear policy signal and restricts irrigators with no delivery right, reducing another irrigator's access to flow share.

In addition, the current policy framework provides no link between land development and access to river channel capacity.

On this basis we strongly support the recommendation below. We note that the last Basin Water Ministers Council meeting has taken steps toward this.

RECOMMENDATION 10.2

Basin Governments should set and publish a work plan within the next 12 months that describes how delivery capacity issues and third party effects associated with changes in water use and trade will be investigated and managed. The work plan should specify responsibilities, timeframes and how this information will be communicated to the water market.

Basin Governments should assign the Murray Darling Basin Authority (as the agent of governments) responsibility for identifying and managing risks related to changes in water use and trade in shared resources and connected systems.

10.2 STRONGLY SUPPORT work on delivery capacity and constraint issues and consideration of the most appropriate policy mechanism to manage the risk of deliverability.

The need to consider this issue extends beyond the River Murray system and the MDBA. The recommendation needs to be inclusive of WaterNSW and Goulburn Murray Water.

Chapter 11 — Environmental water planning and management

NIC made a number of key points in its submission around the importance of community engagement and 'localism' in environmental water planning. We are pleased to see the strength of the draft recommendations and finding in acknowledging the need for this engagement. We acknowledge the risk outlined in draft finding 11.1 of not completing the Pre-requisite Policy Measures. Clearly, if they were to not be implemented it would have a

major impact, but the risk of that happening seems relatively low. We note, but have no specific comment on, findings 11.2 and 11.3.

We are pleased to see the strength of the acknowledgement in this chapter that achieving environmental outcomes requires more than just water. We would hope that all Basin Governments and interest groups will take seriously the very real risk of failing to achieve the best possible environmental improvement if we fail to implement complementary measures that deliver environmental and habitat improvement of our river system.

Recommendation 11.1

The Murray-Darling Basin Authority, when developing the next five-year Basin-wide environmental watering strategy in 2019, should strengthen its value as the key strategic plan governing environmental watering across the Basin by:

- ***including a clear objective to ‘maximise environmental outcomes through effective and efficient environmental water management’***
- ***including a secondary objective that, where environmental outcomes are not compromised, environmental watering should seek to contribute to social or cultural outcomes***
- ***providing clear guidance, under all water availability scenarios, on the relative priority of key Basin environmental assets (including instream assets) to achieving the overall environmental objectives of the Basin Plan and the expected outcomes set out in the strategy***
- ***providing clear guidance, under all water availability scenarios, on the priority for achieving flow connectivity at the system scale relative to watering within an individual Water Resource Plan Area***
- ***providing clear guidance on potentially harmful flow regimes, to support river operators and resource managers to act in a way that is consistent with the Basin Plan.***

11.1 AGREE on importance of maximising the outcomes achieved by environmental watering.

NIC supports the development of environmental watering objectives that ensure environmental water managers have the same incentive to maximise the use of their water that irrigators have, and that also seek to achieve (without diminishing environmental outcomes) outcomes for the community including for Indigenous communities.

NIC would like to see further emphasis on the need for ground up knowledge to inform decision making and priorities, to ensure that community engagement is core to the process and not an after-thought.

RECOMMENDATION 11.2

Following the publication of the 2019 Basin wide environmental watering strategy (BWEWS), the Murray Darling Basin Authority (MDBA) (as Basin Plan Regulator) should provide clear guidance material to Basin States on the expected content of

long term watering plans (LTWPs) when they are reviewed and revised. This guidance material should include the need for LTWPs to articulate:

- **realistic long term objectives to be achieved from the available environmental water portfolio through watering activities within the operational constraints at that time**
- **environmental watering requirements in the catchment including the required magnitude, timing and frequency of watering for priority assets, ecosystem functions and system connectivity**
- **the relative priority of assets within the catchment for achieving the objectives of the Basin Plan and the expected outcomes of the BWEWS**
- **risks to the achievement of the long term watering objectives, including the risk of undesirable outcomes arising from environmental watering or potentially harmful flow regimes as a result of river operations.**

To improve the accessibility of information, the MDBA should maintain a register of LTWPs on its website, including relevant deadlines, progress towards completion, final documents when they are completed, and the status of each plan as they are reviewed and adapted over time.

11.2 SUPPORT the articulation of clearer guidance on long term watering plans

RECOMMENDATION 11.3

As part of the 2020 review of the Environmental Watering Plan, the Murray Darling Basin Authority (as Basin Plan Regulator) should consider the usefulness of Basin annual environmental watering priorities and whether the Basin Plan requirements for these annual priorities should be amended or removed

11.3 SUPPORT the recommendation to remove the requirement for annual priorities.

NIC notes recommendation 11.3 and the reasoning outlined in draft finding 11.4 suggesting that the role envisaged for the annual priorities has been taken over by other planning.

RECOMMENDATION 11.4

By 2020, Basin Governments should:

- **establish a Northern Connected Basin Environmental Watering Committee as a mechanism for intergovernmental coordination for planning and coordinating connected environmental watering events in the northern Basin**
- **increase the transparency of the Southern Connected Basin Environmental Watering Committee and its role by making governance arrangements including terms of reference, membership and reporting responsibilities publicly available**

11.4 SUPPORT

RECOMMENDATION 11.5

Where not yet in place, Basin State Governments should establish processes for consultation and coordination between key stakeholders to enable event based watering decisions — including water managers, asset managers and entitlement holders (including the Commonwealth Environmental Water Holder) — as soon as practicable.

These processes should be documented and publicly available.

Once in place, these arrangements should be reflected in the Commonwealth Environmental Water Holder's annual portfolio management plans.

11.5 SUPPORT. NIC strongly supports extensive consultation on watering decisions

This is in recognition that on some occasions, events might require quick decisions to take advantage of natural opportunities.

RECOMMENDATION 11.6

While achieving environmental outcomes is the primary focus of environmental water holders under their respective legislation, opportunities to contribute to social or cultural outcomes (without compromising environmental outcomes) should be actively pursued. Before the first revision of long term watering plans, Basin States and environmental asset managers should have processes to engage with local communities and Traditional Owners.

11.6 STRONGLY SUPPORT consultation and engagement with communities and traditional owners on watering.

This has been a key point made by the NIC in a number of submissions and we welcome this draft recommendation.

RECOMMENDATION 11.7

Basin States should manage the risks to achieving the environmental watering objectives set out in long term watering plans by delivering complementary waterway and natural resource management measures (such as habitat restoration or weed and pest control).

11.7 SUPPORT

Draft recommendation 11.7 goes to the heart of the flaw in the Basin Plan that sees flow indicators being the proxy for environmental outcomes. While we agree with this recommendation, we would like to see it strengthened with emphasis, not just on state governments delivering complementary measures, but on these measures being included more broadly in the delivery of the Basin Plan.

They are now included in the Northern Basin but suggest there should be scope for inclusion and consideration as part of the 450GL 'up-water' component of the Plan. Perhaps there is opportunity to examine other measures that could assist the South Australian flood plains targeted in the 'schedule 5' outcomes for example, or additional environmental works that would be more effective in improving the Coorong.

As we have continually argued, without a full range of complementary measures for the Southern and Northern Basin, including addressing cold water pollution, fish migration, feral pest control and other measures, then comprehensive environmental benefits will not be derived.

In the medium term it could be that the delivery of complementary measures across the Basin, may require additional expenditure (outside the programs already funded), but the investment is essential to maximise environmental outcomes from the available environmental water pool.

Chapter 12 — Compliance

NIC and other industry stakeholders dealt extensively with our support for stringent compliance regimes in our submissions. Over the past eighteen months these industry bodies have worked constructively with state and federal authorities to ensure that we have a system which is workable, ensures theft is caught and prosecuted and provides the community with confidence in the system.

Again, we reiterate that the vast majority of irrigators do the right thing. There is no justification for the type of comments that tarnish all irrigators or where ridiculous generalisations are made such as ‘corporate irrigators stealing South Australia’s water’. This report’s balanced and practical approach is appreciated as is the inclusion of the evidence from those who actually know.

There have been a large range of actions and measures to build appropriate compliance regimes and it is appropriate that the report has noted many of those, but without adding further layers to an already extensive range of actions and reform.

NIC has no comment on draft finding 12.1 and we would agree that the finding in 12.2 that “compliance reforms by Basin State Governments are a step forward in improving water take compliance regimes.” NIC welcomes the recognition in the report, not only of the substantial work to date, but also the acknowledgment that irrigators support strong compliance and that non-compliant irrigators are a small minority.

NIC welcomes the adoption of our recommendation relating to the Australian Standard for meters. This is practical recommendation designed to strengthen metering by ensuring manufacturers are able to offer the market meters that meet an Australian or appropriate international standard.

RECOMMENDATION 12.1

As a transitional measure, the Murray Darling Basin Authority should house its Sustainable Diversion Limit and Water Resource Plan compliance functions within the Office of Compliance, before its compliance role comes into full effect in July 2019.

12.1 NIC has no objection to draft recommendation on organisational arrangements within the MDBA.

The Commission has appropriately outlined the substantial activity to improve compliance over the past year. Irrigators have worked with Government and various inquiries on this and continue to do so.

RECOMMENDATION 12.2

Basin States should consider the role, costs and benefits of consistent metering policies including the role of metering standards.

Basin Governments should work with Standards Australia to formally revise standards to ensure quality and cost effectiveness in water measurement.

The new metering implementation plans being developed by Basin States should be supported by publicly available business cases.

12.2 STRONGLY SUPPORT recommendations on metering standards.

RECOMMENDATION 12.3

The Murray Darling Basin Authority (MDBA), as the regulator responsible for overseeing compliance at a Basin wide level, should publicly report instances where Basin States are not effectively enforcing their water take laws.

The MDBA's 2026 Basin Plan review should reconsider the risk to meeting the objectives of the Basin Plan from non-compliance of water take, including the case for reducing Sustainable Diversion Limits if there is evidence of persistent illegal water take.

12.3 AGREE in principle but additional information needed.

NIC notes that enforcement is primarily the responsibility of Basin States and we acknowledge the important role of the MDBA in overseeing all compliance. We would like further explanation of what might be intended with the second paragraph of the recommendation.

NIC assumes this recommendation proposes the MDBA restrict take where reporting is ineffective; if this is the case this action will impact on irrigators where the failing is the Basin States. NIC would argue the state, organisation or individual responsible, should be penalised not an entire valley.

Chapter 13 — Reporting, monitoring and evaluation

The need for a clear monitoring and evaluation framework for the Basin Plan is a critical part of judging progress and success in the medium to longer term. NIC agrees that at times there has been a lack of clarity about what the measures of success are.

In that respect we agree with most of the findings made in this chapter and the recommendations arising.

In particular, we highlight the content of “Box 13.3” Key evaluation questions which make it clear that success of the Plan means appropriate outcomes across the ‘triple bottom line’. Economic and community impact is as important as environmental outcomes.

As a general point on measuring environmental results, we again emphasise that we must measure and observe outcomes not just flow measures.

We endorse draft finding 13.1 on the need for strong reporting frameworks and agree with 13.2 pointing to a lack of clarity in evaluation frameworks and coordination. On that basis we also agree with draft recommendations 13.1, 13.2 and 13.3.

RECOMMENDATION 13.1

Reflecting lessons learned from deficiencies in past agreements, for any future funding agreements relating to the implementation of the Basin Plan, the Australian Government should ensure:

- ***the roles of the Australian Government and Basin States are clearly identified***
- ***specific performance milestones are identified, and that clear responsibility is assigned for the delivery of each milestone***
- ***where milestones are linked to payments, that these payments are disaggregated with a payment per milestone to provide a genuine incentive for implementation***
- ***reporting on the progress of Basin Governments in meeting milestones is timely***
- ***independent assessment of the progress of Basin Governments is undertaken***
- ***advice provided by relevant agencies (such as the Murray Darling Basin Authority or the Commonwealth Environmental Water Holder) is used to inform assessments of progress and is published in full.***

13.1 NIC has no objection to draft recommendation on intergovernmental agreements.

The detail of the agreements and requirements should be publicly available, so stakeholders are aware of the requirements and understand the ramifications.

RECOMMENDATION 13.2

The Murray Darling Basin Authority (as Basin Plan Regulator) should develop a revised Basin Plan evaluation framework. This framework should define the specific questions that are to be used to evaluate the outcomes and effectiveness of the Plan, and the scales and times at which these questions will be answered.

The process through which the framework will be developed should be made public as soon as possible.

The evaluation framework should be finalised by the end of 2019, and be made publicly available.

13.2 SUPPORT publication of revised Basin Plan evaluation framework in 2019

RECOMMENDATION 13.3

Basin Governments should develop a monitoring strategy to give effect to the evaluation framework for the Basin Plan. This should describe the process by which the information needed to answer the evaluation questions set out in the framework will be collected. This includes:

- *outlining what information will be collected and by whom*
- *identifying any information gaps, who will be responsible for addressing them and the process by which they will be addressed*
- *establishing the arrangements for sharing the costs of monitoring and evaluating the Plan between Basin Governments.*

This monitoring strategy should be developed by Basin Governments, supported by the Murray Darling Basin Authority (as the agent of governments).

The monitoring strategy should be finalised by the end of 2019, and be made publicly available.

13.3 SUPPORT the recommendation on monitoring and evaluation strategy, noting that MDBA will need to be appropriately resourced to undertake work no later than 2019.

RECOMMENDATION 13.4

After the completion of the 2020 evaluation of the effectiveness of the Basin Plan, the Murray Darling Basin Authority (as Basin Plan Regulator) should publicly outline the approach it will take for the 2026 review of the Plan. This should include establishing:

- *the broad objectives and scope of the review*
- *how the process as set out in the Water Act will be undertaken, including establishing the timing of the review's discussion paper*
- *a clear process for identifying and addressing knowledge gaps that may hinder the review*
- *how the review will be resourced.*

13.4 SUPPORT

Chapter 14 — Institutions and governance

Perhaps some of the most challenging aspects of the report are in this section. In particular, NIC recognises the clear call for much greater cooperation and commitment from Basin Governments to work together on implementing the Basin Plan.

No doubt Australians, along with Basin residents, would expect that to be the case – though they would also expect their Governments to stand up for their needs!

It is very relevant to highlight the shortcomings of the current relationships and responsibilities. As we come particularly to implementing the supply projects, a failure to work together could well sink any prospect of achieving the desired outcomes.

NIC agrees therefore that the objective outlined in this chapter of reforming the institutional and governance arrangements, is very worthwhile. It is also ambitious.

The Plan has been controversial and politically difficult. In recent years some participants have thought the Plan useful as a political platform during the lead up to state and federal elections, sometimes seeing benefit in highlighting interstate conflict and blame-shifting.

But at its core, the Basin Plan was an historic bipartisan agreement by the Federal Government which five state or territory governments signed on to. NIC would hope that the spirit of bipartisanship has the capacity to overcome the potential divisions and assist with implementing the recommendations in this chapter.

RECOMMENDATION 14.1

Basin Governments should demonstrate strategic leadership, take joint responsibility and direct the implementation of the Basin Plan.

The Murray Darling Basin (MDB) Ministerial Council should collaborate to provide the strategic leadership and policy direction required to implement the Plan, and be ultimately accountable for implementation.

In 2019, the MDB Ministerial Council should commence reforms to the institutional and governance arrangements for implementing the Basin Plan by:

- ***enhancing the role of and delegating accountability for implementation to the Basin Officials Committee (BOC). BOC should be responsible for managing the significant risks to successful implementation and ensuring effective intergovernmental collaboration***
- ***ensuring that formal directions to BOC regarding implementation are publicly available***
- ***ensuring that arrangements to assess progress, evaluate outcomes, and ensure compliance with the Plan are fully independent***
- ***recognising that the Murray Darling Basin Authority's agent of government role will continue to be key to driving collaboration between and providing technical support to Basin Governments as they implement the Plan***
- ***ensuring that Basin Governments are individually and collectively resourced to perform their roles to implement the Plan.***

14.1 SUPPORT the revision of Basin Plan governance to enhance collaboration

NIC agrees with recommendation 14.1. We recognise however, that the Basin Plan has been controversial and politically difficult over a long period of time and that makes this recommendation ambitious. Ideally, we would encourage Governments to work far better together, avoid pre-election point scoring and adequately resource all the programs needed to complete implementation of the Plan.

We look forward to seeing how this can be achieved and certainly see this as being one of the key recommendations from this review.

NIC would welcome the opportunity to explore how this could work to improve the effectiveness of Basin Plan implementation.

An additional point on the recommendation is that if the Basin Officials Committee have an enhanced role in implementation of the Plan, then it also needs to become accessible to stakeholders with engagement in higher levels of direct consultation.

It is unclear how the Governance around the BOC, all of whom are agents of their employer, would operate in practice.

Again, NIC would welcome the opportunity to explore how this might be implemented.

RECOMMENDATION 14.2

Basin Governments should agree to the restructure of the Murray Darling Basin Authority to separate its service delivery and regulatory functions into two institutions.

The Australian Government should then embark on the necessary institutional reforms to establish the:

- ***Murray-Darling Basin Corporation — as the agent of Basin Governments***
- ***Basin Plan Regulator — an independent Commonwealth Statutory Authority.***

These institutional reforms should be in place by 2021.

RECOMMENDATION 14.3

As a transitional measure, and before the Murray Darling Basin Authority's compliance role comes into full effect in July 2019, the Office of Compliance should be broadened to be the Office of the Basin Plan Regulator, and include compliance, evaluation and Plan review functions.

14.2 & 3 IN PRINCIPLE SUPPORT for future re-structure of MDBA

NIC can see the logic of recommendation 14.2 & 3 and the need to separate roles in the longer term. This should not be seen as a criticism of the MDBA's significant effort. The irrigated agriculture sector certainly has not supported everything the MDBA has done - nor would we expect that. But looking objectively at the performance of the MDBA as an independent body, it is fair to say they have done a difficult job quite well but there is room to consider improvement in the future.

NIC would want to consider how this recommendation would work in practice and to ensure that any fundamental change in operations was well planned to avoid disruption to the implementation of the Plan during a critical period.

DRAFT RECOMMENDATION 14.3

To enable it to carry out its enhanced role, by 2020 the Basin Officials Committee should:

- *comprehensively review the capability and the resourcing it requires to jointly implement the Plan*
- *agree on the capability and services Basin Governments require of the Murray Darling Basin Corporation to support them to implement the Plan and for shared water resource management*
- *establish new arrangements and processes to support ongoing intergovernmental collaboration.*

RECOMMENDATION 14.4

By 2020, to enable it to carry out its enhanced role (recommendation 14.1) the Basin Officials Committee should:

- *have an independent Chair, appointed by the Australian Minister for Water in consultation with the Murray Darling Basin Ministerial Council*
- *comprehensively review the capability and the resourcing it requires to jointly implement the Plan*
- *agree on the capability and services Basin Governments require of the Murray Darling Basin Agency to support them to implement the Plan and for shared water resource management*
- *establish new arrangements and processes to support ongoing intergovernmental collaboration.*

14.4 Conditional, in-principle support for BOC enhanced role

NIC would support in-principle this decision with the proviso that if the Basin Officials Committee is to become a more active day to day part of implementing the Basin Plan then it also needs to become much more accessible to stakeholders and publicly accountable.
(refer above comment)

RECOMMENDATION 14.5

In establishing the Basin Plan Regulator by 2021, the Australian Government should ensure that it will be effective, including by reviewing the skills mix of the statutory appointments and establishing a statement of expectations.

When there is a need for additional technical skills not available within the Regulator's staff, the Regulator should organise formal, transparent arrangements for the supply of these capabilities from the Murray Darling Basin Agency, Basin Governments, or other providers.

14.4 SUPPORT achieving appropriate mix of appointments subject to more information