



Australian Government

Report of the Independent Review of the *Water Act 2007*



November 2014

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Senator the Hon Simon Birmingham
Parliamentary Secretary to the Minister for the Environment
Parliament House
CANBERRA ACT 2600

Dear Senator Birmingham

Independent Review of the *Water Act 2007*

In accordance with the terms of reference for the review of the *Water Act 2007* (Cth) (the Act) we are pleased to present you with our final review report, on the second anniversary of the commencement of the *Basin Plan 2012* (Basin Plan).

We considered over 70 submissions and met with over 50 groups during the Review, including with agricultural, mining, forestry and other industry bodies; Indigenous groups; environmental organisations; individuals; Australian Government agencies; states and territories; and local governments. We also conducted a series of workshops and roundtables with groups of submitting organisations. We acknowledge the contributions and commitment of the people and organisations who took the time to make submissions and meet with us. It was apparent that the community and all those who engaged in this process have a strong interest in the outcomes of reforms established under the Act, especially the Basin Plan.

Key messages that came from submissions and our consultations include the following:

- Opportunity exists to reduce the regulatory burden on the water and irrigation sector, and to enhance stakeholder confidence, by streamlining regulation, reducing duplication and improving the transparency of decision-making
- As the Basin Plan was only recently made and is in the very early stages of implementation, many felt that it is too early to comprehensively assess the effectiveness of the Act in achieving its objects and the extent to which the objectives and outcomes of the Basin Plan are being met
- There is not a strong appetite for extensive changes to the Act. Some submissions noted that, after such a long period of significant policy change, communities and businesses need stability and certainty, and consider that effort should now be directed to implementing agreed reforms
- Effective collaboration between the Australian Government and the Basin States (New South Wales, Victoria, Queensland, South Australia and the Australian Capital Territory) remains crucial to the timely and effective delivery of the Basin Plan.

In undertaking this Review, we carefully considered evidence presented through the consultation process, and assessed delivery of Basin reforms and water information services to date under the provisions of the Act.

We believe that the successful administration of the Act and implementation of its intended reforms is vital to the long-term well-being of all Australians. Overall, we consider that the Act is an effective legislative framework.

Nevertheless, there is scope to improve the ways in which the objects of the Act are being delivered. Our recommendations provided in this report target those areas of the Act where further improvement is warranted.

We have also made some recommendations that would improve implementation of the Act without requiring amendments to it. Some of these recommendations may result in amendments to subordinate instruments, and others may best be implemented at an operational level.

Over coming years, the success of the reforms will be determined in large part by how the Act and its instruments are implemented. This is particularly the case for the Basin Plan. The remaining implementation challenge depends on a range of actors—governments and their agencies, industry and communities—working together.

There is work to be done to boost community and business confidence in the reforms. This relies on effective partnerships, open and clear communication on why reforms are important and how they will be implemented, and a commitment to ensuring that reforms deliver their intended benefits. We believe that if all governments, agencies and stakeholders work together respectfully of each other's knowledge, interests and roles, the Act and its associated reforms will be delivered successfully, providing enduring benefits for the Murray–Darling Basin and the nation.

Yours sincerely



Eamonn Moran PSM QC



Steve Morton



Peter Anderson



Gavin McMahon

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Structure of the Report

The Report has two parts.

Part 1 provides an executive summary and lists the Panel's recommendations to amend or review the Act or its subordinate instruments and its conclusions on various matters. The Panel's conclusions reflect practical changes that aim to help deliver the Act's objectives without requiring legislative amendment. Background on the Act and the Basin Plan is also provided in Part 1.

Part 2 is structured along the lines of the Act itself, with each chapter dedicated to a separate Part of the Act. Each chapter provides detail on the purpose of the Part with which it deals, discusses relevant issues raised by submitters and relevant aspects of the terms of reference and provides the Panel's conclusions and recommendations.

PART 1

Scope and conduct of the Review

On 12 May 2014, the Parliamentary Secretary to the Minister for the Environment, Senator the Hon Simon Birmingham, announced the independent review of the *Water Act 2007* (Cth) (the Act).

The scope of the Review was determined by section 253 of the Act and the terms of reference. This is the first review of the Act since it commenced in 2008.

The Review was undertaken by a four-member Expert Panel (the Panel), comprising:

- Mr Eamonn Moran PSM QC (Chair)
- Mr Peter Anderson
- Mr Gavin McMahon
- Dr Steve Morton.

Combined, the Panel has extensive experience across the fields of law, business regulation, science and irrigation. Panel members' biographies are provided at Appendix A.

The Review was assisted by a secretariat within the Australian Government Department of the Environment.

A number of opportunities were provided for interested parties to provide input to the Review. The first stage of the consultation process involved a call for public submissions and targeted discussions with relevant peak bodies, with state and territory officials, and with Commonwealth bodies established under the Act or performing additional functions conferred on them under the Act. Over 70 submissions were received. All submissions are available on the website of the Australian Government Department of the Environment at <http://www.environment.gov.au/water/legislation/water-act-review>.

A list of submitters is provided at Appendix B.

The second stage of the consultation process involved a series of wider roundtable discussions to further explore the issues raised in submissions. These discussions were held with environmental and Indigenous groups, industry, states and territories, and organisations representing local councils and communities in the Murray–Darling Basin. A list of consultation participants is provided at Appendix C.

The Panel also considered supplementary information and materials provided by roundtable participants.

Terms of Reference

The Commonwealth *Water Act 2007* (the Act) commenced on 3 March 2008 and implemented key reforms for water management in Australia. The key features of the Act include establishing: the Murray–Darling Basin Authority (MDBA), a national framework to manage Basin water resources, including through the adoption of the Basin Plan, and the Commonwealth Environmental Water Holder. The Act also provided for water charge and market rules to be developed and for national water information to be provided.

A review of the operation of the Act will be carried out in accordance with section 253 of the Act. Consistent with the Government’s deregulation agenda this will include consideration of opportunities to reduce or simplify unnecessary regulatory burden.

The Government is committed to ongoing water reform, including the implementation of the Murray–Darling Basin Plan on time and in full. The focus of the Review will be on improving the effectiveness of the Act itself, although amendments to the Act resulting from the review process could affect regulations or subordinate instruments made under the Act.

The Murray–Darling Basin Ministerial Council is separately progressing a review of the governance arrangements for, and efficiency of, joint activities in the Murray–Darling Basin, the outcomes of which may inform the review.

The terms of reference for this Review are set out below.

- 1) A review of the *Act 2007* (the Act) will be carried out in 2014 in accordance with section 253 of the Act, which specifies the following mandatory terms of reference:
 - (a) having regard to the extent to which water resource plans are in transition, the review will conduct an assessment of the extent to which:
 - (i) the management objectives and outcomes of the Basin Plan are being met; and
 - (ii) long-term average sustainable diversion limits are being met; and
 - (iii) targets in the Basin Plan are being met; and
 - (iv) water trading is occurring effectively and efficiently; and
 - (v) other key elements of the Basin Plan are being implemented;
 - (b) an assessment of:
 - (i) the level of Basin-wide consistency in water charging regimes; and
 - (ii) the contribution made by those charging regimes to achieving the Basin water charging objectives;
 - (c) an assessment of the extent to which water is being used in higher value uses;
 - (d) an assessment of the progress in the implementation of improved water information systems, including the National Water Account.
- 2) In addition, the review will examine and report on:
 - (a) the effectiveness of the Act in achieving its objects, as set out in section 3 of the Act; and
 - (b) opportunities to reduce or simplify the regulatory and/or reporting burden while maintaining effective standards.
- 3) The review will also recommend appropriate future review points for the Act and Basin Plan, noting the 2019 implementation date of the Basin Plan.
- 4) The review will be undertaken in consultation with state and territory governments and stakeholders.

Executive summary

In 2007, the Commonwealth enacted the *Water Act 2007* (Cth) (the Act), putting in place the architecture to support:

- the sustainable management of Murray–Darling Basin (Basin) water resources in the national interest, including through legally binding sustainable diversion limits to be established in the *Basin Plan 2012* (Basin Plan) prepared by the Murray–Darling Basin Authority (MDBA)
- the management of Commonwealth environmental water holdings by the new Commonwealth Environmental Water Holder to protect and restore the environmental assets of the Basin
- efficient water pricing, markets and trade in the Basin, with a role for the Australian Competition and Consumer Commission (ACCC) in regulating Basin water markets and charges in addition to Basin Plan water trading rules enforced by the MDBA
- the provision of high-quality information about Australia’s water resources by the Bureau of Meteorology (Bureau).

Importantly the operation of the Act is supported by the *2008 Intergovernmental Agreement on Murray–Darling Basin Reform* and the *2013 Intergovernmental Agreement on Implementing Water Reform in the Murray Darling Basin*. The Act also incorporates the Murray–Darling Basin Agreement, which represents the longstanding framework for Basin jurisdictions (the Commonwealth, New South Wales, Victoria, Queensland, South Australia and the Australian Capital Territory) to collectively manage the shared water resources of the River Murray System and to administer a range of other jointly funded activities of mutual benefit. All Basin jurisdictions are party to these agreements. The Act also builds on earlier water reforms, including those agreed by the Council of Australian Governments (COAG) as part of the National Water Initiative in 2004, many principles of which have been enshrined in the Act.

The Panel heard from a wide range of stakeholders on a broad range of matters relevant to the terms of reference. In addition to considering the extent to which the Act is effectively achieving its objects, the terms of reference required the Panel to report on the extent to which the Basin Plan and water information systems are being implemented, the extent to which Basin water trading is occurring efficiently and effectively, and the level of Basin-wide consistency in water charging regimes. The Panel was also asked to report on opportunities to reduce the regulatory burden, and on appropriate future review points for the Act and the Basin Plan.

The Panel notes that many of the reforms established under the Act and the Basin Plan are in transition and are yet to be fully implemented. When the Act was enacted, the expectation was that the Basin Plan would be in place by 2009. However, the Basin Plan did not commence until 24 November 2012, following extensive community discussion, and will not be fully implemented until 1 July 2019.

A guiding principle for the Panel has been to identify improvements aimed at supporting effective implementation of the Act and the Basin Plan and the longer term achievement of their objectives. In particular, the Panel has focused on opportunities to build confidence in the reforms by all parties, including the Basin States (New South Wales, Victoria, Queensland, South Australia and the Australian Capital Territory) and their agencies, water managers and Basin industries and communities. The Panel has not made recommendations that would represent structural changes to the Basin Plan settings in advance of outcomes being assessed over the medium to longer term.

Institutional arrangements under the Act

Under the Act, the Commonwealth is responsible for Basin-wide planning and management; Basin States remain responsible for managing water resources within their own jurisdictions. All Basin States are to have accredited water resource plans in place by 1 July 2019.

The institutional arrangements established under the Act reflect the evolution of intergovernmental arrangements over a century (through the incorporation of the Murray–Darling Basin Agreement as Schedule 1 to the Act) and the Australian Government’s and Basin States’ respective roles and powers under the Constitution. In relation to the interplay between the Act, state legislation, the Murray–Darling Basin Agreement and the bodies they establish, many stakeholders maintain that the arrangements are overly complex, difficult to understand, poorly coordinated and in some instances duplicative. This has also contributed to a perception that costs—including costs imposed on water users—are both lacking in transparency and higher than might be the case under simpler governance arrangements.

Some stakeholders also expressed the view that the MDBA has too many functions—functions that cover policy, resource management, standard setting and regulation. Particularly where roles and responsibilities for certain functions under the Act (e.g. environmental water planning) are exercised by multiple agencies, there has been some confusion as to where and how agencies are working together. Although the Panel considers the MDBA to be an effective agency, submissions revealed that at this point in the system’s transition there are varying levels of confidence in the MDBA and in the integration of its work with the regional and local work of other agencies.

The Panel acknowledges that to some extent the complexity of arrangements established by (and, in the case of the Murray–Darling Basin Agreement, incorporated in) the Act reflects the history of the management of water resources in the Australian federal system. It also acknowledges that the institutional arrangements established by the Act are relatively new and that the intergovernmental arrangements established by the Murray–Darling Basin Agreement remain the shared responsibility of the six signatory Basin jurisdictions.

Nevertheless, the Panel has made recommendations and conclusions to address some concerns, including that:

- a detailed analysis of the merits of transferring responsibility for the Basin Plan water trading rules from the MDBA to the ACCC should be undertaken
- joint governments should consider making the River Murray Operations budget and related cost-efficiency information publicly available
- the MDBA’s functions and expertise should be augmented to more effectively integrate Indigenous expertise relevant to Basin water resources into the Act’s water planning and management framework.

Basin Plan reform progress

While significant progress has been made since the commencement of the Basin Plan, the Panel has concluded that much more remains to be done to successfully deliver the Basin Plan in full by 1 July 2019 and to ensure that its objectives and outcomes will be realised. This involves a substantial implementation program as well as a sustained commitment from governments and their agencies, industries and communities to work together in partnership, respecting each others’ roles, responsibilities and expertise. In particular, the Panel is of the view that Australian and Basin State governments and their agencies need to work together to clearly and transparently communicate how reforms are being implemented, including the different roles of governments, how local expertise will be taken into account and how activities will be coordinated. In particular, the Panel has identified the following specific areas as crucial to ensuring the effective delivery of the objectives of the Act and the Basin Plan:

- Decision-makers should transparently demonstrate how environmental, economic, social and cultural considerations are taken into account in decision-making, particularly in relation to operational decisions where there is flexibility to achieve complementary outcomes such as environmental water delivery
- Basin States and the MDBA should work together to facilitate the seamless and successful accreditation of all water resource plans by 1 July 2019
- Effective implementation of the Basin Plan water resource plan requirements relating to Indigenous values and uses is essential to ensuring that these new requirements translate into a positive step forward in integrating Indigenous peoples' objectives into Basin water planning frameworks
- Noting the importance of the effective operation of the sustainable diversion limit adjustment mechanism for Basin Plan outcomes, the MDBA and Basin States should engage openly with stakeholders, clearly explaining roles and responsibilities and rigorously testing methods, processes and safeguards
- Environmental watering must be coordinated, including through the integration of The Living Murray portfolio within Basin Plan frameworks where possible; consideration should be given to transferring The Living Murray entitlements held by the MDBA to the Commonwealth Environmental Water Holder
- Use of allocation trade proceeds by the Commonwealth Environmental Water Holder should be relaxed to enable investment in non-water acquisition activities (e.g. fish ladders, cold water curtains and other complementary natural resource management activities) where this would maximise environmental outcomes and not undermine the sustainable diversion limits over the long term
- The impacts of Basin Plan reforms—for the environment as well as for communities and industry—should be closely monitored and understood over time, with monitoring and evaluation based on rigorous and credible analysis and effectively coordinated to ensure that reform outcomes can be demonstrated
- The five-yearly audits of Basin Plan implementation should be maintained and performed by an independent expert body following the proposed closure of the National Water Commission by the end of 2014.

Efficient and effective trade

The Panel was also asked to report on the extent to which efficient and effective water trading is occurring and the extent to which water is moving to its highest value use. The Panel's key recommendations and conclusions are:

- As Basin water markets continue to mature and the role of water market intermediaries becomes more important, it is necessary to act to ensure the integrity of, and confidence in, markets is protected against potential misconduct and negligence by water market intermediaries. Industry should take steps to develop an industry-led scheme of regulation, in consultation with the Australian Government.
- The Commonwealth Environmental Water Holder should continue to provide timely and transparent information to the market on its trading activities and intentions to build the trust and confidence of water market participants following its recent entry into the market and its growing portfolio of water holdings. Basin States should impose trade-processing fees that reflect efficient costs and variations of fees across Basin States should be reduced.
- Basin States should also seek to improve their performance against the COAG agreed service standards for trade processing and approval times now that these are largely being met.

Water charges

The Panel received submissions on the extent to which consistency in charging regimes is being achieved. Some stakeholders felt that there was room for improvement. The Panel notes that a number of factors may have contributed to inconsistencies in the approach to water charging, including the different approaches by the ACCC and ACCC-accredited regulators and the tiered approach to regulation based on size and ownership of entities. Some submissions suggested specific changes, including increasing the prescriptiveness of the water charging objectives and principles applied by regulators and defining some terms considered to be ambiguous. As the focus of this review is on the Act itself, the Panel considers that there would be merit in conducting a review of the matters raised in relation to the water charge rules, with a focus on increasing the consistency of their application and streamlining regulation where possible to reduce compliance costs.

Water information

The Panel considers that, since the passage of the Act, considerable progress has been made in improving Australia's water information. The Bureau of Meteorology has produced more than 15 water information and forecasting products and services catering to diverse stakeholder needs, helping to better inform governments, industries and business. Australia now has a single national source of water information, enhancing the ways in which this vital resource is monitored and measured over time. To build on these achievements, the Panel considers it necessary for the Bureau to work more closely with stakeholders and data providers to communicate the uses and benefits of its products and take on board stakeholder feedback. The Bureau should also review its suite of water information products to focus on those that are of the highest value to end users.

More broadly, the Panel considers that there would be benefit from a more thorough investigation of water information reporting requirements under the Act with a view to identifying instances of duplication and overlap—including with other Australian Government bodies whose functions lie beyond the Act, such as the Australian Bureau of Statistics and the Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES). The Panel recommends that an interagency group be established to report to the Australian Government in the first half of 2015 on options to reduce the reporting burden on data providers by around 20 per cent or more. The Panel also suggests that consideration be given to the merits of establishing a single portal whereby data providers could provide information once only for many uses.

Reducing red tape

Consistent with both the terms of reference and the Australian Government's commitment to reducing the cost of red tape by \$1 billion per annum, the Panel has sought to identify areas of unnecessary regulatory burden and to identify opportunities to reduce regulatory costs to businesses, not-for-profit organisations and individuals. In addition to the review of the water charge rules and water information reporting requirements, the Panel has made some recommendations for amendments to increase regulatory clarity, to streamline certain processes such as Basin State water resource plan accreditation, and to repeal redundant provisions.

The majority of irrigation industry roundtable participants identified themselves as small to medium sized operations. The Panel notes that even small changes in regulatory burden can have a large productivity effect on small and medium sized business and that the ABARES recently reported that opportunities to increase agricultural productivity will increasingly be reliant on reducing regulatory burdens now that past competition reforms have largely run their course.

Future reviews of the Water Act and Basin Plan

The Panel believes that best practice requires a further scheduled review of the Act, and that such a review should take place in time to inform the next Basin Plan. In terms of the timing of the next substantive review of the Basin Plan, most submissions felt that 2022 was too soon, noting that the sustainable diversion limits do not take full effect until 2019 and that reconciliation of outcomes under the sustainable diversion limit adjustment mechanism does not take place until 2024.

The Panel recommends that the Basin Plan be reviewed when outcomes can be assessed and in time to inform subsequent Basin State water resource plans, most of which become due for further renewal in around 2029. Accordingly, the Panel recommends that the Act next be reviewed in 2024 and that the next substantive review of the Basin Plan be completed in 2026.

The Panel believes that the package of recommendations and conclusions in this report, if implemented by governments (noting that many recommendations require the cooperation of governments or otherwise touch on Basin State responsibilities), will help in ensuring that the Act provides an effective framework for delivering these important reforms over coming years.

Recommendations

CHAPTER 2: MANAGEMENT OF BASIN WATER RESOURCES

RECOMMENDATION 1

The Panel recommends that the Murray–Darling Basin Authority prepare guidelines to assist Basin State governments to develop water resource plans in accordance with Basin Plan water resource plan requirements relating to Indigenous values and uses, with the guidelines to draw on the Convention on Biological Diversity’s Akwé: Kon Guidelines as appropriate.

The Panel also recommends that, after 1 July 2019 when the Basin State water resource plans have been accredited, the case to amend section 22(3) to include a new section that reflects existing Basin Plan water resource plan requirements dealing with Indigenous values and uses should be considered.

RECOMMENDATION 2

To align with requirements in Chapter 13 of the Basin Plan, the Panel recommends that item 13 of section 22(1) ‘Mandatory Content of the Basin Plan’ be amended to require that the program for monitoring and evaluating the effectiveness of the Basin Plan includes five-yearly reviews of the extent to which the Basin Plan has affected social and economic outcomes in the Murray–Darling Basin.

RECOMMENDATION 3

The Panel recommends that regulations be made to set out a process for minor amendments to the Basin Plan, consistent with section 49 of the Act.

RECOMMENDATION 4

The Panel recommends that:

- (a) section 50 of the Act be amended to provide for the next scheduled review of the Basin Plan to be finalised in 2026, with 10-yearly reviews thereafter
- (b) other review points be amended or re-phased as follows:
 - (i) amend section 49A of the Act to postpone the first five-yearly report on Basin Plan impacts to the Murray–Darling Basin Ministerial Council from 2017 to 2020
 - (ii) postpone the first of the five-yearly reviews of the Environmental Watering Plan and Water Quality and Salinity Management Plan from 2017 to 2020, then undertake the reviews concurrently every five years (this will require an amendment to the Basin Plan)
 - (iii) undertake the social and economic evaluation (see Recommendation 2) concurrently with those reviews and every five years thereafter, consistent with the Basin Plan.

RECOMMENDATION 5

The Panel recommends that section 56(2) be amended to provide flexibility for Basin States to nominate a more recent version of the Basin Plan for the Murray–Darling Basin Authority to use when assessing water resource plans for accreditation.

RECOMMENDATION 6

The Panel recommends that the Australian Government consult Basin States on:

- (a) making regulations under section 66 of the Act to avoid the need for minor, non-substantive amendments to water resource plans to go through a full accreditation process
- (b) amending the Act to streamline accreditation processes for water resource plan amendments with the aim of ensuring that implementation of the Basin Plan through Basin State frameworks is as responsive as possible.

RECOMMENDATION 7

The Panel recommends that a new provision be included in section 77(5) of the Act to require that, for the purposes of an amount payable by the Commonwealth, regard must be had to a presumption that a water access entitlement holder should be fully compensated for any reduction in the market value of the entitlement that is reasonably attributable to the Commonwealth share of the diversion limit reduction, consistent with sections 77(4) and 77(6).

CHAPTER 4: BASIN WATER CHARGE AND MARKET RULES

RECOMMENDATION 8

The Panel recommends that a detailed analysis of the potential benefits of reassigning the Basin Plan water trading rules function from the Murray–Darling Basin Authority to the Australian Competition and Consumer Commission be undertaken.

RECOMMENDATION 9

The Panel recommends that industry develop, in consultation with the Australian Government, an industry-led scheme of regulation for water market intermediaries. The scheme could include voluntary accreditation, a code of conduct and a defalcation fund. If a scheme is not developed, the Australian Government should regulate water market intermediaries. State referrals would be necessary to give effect to Basin-wide or national regulation.

RECOMMENDATION 10

The Panel recommends that section 253 of the Act be amended to remove the term ‘higher value uses’.
See also Recommendation 23 relating to this section.

RECOMMENDATION 11

The Panel recommends a separate review of the Water Charge (Infrastructure) Rules, the Water Charge (Termination Fees) Rules and the Water Charge (Planning and Management Information) Rules. The review should be undertaken by the Australian Competition and Consumer Commission in consultation with industry and Basin State governments. It should focus on reducing the cost to industry and governments and should report on:

- (a) the continuing appropriateness of tiered regulation of infrastructure operators and the potential for streamlining or eliminating regulation, including whether to remove the current requirements for member-owned operators under Part 5 of the Water Charge (Infrastructure) Rules
- (b) the current process for accreditation of Basin States' regulators, the effectiveness in applying water charging regimes by different regulators, and the form and content of charge determinations by all regulators
- (c) opportunities for advancing the consistent application of the water charging objectives and principles, including options to rank objectives and define terms
- (d) lessons learned from other sectors in relation to appeal mechanisms
- (e) opportunities to combine the water charge rules and Water Market Rules in one instrument
- (f) consistency with the Australian Government's deregulation objectives
- (g) the effectiveness of the Water Charge (Planning and Management Information) Rules, the extent to which their effectiveness could be enhanced and the likely impacts if they were to be repealed.

The review should take into account the views the Panel has expressed in this report, submissions made to this Review and any further submissions.

RECOMMENDATION 12

The Panel recommends that section 92(4) of the Act be amended to give regulators applying the Water Charge (Infrastructure) Rules the discretion to determine or vary regulatory periods, so long as the regulatory periods are longer than those already provided for in the rules.

RECOMMENDATION 13

The Panel recommends that minor technical amendments be made to the definitions in the Act for 'bulk water charge', 'infrastructure operators' and 'irrigation infrastructure operators' to remove ambiguity for stakeholders.

CHAPTER 5: MURRAY–DARLING BASIN WATER RIGHTS INFORMATION SERVICE

RECOMMENDATION 14

The Panel recommends that Part 5 of the Act, 'Murray–Darling Basin Water Rights Information Service', be repealed.

CHAPTER 6: COMMONWEALTH ENVIRONMENTAL WATER HOLDER

RECOMMENDATION 15

The Panel recommends that section 106(2) of the Act be amended to allow trade revenue to be used for other environmental activities in addition to water acquisitions to maximise environmental outcomes from the use of Commonwealth environmental water, with the following safeguards:

- (a) only revenue generated from the trade of Commonwealth environmental water allocations (not Commonwealth environmental water entitlements) may be used for environmental activities other than acquisitions
- (b) any disposal of water and use of proceeds for non-water acquisition purposes must reasonably be expected to improve environmental outcomes from the use of Commonwealth environmental water
- (c) trading activity should not impact on the achievement of sustainable diversion limits in the long-term
- (d) trade revenue cannot be used to fund operational expenses of the Commonwealth Environmental Water Holder such as holding and delivery fees and charges.

RECOMMENDATION 16

The Panel recommends that section 106(1) of the Act be amended to remove the restriction on disposal of allocations that could be reasonably expected to result in forgoing future allocations, such as in continuous accounting systems.

RECOMMENDATION 17

The Panel recommends that section 114 of the Act be amended to require the Commonwealth Environmental Water Holder to report annually on trading decisions.

CHAPTER 7: WATER INFORMATION

RECOMMENDATION 18

The Panel recommends that an interagency working group led by the Bureau of Meteorology be established to report to the Australian Government on:

- (a) current water information reporting requirements under the Act and associated regulatory burdens for data providers, including an estimate of current costs
- (b) the benefits of the suite of information products with reference to associated costs borne by data providers
- (c) options to reduce the regulatory burden imposed on data providers in the order of 20 per cent or more compared to current regulatory burdens.

The working group should undertake the review in consultation with data providers and report to the Australian Government in the first half of 2015.

CHAPTER 8: ENFORCEMENT

RECOMMENDATION 19

The Panel recommends that regulations be made to prescribe types of enforceable undertakings, in consultation with stakeholders.

CHAPTER 9: MURRAY–DARLING BASIN AUTHORITY

RECOMMENDATION 20

The Panel recommends that:

- (a) section 178(3) of the Act be amended to include expertise in Indigenous matters relevant to Basin water resources as a field relevant to the Authority's functions
- (b) section 172(1) of the Act, 'Authority's functions' be amended to add 'engage the Indigenous community on the use and management of Basin water resources' as a distinct function of the Authority
- (c) section 202(5) of the Act be amended to provide that the Basin Community Committee's membership must include at least two individuals with expertise in Indigenous matters relevant to Basin water resources.

RECOMMENDATION 21

The Panel recommends that section 212 be amended so that the Murray–Darling Basin Authority's powers to charge fees for services are restricted to regulated water charges as defined by Part 4 of the Act and that these charges are regulated by rules equivalent to those that apply to an infrastructure operator that is a Part 6 operator as defined by the Water Charge (Infrastructure) Rules.

RECOMMENDATION 22

The Panel recommends that the Act be amended to de-link the requirement for the Murray–Darling Basin Authority to produce an annual effectiveness report on the Basin Plan from the Murray–Darling Basin Authority's annual report requirements, with the effectiveness report to be submitted to the Minister by 31 December annually for tabling in Parliament.

CHAPTER 11: MISCELLANEOUS

RECOMMENDATION 23

The Panel recommends that section 253 of the Act be amended:

- (a) to provide for a review of the Act in 2024 without mandatory terms of reference for that review being specified in the Act
- (b) to repeal the mandatory terms of reference specified in that section.

Conclusions

Chapter 1: Objects and operating framework of the Act

1.1: ECONOMIC, SOCIAL AND ENVIRONMENTAL CONSIDERATIONS

The Act's framework does provide for the achievement of economic, social and environmental outcomes. However, decision-makers—governments, their agencies and water managers—need to more transparently demonstrate how economic, social and environmental considerations are taken into account in decision-making under the Act and the Basin Plan.

1.2: INDIGENOUS WATER RESOURCE PLAN REQUIREMENTS

The effective implementation of the Basin Plan water resource plan requirements relating to Indigenous values and uses is essential to ensuring that these requirements translate into a positive step forward in integrating Indigenous peoples' objectives into Basin water planning frameworks.

Chapter 2: Management of Basin water resources

2.1: COORDINATION OF MONITORING AND EVALUATION ACTIVITIES

Monitoring and evaluation of Basin Plan outcomes must be coordinated to ensure that performance against the Basin Plan's objectives and outcomes—economic, social and environmental—is rigorously assessed, demonstrates Basin-wide outcomes and builds confidence in, and support for, the reforms.

2.2: FIT-FOR-PURPOSE WATER ACCESS FOR THE MINING AND PETROLEUM SECTORS

Basin States should develop fit-for-purpose water allocation arrangements that ensure the mining and petroleum industries are able to operate within the same entitlement and water market frameworks as all other consumptive users.

2.3: SUSTAINABLE DIVERSION LIMIT ADJUSTMENT MECHANISM

The Act and the Basin Plan contain safeguards that appear appropriate and adequate to ensure that the Act's objects will be achieved in the sustainable diversion limit adjustment mechanism process.

The Murray–Darling Basin Authority and Basin States should engage openly with stakeholders, clearly communicating how the sustainable diversion limit adjustment mechanism will operate, explaining roles and responsibilities and rigorously testing its methods and processes so that stakeholders have confidence in its future operation in a manner consistent with the Act's objects.

2.4: ENVIRONMENTAL WATERING: COORDINATION

The Australian Government, Basin States and water holders should work together to communicate to stakeholders and the community on:

- (a) the roles and responsibilities of all parties involved in environmental watering
- (b) the arrangements in place to coordinate environmental watering to maximise the achievement of the Basin Plan's environmental objectives.

2.5: ACHIEVING COMPLEMENTARY OUTCOMES THROUGH ENVIRONMENTAL WATERING DECISIONS

All Basin water holders and managers should fully engage with the Basin's industries and communities to understand and identify social, economic and cultural priorities that may be achieved together with the environmental objectives of environmental watering events.

2.6: ENFORCEMENT OF BASIN PLAN WATER TRADING RULES

All Basin States and the Murray–Darling Basin Authority should identify and resolve any areas of non-compliance with the Basin Plan water trading rules as soon as possible, noting that a commonsense approach to resolving issues should be taken.

2.7: NEW INFORMATION AND ADJUSTMENTS TO SUSTAINABLE DIVERSION LIMITS

Industry, Basin States and the Murray–Darling Basin Authority should work together to ensure that new information concerning Basin water resources, whether produced by industry or by government, is comprehensively considered so as to inform possible sustainable diversion limit amendments.

2.8: WATER RESOURCE PLAN ACCREDITATION

The Murray–Darling Basin Authority and Basin States should work together in partnership, each respecting the others' roles, responsibilities and expertise, to facilitate the successful accreditation of all Basin State water resource plans by 1 July 2019.

2.9: BASIN STATE WATER RESOURCE PLANS AND BASIN PLAN WATER TRADING RULES

The Murray–Darling Basin Authority and the Australian Competition and Consumer Commission should work together on those aspects of Basin State water resource plans that relate to trade, to ensure that accredited provisions are consistent with the Basin Plan water trading rules.

2.10: HARMONISATION OF STATE WATER PLANNING AND MANAGEMENT TERMINOLOGY

All Basin State governments should proactively take opportunities to work towards greater uniformity of terminology used under their water planning frameworks.

2.11: RISK ASSIGNMENT FRAMEWORK

Basin States that have not adopted the National Water Initiative risk assignment framework in their own legislation should provide clear and transparent information on the alternative arrangements that have been put in place to build entitlement holders' confidence that entitlements will not be eroded without appropriate compensation in relevant circumstances.

2.12: EFFICIENCY MEASURES

The Australian Government should engage and communicate with stakeholders at an early stage on the program design for efficiency measures, demonstrating clearly how the additional water is to be recovered while maintaining the benchmark social and economic outcomes of the Basin Plan.

The Murray–Darling Basin Authority should also monitor the impact of efficiency measures as part of its broader Basin Plan Monitoring and Evaluation Program so that the impacts can be appropriately scrutinised and made transparent.

Chapter 3: Audits by the National Water Commission

3.1: BASIN PLAN AUDITS

The continuation of five-yearly audits of Basin Plan implementation by an independent expert body is essential to the successful delivery of the Basin Plan.

Chapter 4: Basin water charge and market rules

4.1: BASIN PLAN WATER TRADING RULES

The Basin Plan water trading rules, which commenced on 1 July 2014, should be implemented in their current form and should then be assessed over the medium to longer term when assessment of outcomes is possible, before any changes are made to the rules.

4.2: BASIN PLAN WATER TRADING RULES: INTERACTION WITH SCHEDULE D OF THE MURRAY–DARLING BASIN AGREEMENT

The Murray–Darling Basin Authority and Basin States should progress work on addressing any inconsistencies between Schedule D of the Murray–Darling Basin Agreement and the Basin Plan water trading rules, such as differences in how exchange rates are used within and between regulated systems, as a matter of priority.

4.3: INTEROPERABILITY AND EFFICIENCY OF BASIN STATE WATER REGISTERS

Basin State governments should take opportunities to enhance the interoperability of registers, building on the work that has been undertaken through the National Water Markets System program to create more efficient services for users.

4.4: TRANSACTION FEES AND TIMEFRAMES

Fees imposed by Basin States for trade processing should be efficient, and variations of fees between the Basin States should be reduced. Basin States should continue to improve their performance against the service standards agreed by COAG for trade processing and approval times.

4.5: COMMONWEALTH ENVIRONMENTAL WATER HOLDER: TRADING TRANSPARENCY

The Commonwealth Environmental Water Holder should continue to provide timely and transparent information to the market, including by raising stakeholder awareness of its Trading Framework and quarterly portfolio management statements.

4.6: ELECTRONIC ACCESS TO WATER CHARGE INFORMATION

Electronic transmission of, or online access to, information is desirable. Regulators should recognise the efficiency and desirability of electronic communication when developing and applying regulation.

Chapter 6: Commonwealth Environmental Water Holder

6.1: COMMONWEALTH ENVIRONMENTAL WATER HOLDER: INDIGENOUS ENGAGEMENT

The Commonwealth Environmental Water Holder should develop a more structured, transparent approach to Indigenous engagement to complement current engagement arrangements.

6.2: COMMONWEALTH ENVIRONMENTAL WATER HOLDER: OPERATING COSTS

The Commonwealth Environmental Water Holder's operating costs should continue to be met from Commonwealth consolidated revenue to ensure that the Commonwealth Environmental Water Holder is appropriately and transparently funded to deliver Basin Plan outcomes.

6.3: ENVIRONMENTAL WATERING: THE LIVING MURRAY

Environmental watering should be coordinated, including through integration of The Living Murray portfolio within Basin Plan frameworks where possible. Consideration should be given to transferring The Living Murray entitlements held by the Murray–Darling Basin Authority to the Commonwealth Environmental Water Holder.

Chapter 7: Water information

7.1: WATER INFORMATION: PRODUCTS AND SERVICES

The Bureau of Meteorology should engage with stakeholders on a continuing basis with a view to developing products where the benefits outweigh the costs, and should adapt and refine its existing product suite in light of user feedback. It should also clearly communicate the benefits of its products and demonstrate their usefulness.

7.2: WATER INFORMATION: REPORTING REQUIREMENTS

Australian Government agencies should ensure that data collected under the Act is collected in the right form at the right time for the right purpose and used to create information that is of value, while minimising regulatory burdens and any duplication of requests imposed on data providers.

Chapter 8: Enforcement

8.1: ENFORCEMENT

A sensible and cooperative approach to monitoring and compliance activities should be applied by regulators under the Act.

Chapter 9: Murray–Darling Basin Authority

9.1: MURRAY–DARLING BASIN AUTHORITY: TRANSPARENCY OF BASIN PLAN AND RIVER MURRAY OPERATIONS FUNCTIONS

The Murray–Darling Basin Authority should consider how it can more clearly differentiate between its Basin Plan, River Murray Operations and other joint activity functions and associated costs in its financial reporting.

9.2: MURRAY–DARLING BASIN AUTHORITY: CORPORATE PLAN

The Murray–Darling Basin Authority and joint governments should make the whole of the Authority's corporate plan publicly available.

9.3: MURRAY–DARLING BASIN AUTHORITY: RIVER MURRAY OPERATIONS BUDGET AND COSTS

Information on the River Murray Operations budget and costs (compatible with information provided on assets and operations through water charge determinations made under Part 4 of the Act) should be made publicly available by the Murray–Darling Basin Ministerial Council.

Background to the Water Act and Basin Plan

The *Water Act 2007* (Cth) (the Act) implements key aspects of the Howard Government's reform package *A National Plan for Water Security*, announced on 25 January 2007. The Act fundamentally changed the way in which the Murray–Darling Basin (Basin) water resources are managed, by moving to a Basin-wide management framework based on accredited Basin State water resource plans. The Basin States are New South Wales, Victoria, Queensland, South Australia and the Australian Capital Territory. The new framework involves the development of long-term average sustainable levels of extraction, which the Act calls sustainable diversion limits, to be recommended in a Basin Plan prepared by the independent Murray–Darling Basin Authority (MDBA) for adoption by the Commonwealth Minister with responsibility for water. The new governance arrangements aim to deliver Basin-wide social, economic and environmental outcomes.

The enactment of the Act and the making of the Basin Plan in 2012 represented a historic step in water management reform. This followed decades of intergovernmental action and partnership with industries and communities to address the declining environmental health of Basin water resources in the face of increasing water use and the impacts of extensive drought and climate change. Notable earlier reforms are the *1994 COAG Water Reform Framework* and the *2004 Intergovernmental Agreement on a National Water Initiative*. The National Water Initiative remains a national blueprint for water reform. Importantly, the Act codifies many of the National Water Initiative's principles, particularly in relation to efficient water markets and pricing, assignment of risks arising from reductions in water access, and integration of Indigenous values and uses in water planning frameworks.

The Act established:

- an independent MDBA with the functions and powers necessary to ensure that Basin water resources are managed on a sustainable basis, including through preparing a strategic plan for the integrated and sustainable management of water resources in the Basin (the Basin Plan)
- the Commonwealth Environmental Water Holder to manage Commonwealth environmental water holdings to protect and restore the environmental assets of the Basin and of areas outside the Basin where the Australian Government holds water
- a role for the Australian Competition and Consumer Commission in developing and enforcing the water charge and market rules
- new water information functions for the Bureau of Meteorology, in addition to its existing functions under the *Meteorology Act 1955* (Cth)
- a requirement for five-yearly audits of the effectiveness of the implementation of the Basin Plan and associated water resource plans to be undertaken by the National Water Commission; it is proposed that in future these audits be undertaken by the Productivity Commission following the expected closure of the National Water Commission from the end of 2014.¹

The Basin Plan commenced on 24 November 2012 after several years of development and extensive consultation. The key elements of the Basin Plan include:

- management objectives and outcomes to be achieved
- the maximum long-term annual average quantities of water that can be taken on a sustainable basis—legally binding sustainable diversion limits

¹ Based on the *National Water Commission (Abolition) Bill 2014* (Cth).

- the sustainable diversion limit adjustment mechanism, which provides for the MDBA to propose sustainable diversion limit adjustments to the Minister in 2016 on the basis of a package of adjustment measures agreed by Basin State governments
- an Environmental Watering Plan to guide environmental watering in the Basin at both the Basin-wide and local scale and over the short and longer term
- a Water Quality and Salinity Management Plan
- the requirements with which Basin State water resource plans must comply to be accredited by the Commonwealth Minister as consistent with the Basin Plan
- provision for critical human water needs such as drinking water supplies, water for community services such as hospitals and schools, and water essential for social, economic or national security purposes
- rules for the trading or transfer of tradeable water rights in relation to Basin water resources
- a program for monitoring and evaluating the effectiveness of the Basin Plan.

The delivery of the Act is supported by Australian Government funding, most of which is directed to bridging the gap to the sustainable diversion limits established by the Basin Plan through investment in more efficient water and irrigation infrastructure and water purchase. Government funding is also provided for a range of other purposes, including the management of Commonwealth environmental water holdings, and to support the water information functions administered by the Bureau of Meteorology.

Under the new Basin Plan framework the Australian Government is responsible for Basin-wide planning and the Basin States remain responsible for planning, managing and allocating water resources within their own jurisdictions through water resource plans accredited as consistent with the Basin Plan.

All governments are now working together in accordance with the *2013 Intergovernmental Agreement on Implementing Water Reform in the Murray Darling Basin* to implement the Basin Plan over the period to 1 July 2019, when sustainable diversion limits take effect.

The Act and the Basin Plan recognise the national importance of the Basin in environmental, economic and social terms. The Basin Plan notes that the Basin spans over 1 million km² and supports more than 3.3 million people, with more than 2 million people living in the Basin and a further 1.3 million (including Adelaide residents) relying on its water resources for drinking supplies. The Basin is also home to many rural and regional towns, more than 40 Indigenous communities and the nation's capital.²

The Basin water resources are important for the Basin's agricultural economy as well as its mining, tourism and recreation sectors. Basin-wide agricultural production in 2011–12 is estimated at \$18.6 billion, or around 40 per cent of Australia's total agricultural production.³

The Basin is also of immense environmental importance. It supports biodiversity for a vast array of plants and animals and ecosystems, including many threatened species. Within the Basin there are approximately 30,000 wetlands, over 60 species of fish, 124 families of macro-invertebrates, 98 species of waterbirds, four threatened water-dependent ecological communities and hundreds of plant species supported by key floodplains.

Thus, the Act and the Basin Plan reflect a framework contributing materially to economic, social and environmental outcomes. This framework is operating in key respects in the national interest but is also still in transition.

² Australian Bureau of Statistics, 2006, Census of Population and Housing.

³ Australian Bureau of Statistics, 2013, Gross Value of Irrigated Agricultural Production 2011–2012: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4610.0.55.0082011-12?OpenDocument>

PART 2

Chapter 1: Objects and operating framework of the Act

The objects of the *Water Act 2007* (Cth) (the Act) and its constitutional basis are set out in Part 1 of the Act. Part 1A sets out the status of the Murray–Darling Basin Agreement and the functions and powers conferred on the Murray–Darling Basin Authority (MDBA) under the Agreement. The objects are provided in Box 1.1 below.

BOX 1.1: OBJECTS OF THE ACT

The objects of the Act are:

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

1.1 Economic, social and environmental considerations

Almost all the submissions received by the Panel commented on the Act’s objects. Many expressed concern that environmental considerations are prioritised over social and economic considerations, and suggested amendments to the objects and to various provisions in the Act to provide a ‘more balanced’ consideration of economic, social and environmental outcomes. Other submissions sought changes to better recognise Indigenous interests in the

Basin water resources. Many other submissions strongly supported the objects as they are and argued that no changes should be made.

The Panel notes that, during the development of the Act, the Commonwealth sought a full referral of constitutional power over water management but this was not granted by all Basin States. As a result, the Act as originally enacted relied on the Commonwealth's legislative powers under the Constitution. In 2008, the Basin States agreed to a limited referral of powers to the Commonwealth and the Act was amended. The objects and structure of the Act therefore reflect the Act's reliance on the external affairs power, among other Commonwealth powers including interstate trade and commerce, corporations and the power to collect information and statistics.

The overarching object of the Act is to give effect to relevant international agreements (to the extent to which those agreements are relevant to the use and management of Basin water resources). Relevant international agreements are defined by the Act (section 4(1)); they include the Ramsar Convention on Wetlands and the Convention on Biological Diversity.

Regulations can be made under the Act identifying other international agreements to which Australia is a party that are relevant to the use and management of Basin water resources as relevant international agreements. No regulations have been made to date.

The Panel notes that amendments to the objects are not in the scope of the current Review. The Panel has been tasked with reporting on the effectiveness of the Act in delivering its objects, as set out at section 3.

The Act's objects state that, in giving effect to relevant international agreements, the aim is to promote the use and management of Basin water resources in a way that optimises social, economic and environmental outcomes. The international agreements themselves recognise the importance of social and economic factors. The concept of sustainable development, which is central to the Convention on Biological Diversity and the Ramsar Convention on Wetlands, involves using resources so as to meet human needs and to preserve the environment for the present and the future.

This is also reflected in the Basin Plan itself, which specifies that a key objective is to optimise social, economic and environmental outcomes arising from the use of Basin water resources. The overarching outcome for the Basin Plan is a healthy working Basin, which includes:

- (a) communities with sufficient and reliable water supplies that are fit for a range of purposes, including domestic, recreational and cultural use
- (b) productive and resilient water-dependent industries, and communities with confidence in their long-term future
- (c) healthy and resilient ecosystems with rivers and creeks regularly connected to their floodplains and, ultimately, the ocean.

The Panel believes that these objectives are not mutually exclusive. A healthy working river is fundamental to ensuring the sustainability and productivity of irrigated agriculture and food and fibre production into the future, as well as to delivering a range of benefits for the community.

The Panel acknowledges that the implementation of the Basin Plan and sustainable diversion limits involves a significant adjustment for the Basin's industries and communities. It is clear to the Panel from the submissions it received that some stakeholders are not yet confident that these objectives can be truly balanced. The Panel believes that the Act's framework does provide for the achievement of these outcomes, subject to decision-makers—governments and their agencies and water holders—rigorously and transparently applying them as part of their decision-making under the Act and the Basin Plan.

In addition, the Panel notes the supporting Australian Government measures and programs which are not legislated under the Act but are nevertheless a key part of delivering the Act's reforms and assisting communities and industries to adjust. These include the Australian Government's water recovery program to recover all of the water required to meet the sustainable diversion limits in the Basin Plan. These measures are discussed in more detail in Chapter 2.

Now that the Basin Plan and sustainable diversion limits have been settled following extensive debate, the effective application of these objectives in implementation decisions by governments, their agencies and water holders is critical to ensuring that the objective of the Act and the Basin Plan to optimise economic, social and environmental considerations is met. Decision-makers must ensure they are relying on the best available scientific and social and economic information as well as leveraging community input and expertise on social, economic and environmental objectives to the maximum extent possible. This is necessary to maintain and build stakeholder confidence in the reforms. The Panel heard that stakeholders want decision-makers to more transparently demonstrate how these considerations are taken into account in decision-making, ranging from the operation of the sustainable diversion limit adjustment mechanism in 2016 to environmental watering actions and monitoring and evaluation of reform impacts.

1.1: ECONOMIC, SOCIAL AND ENVIRONMENTAL CONSIDERATIONS

The Act's framework does provide for the achievement of economic, social and environmental outcomes.

However, decision-makers—governments, their agencies and water managers—need to more transparently demonstrate how economic, social and environmental considerations are taken into account in decision-making under the Act and the Basin Plan.

1.2 Indigenous interests in Basin water resources

The Panel heard a strong desire from a number of Indigenous and environmental groups for greater recognition of Indigenous interests in the Act. These groups considered this to be unfinished business following the making of the Basin Plan in 2012. A number of specific proposals were put forward in relation to the objects of the Act and international instruments that are (and are not) included in the Act. Other proposals dealt with other parts of the Act and are addressed in other chapters of this report.

The Panel heard that Indigenous people possess a holistic understanding and connection to the Basin's river system, feel a deep responsibility for the health of the Basin's rivers and have a strong desire for associated statutory access rights to enjoy and use Basin water resources.

The Act contains a number of provisions relating to Indigenous water use. The Panel notes that the Basin Plan was required to be developed having regard to Indigenous outcomes under section 21(4)(c)(v) of the Act. The Basin Plan acknowledges that Indigenous people from across the Basin use Basin water resources for various purposes including cultural, social, environmental, spiritual and economic purposes. The Basin Plan also sets out (in Chapter 10) water resource plan requirements related to Indigenous values and uses that Basin States must meet in the development of their water resource plans. The Panel believes that, if these requirements are implemented effectively, this is likely to be a positive step in delivering on Indigenous outcomes relevant to water planning and management.

The requirements in the Basin Plan build on the commitments made by all Australian governments under the National Water Initiative that water planning frameworks will address Indigenous access to, and management of, water. In its recent report *A review of Indigenous involvement in water planning* the National Water Commission (NWC) found that, while some jurisdictions had made significant improvements in the recognition of Indigenous

water requirements in water planning, little progress has been observed in the allocation of water for Indigenous purposes.⁴ In 2010 it was estimated that Indigenous bodies held an estimated 81 water licences in the Basin, with a total allocation of 8,237 ML.⁵

The Panel acknowledges New South Wales' approach to engaging Indigenous people in the water planning and management process and making provision for Indigenous water licences. Under the *Water Management Act 2000* (NSW) Indigenous representation on water management committees is mandatory and Indigenous cultural access licences and community development licences are available. The NWC reports that the New South Wales Aboriginal Water Initiative, in place since 2012, has been funded through the Australian Government's Closing the Gap initiative with the objective of ensuring ongoing and effective state-wide and regional engagement with Indigenous communities in water planning, and that measureable Indigenous water outcomes for both environmental and commercial purposes are achieved and reported on.⁶ The Panel considers this a good example of implementation by a Basin State consistent with their ongoing water planning responsibilities.

The Panel notes the NWC's advice in its recent assessment of progress under the National Water Initiative that, while there has been some progress to date in incorporating Indigenous knowledge and expertise in water planning and management, implementation in this area could still be improved.⁷ It is therefore not surprising that many stakeholders seek a solution, legislative or otherwise.

The Panel has given full consideration to all proposals put forward and has given its support to amendments consistent with the scope of this Review and the scope and purpose of the Act that may facilitate more effective incorporation of Indigenous interests and expertise in the Act's planning and management framework.

In each case, the Panel has deliberated on whether the Act is the appropriate vehicle to deliver a proposal. In some cases, the Panel has concluded that proposals (such as the proposal for an Indigenous Water Fund) would require a broader, national platform and whole-of-government approach to successfully deliver on intended objectives.

Similarly, while some groups have called on the Panel to recommend an amendment to the Act that recognises Indigenous interests in water, the Panel notes that the Act provides a Basin-wide framework under which Basin States retain responsibility for allocating water between the various uses—including Indigenous purposes, urban water needs and irrigated agriculture—as part of their water resource plans, which must be consistent with the Basin Plan from 1 July 2019. Furthermore, this framework is relevant only to Basin water resources and not to Australia's water resources as a whole. The Panel considers that a national approach, through the National Water Initiative, is required to deliver on the aspirations of all Indigenous peoples relevant to water. The Panel encourages all states and territories to accelerate progress against existing National Water Initiative commitments. At the same time, the Panel recognises that incorporating Indigenous interests presents some challenges in fully allocated or overallocated systems and where changes must be delivered through water resource plans, which generally operate under state legislation for at least 10 years.

There were also several submissions requesting that the definition of 'relevant international agreements' in section 4 of the Act be amended to include the *United Nations Declaration on the Rights of Indigenous Peoples* (the Declaration).⁸

As the Declaration is not an international agreement, its listing would require an amendment to the definition of a relevant international agreement, and could require significant revisions to the Act and the Basin Plan to ensure that the Declaration is given effect.

4 National Water Commission, 2014, *A Review of Indigenous involvement in water planning*.

5 Arthur, WS., 2010, *The Murray–Darling Basin Regional and Basin Plans: Indigenous water and land data*, report to the Murray–Darling Basin Authority.

6 National Water Commission, 2013, *A review of Indigenous involvement in water planning*.

7 National Water Commission, 2013, *A review of Indigenous involvement in water planning*, p. 1.

8 The Declaration was adopted by the United Nations General Assembly in 2007 and supported by Australia in 2009. Australia's statement of support made it clear that Australia's laws concerning land rights and native title are not altered by its support of the Declaration: http://www.un.org/esa/socdev/unpfii/documents/Australia_official_statement_endorsement_UNDRIP.pdf

The Declaration sets out important principles in relation to the fundamental human rights of Indigenous peoples for nations to aspire to. The document emphasises the rights of Indigenous peoples to maintain and strengthen their own institutions, cultures and traditions and to pursue their development in keeping with their own needs and aspirations.⁹ In contrast, all of the current international agreements prescribed under the Act have treaty status under international law. For these reasons, the Panel does not support the listing of the Declaration under the Act.

The Panel acknowledges that Indigenous organisations are seeking a more extensive and timely response to their proposals for increased access to water for Indigenous cultural and economic purposes and greater involvement and recognition of Indigenous expertise in water management. The Panel heard about the cultural flows work that will assist with building the evidence base necessary to build the case for further change in this regard. See Box 1.2 for details on cultural flows and the research program underway.

Cultural flows and other matters relevant to Indigenous engagement, Indigenous-related water resource plan requirements, environmental watering and greater integration of Indigenous expertise in institutions governing and advising on Basin water resources are discussed in Chapters 2 and 9.

BOX 1.2: CULTURAL FLOWS

The Basin Plan notes that the concept of cultural flows helps to translate the complex connection Indigenous peoples have with water into the language of water planning and management.¹⁰

To better understand cultural flow requirements, including the potential overlaps with environmental flows, a number of Australian Government agencies (including the Murray–Darling Basin Authority and the Commonwealth Environmental Water Office) are working to support the National Cultural Flows Research Project.

The project draws on scientific research methodologies and generations of cultural knowledge to:

- improve understanding of Indigenous values relating to water
- provide information to Indigenous peoples to enable their preferences to be better reflected in water planning and management policy
- inform the development of new governance approaches to water management that incorporate aspects of Indigenous governance and capacity building.¹¹

The project is managed by the National Native Title Council in collaboration with the Northern Basin Aboriginal Nations, the Murray Lower Darling Rivers Indigenous Nations and the North Australian Indigenous Land and Sea Management Alliance.

The project is due for completion in 2017.

1.2: INDIGENOUS WATER RESOURCE PLAN REQUIREMENTS

The effective implementation of the Basin Plan water resource plan requirements relating to Indigenous values and uses is essential to ensuring that these requirements translate into a positive step forward in integrating Indigenous peoples' objectives into Basin water planning frameworks.

9 Frequently Asked Questions on the Declaration on the Rights of Indigenous Peoples, UNPFII: <http://www.un.org/esa/socdev/unpfii/documents/FAQsindigenousdeclaration.pdf>

10 Basin Plan, Schedule 1—Basin water resources and the context for their use.

11 National Cultural Flows Research Project: <http://culturalflows.com.au>

Chapter 2: Management of Basin water resources

A key objective of the *Water Act 2007* (Cth) (the Act) is the establishment of a coherent and sustainable framework for the management of Basin water resources. This is reflected in almost all of the objects of the Act, with the exception of the object relating to water information, which has national application.

In addition to considering the effectiveness of the Act in achieving its objects and opportunities to reduce red tape, the Panel has been tasked with specific terms of reference, which will be addressed in this chapter. This includes the mandatory terms of reference specified at section 253 of the Act focusing on implementation of the Basin Plan. In particular, the Panel must conduct an assessment of the extent to which:

- (a) the management objectives and outcomes of the Basin Plan are being met
- (b) long-term average sustainable diversion limits (sustainable diversion limits) are being met
- (c) targets in the Basin Plan are being met
- (d) other key elements of the Basin Plan are being implemented.

The Panel must conduct this assessment having regard to the extent to which water resource plans are in transition.

The Panel must also report on appropriate future review points for the Basin Plan, noting that it will be implemented in full in 2019.

The first part of this chapter addresses the mandatory terms of reference in relation to the implementation of the Basin Plan. The second part addresses the remaining aspects of the terms of reference, with reference to Parts 2, 2A and 2AA of the Act and relevant issues raised in submissions.

2.1 Extent to which the Basin Plan has been implemented

Basin Plan management outcomes and objectives

Chapter 5 of the Basin Plan sets out the management objectives and outcomes to be achieved by the Basin Plan. These are specified for (1) the Basin Plan as a whole; (2) environmental outcomes; (3) water quality and salinity; (4) long-term average sustainable diversion limits; and (5) water trade.

The Panel is aware that when the Act was made it was expected that the Basin Plan would be in place by 2009 and a 2014 review date would be appropriate. Because the Basin Plan did not commence until late 2012 and the sustainable diversion limits do not come into effect until 1 July 2019, there was a widespread view that the Review was somewhat premature and that it would not be possible to comprehensively assess Basin Plan outcomes. The Panel agrees that it is not possible to comprehensively assess reform outcomes during the early implementation phase but also recognises the significant opportunity that the Review presents. In particular, now that the Basin Plan has been made, following an exhausting and extensive community debate, the Review presents an opportunity for governments, industry and communities to reflect on this historic, albeit very difficult, achievement and turn their focus to how the reform can be best implemented to achieve the intended outcomes.

Having assessed progress to date, the Panel notes that the majority of Basin Plan implementation priorities to early 2015 identified by the National Water Commission (NWC) in its initial audit report¹² under Part 3 of the Act are either complete or well underway.

Key developments since the audit report include:

- (a) The *2013 Intergovernmental Agreement on Implementing Water Reform in the Murray Darling Basin* has been signed by the Australian and Basin State governments
- (b) The *2013 Basin Plan Implementation Agreement* was agreed between the Murray–Darling Basin Authority (MDBA), all Basin States and the Commonwealth Environmental Water Holder in August 2013
- (c) The Australian Government has continued its progress to recover all of the water needed to bridge the gap to the sustainable diversion limits, having recovered 1,908 GL (long-term equivalent) of the 2,750 GL reduction in surface water as at 30 September 2014
- (d) All Basin States are working on a package of adjustment measures that will underpin the operation of the sustainable diversion limit adjustment mechanism in 2016
- (e) The MDBA has finalised and released the *Constraints Management Strategy*¹³ and the Basin Plan Evaluation Framework
- (f) Environmental watering settings continue to develop, and the Basin-wide environmental watering strategy is due for release in November 2014
- (g) Early obligations of the *Water Quality and Salinity Management Plan* have been implemented, including annual assessment and reporting against the salt export objectives and the targets for flow management
- (h) The first trading of Commonwealth environmental water has occurred after the development of the Commonwealth environmental water Trading Framework
- (i) The Basin Plan water trading rules commenced on 1 July 2014.

The Panel acknowledges the work done and the results achieved to date made possible by the cooperation of governments and input from stakeholders and the community. While much has been achieved, the Basin Plan is a framework still in transition and there is still much to do to ensure that it is implemented in full and on time by 1 July 2019.

Long-term average sustainable diversion limits

The Basin Plan includes legally binding sustainable diversion limits that aim to ensure that sufficient water is available to maintain the health of Basin water resources, having regard to social and economic impacts. The MDBA has estimated that the long-term average sustainable diversion limit for surface water is 10,873 GL per year, which represents a reduction of 2,750 GL per year from the 2009 baseline diversion level.

The reduction of surface water diversions by 2,750 GL has two components: a local reduction component of 1,636 GL and a shared reduction component of 1,114 GL, also known as the shared recovery target. The local reduction component is the amount of water required to be recovered from within a particular sustainable diversion limit resource area. The shared reduction target is the amount required, in addition to the local recovery component, to satisfy the environmental needs of the Murray and Darling rivers. Any water recovered above the local reduction component contributes to the shared reduction target. Progress has been made in the five shared target zones outlined in the Basin Plan.¹⁴ In 2016 each Basin State may request a reallocation of its shared

12 National Water Commission 2013, *Murray–Darling Basin Plan implementation: initial report*.

13 Murray–Darling Basin Authority, 2014, *Constraints Management Strategy 2013 to 2024*

14 Murray–Darling Basin Authority, Environmental Water Recovery Progress: <http://www.mdba.gov.au/what-we-do/water-planning/sdl/water-recovery-progress>

reduction amount. The MDBA must then propose to the Minister that the Basin Plan be amended in accordance with the reallocation adjustments requested by the Basin States.

The sustainable diversion limits take effect on 1 July 2019 and will be implemented through accredited Basin State water resource plans. In parallel to the development of water resource plans by Basin States, the Australian Government is recovering the water needed to bridge the gap to the long-term average sustainable diversion limits in the Basin Plan, consistent with its *Water Recovery Strategy for the Murray–Darling Basin* (Water Recovery Strategy) released in June 2014. All water recovered by the Australian Government becomes part of the Commonwealth environmental water holdings.

The Australian Government is prioritising water recovery through infrastructure investment over water buybacks, which are capped at 1,500 GL for surface water.

As at 30 September 2014 the Australian Government's water recovery programs had recovered 1,908 GL (long-term equivalent) of the 2,750 GL reduction in surface water for the environment.

As explained in the Water Recovery Strategy, the remaining recovery required to bridge the gap is expected to be approximately 200 GL, provided that the full potential of supply measures through the sustainable diversion limit adjustment mechanism is realised (see Box 2.1 below). The remainder would be acquired from a mix of infrastructure and targeted purchase initiatives.

A number of submissions raised the commitment made by the Australian Government in the 2014–15 budget to limit water purchases to 1,500 GL and suggested that this limit should be legislated in the Act. Other submissions indicated a concern that the 1,500 GL cap could impede the Australian Government's ability to bridge the gap. The Panel notes that it is a decision for the Australian Government as to whether this commitment should be legislated.

The Panel notes that the northern Basin review is currently underway. The review involves environmental science projects, hydrological modelling and social and economic analyses that will be used to inform potential amendments to northern Basin sustainable diversion limits. The research and investigations phase of the review is expected to be completed by late 2015. The MDBA will then consider whether a change to sustainable diversion limits is warranted by mid-2016.

Sustainable diversion limit adjustment mechanism

The Panel notes that the remaining water recovery effort will be largely dependent on the outcomes of the sustainable diversion limit adjustment mechanism.

The sustainable diversion limit adjustment mechanism is set out in detail in Chapter 7 of the Basin Plan. It enables the Basin-wide surface water sustainable diversion limit to be changed up or down by no more than five per cent, as long as environmental, social and economic outcomes are not compromised. This includes safeguards to ensure no change to the reliability of supply for consumptive users and limit changes to environmental outcomes.

The *2013 Intergovernmental Agreement on Implementing Water Reform in the Murray Darling Basin* agreed between the Australian Government and all Basin States contains a protocol that sets out how governments intend to cooperate to agree to a package of adjustment measures including constraint, supply and efficiency measures (see Box 2.1). In 2016, the MDBA will determine the extent to which it considers a sustainable diversion limit adjustment can be made based on the package of adjustment measures and propose an amendment to the Minister.

BOX 2.1: SUPPLY, EFFICIENCY AND CONSTRAINTS MEASURES¹⁵

The Water Recovery Strategy for the Murray–Darling Basin released in June 2014 by the Australian Government explains sustainable diversion limit adjustment measures as follows.

Supply measures are actions such as environmental works or changes to river operation rules that enable the use of less water while achieving environmental outcomes equivalent to the modelled outcomes for the 2,750 GL recovery target under the Basin Plan. Supply measures offset the need for water to be acquired through recovery programs and held for environmental use.

All Basin States have agreed to arrangements that allow for up to 650 GL of sustainable diversion limit adjustments to be achieved through supply measure projects. The Australian Government has provided \$34.5 million for Basin States to develop business cases for prospective supply measure projects. Measures will be funded by the Australian Government up to the market value of the environmental water that would have otherwise been recovered from held entitlements.

Efficiency measures are projects that recover more water for the environment with neutral or beneficial social and economic impacts, such as through improved on-farm water use efficiency projects. Efficiency measures would be used to recover any water required to meet environmental outcomes above those achievable with a 2750 GL reduction in the sustainable diversion limit. These projects must meet the criteria in the Basin Plan for evidence of neutral or improved social and economic outcomes. Efficiency measures can include replacing or upgrading less efficient methods of on-farm irrigation and lining channels to reduce water losses.

The Australian Government has provided over \$1.5 billion to deliver 450 GL through efficiency measure projects through the Water for the Environment Special Account (Special Account). These measures are expected to commence in 2015–16.

Constraints are rules and structures that govern the volume and timing of regulated water delivery through the system, including the delivery of environmental water in a way that protects against third-party impacts such as flooding of private land. If constraints are addressed, river operators will have more flexibility in certain years to use environmental water in a way that better connects the river to its floodplains. Such operations would result in improved floodplain benefits and would lead to healthier working rivers overall. Examples of constraint measures are raising of bridges to allow higher regulated flows in watercourses and floodplains, and acquisition of easements to allow inundation of private land in conjunction with making regulated releases of environmental water.

The Australian Government has provided \$200 million through the Special Account to help remove or ease agreed physical or other constraints, including up to \$5 million for Basin States to develop business cases for constraint measure proposals.

The Panel understands that governments are making progress in readiness for the operation of the sustainable diversion limit adjustment mechanism in 2016, as follows.

- (a) Basin States are working together to develop and assess business cases for supply and constraint measures by late 2015 with support from the MDBA and the Commonwealth Environmental Water Office.
- (b) The MDBA commissioned CSIRO to develop an ‘ecological elements method’ that is used in the environmental equivalence test. Basin State governments were consulted during the development of the method, which has been independently reviewed and is being rigorously tested during a trial implementation phase.

¹⁵ *Water Recovery Strategy for the Murray–Darling Basin*, Commonwealth of Australia 2014: <http://www.environment.gov.au/water/publications/water-recovery-strategy-murray-darling-basin>

- (c) The Sustainable Diversion Limit Adjustment Assessment Committee, comprising representatives of the Australian Government and the Basin States has developed guidelines and assessment procedures for both the feasibility and business case phase, and has started to assess adjustment measure proposals. Information about proposals is available on the MDBA website.
- (d) The MDBA is conducting a Basin-scale analysis of priority constraints in 2014 following the release of the Constraints Management Strategy in 2013. This includes consultation with landholders, industry groups and Basin State government officials, further modelling, inundation mapping, a preliminary assessment of the impacts of changes to constraints within the river system, and a report to the Murray–Darling Basin Ministerial Council on priorities for further work.

2.2 Basin Plan targets and monitoring and evaluation

Basin Plan Monitoring and Evaluation Program

Section 214 of the Act requires the MDBA to report annually on the effectiveness of the Basin Plan. In addition, Chapter 13 of the Basin Plan outlines the program for monitoring and evaluating the effectiveness of the Basin Plan. It includes principles to be applied and the reporting and publishing requirements to be met in undertaking the program as well as key evaluation questions and details of the reviews, evaluations and audits required to be performed.

The MDBA coordinates reporting on, and evaluates the effectiveness of, the Basin Plan, using the framework of the Basin Plan Monitoring and Evaluation Program. The program provides for:

- (a) compliance audits
- (b) reviews of the water quality and salinity targets and the Basin Plan Environmental Watering Plan
- (c) periodically assessing the condition of the Basin
- (d) the Basin Plan evaluation framework, with the full list of matters for evaluation and reporting timeframes set out in Schedule 12 of the Basin Plan.

There are a range of evaluations required to be conducted over different timescales, from annual to five-yearly evaluations. The MDBA must prepare a report on the effectiveness of the Basin Plan annually—currently as part of its annual report (see also Recommendation 22).

In relation to environmental watering, the reporting responsibilities include the following five-yearly reports:

- (a) MDBA—achievement of environmental objectives of the Basin Plan at a Basin scale
- (b) Basin States—achievement of environmental objectives of the Basin Plan at an asset scale
- (c) Commonwealth Environmental Water Holder—contribution of Commonwealth environmental water to the environmental objectives of the Basin Plan.

The MDBA released its Basin Plan evaluation framework in 2014, detailing how the MDBA intends to evaluate the implementation of the Basin Plan and its performance against its environmental, social and economic objectives. The framework outlines the scope of the work, the questions that will be addressed, the evaluation methods, indicators that will be used to measure progress, the types of data that will be drawn upon and the roles of, and reporting by, the people involved.

As well as Basin environmental health, the MDBA is required under the Basin Plan to monitor and evaluate the effects of the Basin Plan on industries and communities. Changes in industries and communities across the Basin are occurring for a range of reasons. The Panel acknowledges that understanding those changes that are the result from the Basin Plan and those that are a result of other factors (such as commodity prices, climate, and population changes) is a challenging but very important task. A number of submissions highlighted the impact on Basin industries and communities and the need to track and monitor these impacts (see also the section on targets below and Recommendation 2). The Panel notes that the MDBA must report on the extent to which the Basin Plan has affected social and economic outcomes in the Basin every five years, and is recommending that this requirement be reflected in the Act itself (Recommendation 2). Further information on the indicators that the MDBA will use to assess impacts is provided under the section on Basin Plan targets in this chapter.

Many stakeholders noted that the monitoring and evaluation activities of the MDBA, Commonwealth Environmental Water Holder and Basin States were not as coordinated and integrated as possible, resulting in duplication and/or fragmentation. This therefore leads to a real risk that those activities would not fit together to provide a clear and coherent Basin-wide picture on outcomes. Some stakeholders are also unclear about the roles and responsibilities of each of the entities involved and therefore are not confident in the Basin Plan Monitoring and Evaluation Program and how this is to be conducted.

The Panel notes that the confusion may in part be explained by the fact that the Monitoring and Evaluation Program in Chapter 13 of the Basin Plan sets out high-level principles that apply to the MDBA, the Basin States, the Commonwealth Environmental Water Holder and the Australian Government Department of the Environment rather than stipulating specific monitoring obligations. It sets out reporting requirements under Schedule 12 of the Basin Plan, leaving it open to the MDBA, Commonwealth Environmental Water Holder and Basin States to determine the monitoring to be undertaken to meet these reporting requirements. The lack of specificity provides flexibility for agencies to work together to meet the objectives but does not provide clarity for stakeholders.

The Panel believes that stakeholder concerns will be addressed if governments and their agencies adhere to the principles to be applied in monitoring and evaluating the Basin Plan (Part 2 of Chapter 13)—in particular, the principles that information should be collected in an efficient way and fragmentation and duplication of monitoring processes should be eliminated. The Panel also notes some recent positive developments aimed at ensuring greater coordination of monitoring and evaluation activities:

- (a) the establishment of a Monitoring and Evaluation Working Group that includes the MDBA, Commonwealth Environmental Water Holder and Basin States
- (b) consideration by the Murray–Darling Basin Ministerial Council of better integrating jurisdictions' respective environmental monitoring and evaluation activities to avoid duplication and to meet regional, state, Basin and national reporting obligations.

The Panel believes that it is vitally important that monitoring and evaluation are coordinated to ensure that performance against the Basin Plan's objectives and outcomes can be rigorously assessed. Basin communities and industries, having been asked to go through this difficult change, need to see the benefits for the environment and the community realised and demonstrated. Without this, the Panel believes that confidence and support for the reforms will be undermined.

The Panel notes the current work being undertaken by the MDBA, the Commonwealth Environmental Water Holder and Basin States to explore opportunities for coordinated and integrated monitoring and evaluation activities through the Monitoring and Evaluation Working Group and encourages the ongoing pursuit of efficiencies and reductions in duplication.

Basin Plan targets

The targets in the Basin Plan are a tool for measuring progress against Basin Plan objectives. The targets, and performance against them, will inform future monitoring and evaluation of the Basin Plan. The Basin Plan contains a range of targets, including targets that relate to environmental watering and water quality and salinity.

The Basin Plan Environmental Watering Plan in Chapter 8 establishes targets to measure progress towards achieving the objectives for water-dependent ecosystems identified in the Environmental Watering Plan. These targets are set out in Schedule 7, with intermediate targets applying up to 30 June 2019 and longer term targets from 1 July 2019. The Basin-wide environmental watering strategy due for release in November 2014 is expected to elaborate on these targets by describing the expected outcomes for four ecological components of the river system: river flows and connectivity, native vegetation, waterbirds and native fish.

The Water Quality and Salinity Management Plan (in Chapter 9 of the Basin Plan) also sets out objectives and targets to ensure that water quality in the Basin remains fit for purpose—that is, water quality is suitable for irrigation and recreational uses, for maintaining aquatic ecosystems and for being treated for human consumption. Targets relate to flow management, long-term salinity planning and management and salt export.

Some submissions proposed that social and economic targets should be included in the Act and the Basin Plan, similar to those included for environmental objectives.

While there are no specific targets in the Basin Plan itself, the MDBA is measuring the impact on communities and industries under the Basin Plan Monitoring and Evaluation Program (discussed earlier). It is using indicators primarily based on the agriculture sector, and in particular irrigated agriculture, because that sector is more directly linked to the effects of Basin water reforms. These indicators include water used by irrigated agriculture; irrigated agricultural output by crop or commodity; patterns of water trading; measures of productivity; tourism activity and other indicators of social and economic benefits derived from environmental improvements.¹⁶

The MDBA notes that the indicators will be used in combination and will be complemented by a range of other information that will be collected to understand the key drivers of social and economic change in the Basin—for example population data, commodity prices, community views or local studies. A suite of analytical techniques will be used to pull this data together, supported by consultation.

The Panel encourages rigorous analysis of social and economic impacts drawing on these indicators.

Monitoring and evaluation to date

Based on the material submitted to the Panel, it is apparent that improvement of the underlying health of the Basin's water-dependent ecosystems at the Basin scale will take many years and it is too early to evaluate whether the implementation of the Basin Plan has made progress towards the Basin-wide environmental objectives.

¹⁶ Murray–Darling Basin Authority, research and investigations: social and economic: <http://www.mdba.gov.au/what-we-do/research-investigations/social-and-economic>

However, short-term monitoring¹⁷ of Commonwealth environmental water use to date has detected positive responses, including:

- (a) mitigating the impacts of blackwater in the River Murray, Edward Wakool system and Murrumbidgee River
- (b) supporting native bird and fish breeding through improved water quality and increased volume and duration of flows
- (c) improving water quality through the export of salt, sediments and nutrients out of the system
- (d) connecting rivers, wetlands and floodplains to improve habitat for breeding and migration of native animals
- (e) improving the health of native plants, including river red gums.

2.1: COORDINATION OF MONITORING AND EVALUATION ACTIVITIES

Monitoring and evaluation of Basin Plan outcomes must be coordinated to ensure that performance against the Basin Plan's objectives and outcomes—economic, social and environmental—is rigorously assessed, demonstrates Basin-wide outcomes and builds confidence in, and support for, the reforms.

2.3 Other key elements of the Basin Plan

Other key elements of the Basin Plan include the Environmental Watering Plan (Chapter 8 of the Basin Plan), the Water Quality and Salinity Management Plan (Chapter 9 of the Basin Plan), water resource plan requirements (Chapter 10 of the Basin Plan) and critical human water needs (Chapter 11 of the Basin Plan). Water resource plan requirements and critical human water needs are dealt with later in this chapter.

Environmental watering framework

The Basin Plan Environmental Watering Plan provides high-level environmental objectives, targets and principles to guide environmental watering in the Basin at both the Basin-wide and local scales and over the short term and longer term.

Environmental water is provided through the sustainable diversion limits that establish average long-term annual flow and Basin State water resource plan provisions that give effect to the sustainable diversion limits and identify both planned and held environmental water, including the Commonwealth environmental water holdings. However, the achievement of the Basin Plan's environmental objectives will depend on effective, efficient and coordinated environmental water delivery guided by the Basin Plan Environmental Watering Plan.

The Environmental Watering Plan also requires the development and publication of a Basin-wide environmental watering strategy within two years of the commencement of the Basin Plan and the development of regional long-term watering plans by Basin States within one year after the environmental watering strategy is published. Annual environmental watering priorities are also prepared by each Basin State and, at the Basin-wide scale, by the MDBA.

Since the making of the Basin Plan, environmental watering settings have continued to evolve. For example the Panel notes that:

- the Basin-wide environmental watering strategy due for release in November 2014 aims to help environmental water holders, Basin States and waterway managers plan and manage environmental watering at a Basin scale and over the long term to meet the Basin Plan's environmental objectives.

¹⁷ Commonwealth Environmental Water Holder outcomes reports can be found at: <http://www.environment.gov.au/water/cewo/publications>

- Over 3,546 GL (as of 30 September 2014) of Commonwealth environmental water has been delivered since 2009 to help achieve a sustainable Basin.
- The Murray–Darling Basin Ministerial Council agreed to establish a Southern Connected Basin Environmental Watering Committee to better coordinate the delivery of all environmental water in the southern connected Basin and, in particular, the River Murray.

The Panel also notes the NWC's recent finding that environmental water portfolio management by water holders, including the Commonwealth Environmental Water Holder and the Victorian Environmental Water Holder, the New South Wales Office of Environment and Heritage and the MDBA (as manager of The Living Murray portfolio) (see Box 6.3 for details on The Living Murray) has been maturing, with coordinated delivery of water occurring through the preparation of annual water use plans and publicly available frameworks for decision-making on environmental water.¹⁸

Environmental management and relevant matters raised by stakeholders are further discussed later under Subdivision C—Environmental management of this chapter.

Water Quality and Salinity Management Plan

The overarching objective of the Water Quality and Salinity Management Plan is to protect and enhance water quality (including salinity levels) to ensure it is suitable to meet the environmental, social, economic and cultural values of the Basin water resources. It focuses on water used for aquatic ecosystems, drinking supplies, irrigation and recreation. The Water Quality and Salinity Management Plan builds on the National Water Quality Management Strategy and the Basin Salinity Management Strategy, which guide development of the Basin Plan Water Quality and Salinity Management Plan.

The Water Quality and Salinity Management Plan includes:

- objectives and targets
- a description of the key causes of water quality degradation and the risks to the condition of Basin water resources.
- a framework for basin and catchment management to promote improved water quality.

The Water Quality and Salinity Management Plan framework includes procedures for having regard to the flow management targets, a method for assessing salinity levels at the reporting sites and an approach to estimating salt export. Further work is planned to refine the approach for assessing salt export and to support decision-making when having regard to the flow management targets. Assessment of measures to improve water quality included in Basin State water resource plans will be completed as required. Basin State water resource plans to be developed progressively between 2015 and 2019 are required to incorporate a water quality management plan.

Part 7 of Chapter 10 of the Basin Plan requires the water quality management plans to identify causes of water quality degradation and risks to water quality, and to incorporate water quality and salinity targets. The water quality target values may be the default values from Division 3 of Part 4 of Chapter 9 of the Basin Plan. Alternative values may be specified in the water quality management plan, provided that these are determined in accordance with procedures set out in the Australian and New Zealand Guidelines for Fresh and Marine Water Quality and give at least the same levels of protection as those set out in Chapter 9. In addition, a key requirement is that water quality management plans incorporate measures that will contribute to the achievement of the water quality objectives provided in Chapter 9, unless there are no such measures that can be undertaken cost-effectively.

¹⁸ National Water Commission, 2014, *Australia's Water Blueprint: National Reform Assessment 2014*.

Basin Plan water trading rules

Chapter 12 of the Basin Plan sets out the water trading rules, which commenced on 1 July 2014. The trading rules are addressed in Chapter 4 as part of the Panel's assessment of the extent to which water trading is occurring efficiently and effectively and water is moving to its highest value use—both of which are specific terms of reference for this Review.

2.4 A framework for managing Basin water resources

Part 2 of the Act provides for the making of the Basin Plan, its purpose and content. The Part also provides, through the Basin Plan, for key components of the Act's reform measures including the limits on the quantity of water that may be taken (sustainable diversion limits including the sustainable diversion limit adjustment mechanism), the water resource plan framework, the Basin Plan water trading rules and the allocation of risks in relation to reductions in water availability.

Part 2AA of the Act establishes the Water for the Environment Special Account (Special Account), which provides funding for efficiency and constraints measures and the recovery of 450 GL of additional water to enhance environmental outcomes with neutral social and economic outcomes. These measures will contribute to the Basin Plan's sustainable diversion limit adjustment mechanism.

Part 2A of the Act requires the Basin Plan to include certain arrangements for meeting critical human water needs.

With the exception of the Basin Plan water trading rules, Parts 2, 2AA and 2A predominantly impose regulatory burden on governments—for example in relation to the assessment and accreditation of Basin State water resource plans and the development of a package of supply and efficiency measures for the purposes of the sustainable diversion limit adjustment mechanism.

Given the scope of Parts 2, 2AA and 2A, almost all stakeholders raised matters relevant to its provisions in one way or another—with the exception of critical human water needs. Key issues included legislating the Australian Government's bridging the gap commitment, transparency of the sustainable diversion limit adjustment mechanism, the Basin State water resource plan accreditation framework, the Special Account and the process and timing of amending and reviewing the Basin Plan.

Subdivision B—Basin Plan, its purpose and contents

A number of suggested amendments were made in relation to the provisions dealing with the development and content of the Basin Plan, including providing greater prominence to social and economic and Indigenous considerations in the Basin Plan.

Consistency with the United Nations Convention on Biological Diversity¹⁹

One submission proposed that a new section 21(2)(a)(iii) be included in the Act, requiring the Basin Plan to be prepared having regard to 'the fact that the cultural rights of Aboriginal People²⁰ have been adversely impacted, as a result, and require special measures to ensure consistency with relevant international agreements'.²¹

19 Details of the *Convention on Biological Diversity* are available on the Department of Foreign Affairs and Trade website: <http://www.info.dfat.gov.au/info/Treaties/Treaties.nsf/AllDocIDs/AC74E159153B5CD0CA256B530005465A>

20 Submissions noted that they used the terms Aboriginal and Indigenous interchangeably.

21 Northern Basin Aboriginal Nations submission to the Review of the *Water Act 2007* (Cth), dated 30 July 2014.

It was argued that this would ensure consistency of the Act with the Convention on Biological Diversity, a relevant international agreement under the Act—in particular with Article 8(j)²² and the biodiversity elements of the Convention, and in relation to the cultural rights of Indigenous peoples.

Section 21(1) of the Act states that the Basin Plan must be prepared so as to provide for giving effect to relevant international agreements. Section 21(2)(a)(i) and (ii) add that it must be prepared having regard to:

- (a) the fact that the use of the Basin water resources has had, and is likely to have, significant adverse impacts on the conservation and sustainable use of biodiversity
- (b) the fact that the Basin water resources require, as a result, special measures to manage their use to conserve biodiversity.

As the Basin Plan was prepared with regard to the Convention on Biological Diversity, the Panel considers that the amendment is unnecessary for Australia to comply with the requirements of Article 8(j) of the Convention. The wording of section 21(2)(a) of the Act is a direct reference to the provisions of the Convention that refer to special measures and conservation and management of biological diversity (Article 8).

Another proposal relating to the Convention on Biological Diversity was that the Akwé: Kon guidelines should be added to the Basin Plan to give greater effect to Article 8(j).

The Convention on Biological Diversity Akwé: Kon guidelines, released in 2004, were developed pursuant to the program of work on Article 8(j) and related provisions adopted by the Conference of the Parties of the Convention on Biological Diversity. The guidelines are voluntary and are intended to serve as guidance for Parties and Governments, subject to their national legislation, in the development and implementation of their environmental impact assessment regimes. The guidelines should be taken into consideration whenever developments are proposed that take place on, or are likely to impact on, sacred sites and lands and water traditionally occupied or used by Indigenous and local communities. The guidelines recognise that developments can vary enormously and that the guidelines should be adapted to suit the circumstances of each development.

The guidelines appear to be designed to guide consultation around new developments on relevant lands or waters traditionally occupied or used by Indigenous communities rather than for updating Basin State water resource plans relating to already developed water resources in fully allocated or overallocated systems.

A number of the provisions in the guidelines appear to be largely consistent with existing Basin Plan requirements around the development of water resource plans—for example requirements in relation to notification and public consultation and the establishment of effective mechanisms for Indigenous and local community participation.

Additionally the Basin Plan provides an example of the principles that may be applied in relation to the participation of Indigenous people using the Murray Lower Darling Rivers Indigenous Nations and Northern Basin Aboriginal Nations endorsed Principles of Indigenous Engagement in the Murray–Darling Basin.²³

However, during consultations stakeholder groups noted that the Basin Plan does not specify what is meant by ‘have regard to’ for the purposes of meeting these requirements and that, as a consequence, there was low confidence that the provisions would result in greater benefit for Indigenous people.

²² Article 8(j) of the Convention states: ‘Each Contracting Party shall, as far as possible and as appropriate: ... subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilisation of such knowledge, innovations and practices.’

²³ These principles were made in line with the *United Nations Declaration on the Rights of Indigenous Peoples* and can be found at: <http://www.mdba.gov.au/kid/kid-view.php?key=sml165ssh5enYyb5xSA8iQDfwFrLmEvCGO8a0zMWYMs>

The Panel recognises that the MDBA's *Handbook for Practitioners: Water resource plan requirements* provides some guidance on the meaning of 'have regard to'. The Handbook recommends that, when approaching Part 14 of Chapter 10 of the Basin Plan, water planners should keep in mind the meaning of 'have regard to' in the note in section 1.07 of the Basin Plan:

The phrases 'have regard to' and similar phrases are intended to be interpreted consistent with case law, as it develops from time to time and as applied with appropriate regard to the circumstances ... When a decision-maker is required to 'have regard to' particular matters, it is expected that the decision-maker will give those matters proper, genuine and realistic consideration, even if not ultimately bound to act in accordance with those matters.

In light of the issues raised by stakeholder groups, the Panel recommends the MDBA issue guidelines that specifically elaborate on best practice for meeting the water resource plan requirements under Part 14 of Chapter 10 of the Basin Plan. Such guidelines could draw on the Akwé: Kon guidelines where appropriate.

Section 22(3) of the Act specifies certain requirements that must be met in Basin State water resource plans to be consistent with the Basin Plan. These requirements are then reflected in Chapter 10 of the Basin Plan. The Panel has observed that the Basin Plan water resource plan requirements (Chapter 10 of the Basin Plan) relating to Indigenous values and uses are not mirrored in this section of the Act.

Subject to an assessment of the current requirements being found effective after Basin State water resource plans are accredited by 1 July 2019, the Panel also proposes that section 22(3) of the Act be amended to specifically require water resource plans to include requirements in relation to Indigenous values and uses on the basis that they are relevant to the sustainable use and management of Basin water resources. While this change is consistent with the requirements in the Basin Plan it would nonetheless ensure that these requirements are the minimum necessary for future versions of the Basin Plan, and in this way would ensure the requirement is an enduring one.

RECOMMENDATION 1

The Panel recommends that the Murray–Darling Basin Authority prepare guidelines to assist Basin State governments to develop water resource plans in accordance with Basin Plan water resource plan requirements relating to Indigenous values and uses, with the guidelines to draw on the Convention on Biological Diversity's Akwé: Kon Guidelines as appropriate.

The Panel also recommends that, after 1 July 2019 when the Basin State water resource plans have been accredited, the case to amend section 22(3) to include a new section that reflects existing Basin Plan water resource plan requirements dealing with Indigenous values and uses should be considered.

Content of the Basin Plan

Section 22 of the Act sets out the content of the Basin Plan, including the mandatory content specified in a table at section 22(1). The mandatory content includes the Environmental Watering Plan, the Water Quality and Salinity Management Plan, water trading rules, water resource plan requirements and a program for monitoring and evaluating the effectiveness of the Basin Plan.

The Panel has observed that there is an opportunity to recognise the requirement to conduct five-yearly reviews of the social and economic impacts of the Basin Plan as part of the program for monitoring and evaluating the effectiveness of the Basin Plan under item 13 of section 22(1) that must be included as mandatory content in the Basin Plan.

The Panel believes that five-yearly reviews provide a chance to look at all outcomes, including the opportunity to assess social and economic impacts. Due to this, the Panel recommends that section 22(1) item 13 should be amended to require five-yearly reviews of social and economic impacts in addition to the five-yearly reviews already specified at this item for the Water Quality and Salinity Management Plan and the Environmental Watering Plan.

This amendment, while consistent with existing Basin Plan requirements, would ensure that this monitoring endures beyond this version of the Basin Plan and appropriately elevates recognition of this requirement to the Act. It also recognises that the social and economic impacts of the Basin Plan are inextricably linked with the environmental outcomes: while the community needs sustainable environmental objectives achieved to maintain a healthy river system, sustainable environmental objectives can only be achieved when there is community confidence in the objectives and support for how they are to be met.

This represents a practical amendment in response to many stakeholders' concerns about the balance of considerations in the Act and the need to consider the impacts on industries and the community. It is critical that the social and economic outcomes can be measured and assessed against broader Basin Plan outcomes when the Basin Plan is reviewed.

RECOMMENDATION 2

To align with requirements in Chapter 13 of the Basin Plan, the Panel recommends that item 13 of section 22(1) 'Mandatory Content of the Basin Plan' be amended to require that the program for monitoring and evaluating the effectiveness of the Basin Plan includes five-yearly reviews of the extent to which the Basin Plan has affected social and economic outcomes in the Murray–Darling Basin.

Sustainable diversion limits

The Act requires the Basin Plan to specify the maximum long-term annual average quantities of water that can be taken on a sustainable basis from Basin water resources as a whole and the water resources or particular parts of the water resources of each water resource plan area. As discussed earlier in this report, the averages are the long-term average sustainable diversion limits.

Mining sector access to water

Proposals were put forward by the mining and petroleum sectors that would provide more flexible access to water for those sectors. Water is a crucial input for mining activities. It helps produce power, cool equipment, manage waste and suppress dust. Work by the Australian Bureau of Statistics has shown that mining produces a high value-add per megalitre of water.²⁴ The characteristics and needs of the mining sector are distinct from those of other users, including agricultural uses. For example, mining tends to be a short-term, high-demand user of water. Mining also entails use of low-quality water, co-produced water and water access for short periods of time rather than perpetual entitlements.

²⁴ In 2004–05 the average value added per megalitre of water use was around \$86,000 per megalitre for coalmining and \$50,000 per megalitre and \$25,000 a megalitre for metal mining and other mining respectively. ABS *ABS4610.0 Water Account Australia 2004–05*, ABS *5206.0 Australian National Accounts*.

The Panel believes that current Basin Plan settings are sufficiently flexible to meet the needs of these industries. Basin States remain responsible for setting out how the water resources of a water resource plan area are to be shared across users and managed over time in a way that is consistent with the sustainable diversion limits. It is therefore up to Basin States to consider how the water planning and entitlement arrangements account for competing consumptive demands on a particular water resource. The needs of the mining industry for water collection, storage and use forms part of that planning process. In cases where standard water entitlements are not well suited to the needs of the mining industry (for example in catchments where no high-reliability entitlements exist), Basin States may choose to develop and administer alternative classes of entitlements, provided these are accounted for within their water planning and entitlement frameworks and incur no third-party impacts.

The Panel believes that the Basin Plan water trading rules, which commenced on 1 July 2014, will also help to improve access for all industries by ensuring that water access rights may be traded free of any restriction relating to the purpose for which the water will be used. The water market continues to mature and evolve and enables industries to develop a portfolio of water market products so that choices can be made between different reliability water, recycled water, temporary water allocations and permanent entitlements.

The Panel notes that it received no specific examples of the mining sector experiencing difficulty in accessing water via the market.

2.2: FIT-FOR-PURPOSE WATER ACCESS FOR THE MINING AND PETROLEUM SECTORS

Basin States should develop fit-for-purpose water allocation arrangements that ensure the mining and petroleum industries are able to operate within the same entitlement and water market frameworks as all other consumptive users.

Commercial plantations

The Panel heard the perspective of the commercial plantation sector through a submission made by the Australian Forest Products Association, which proposed that commercial plantations should be treated similarly to other dryland crops. Water interception by plantation forests must be included in Basin State water resource plans, with new plantations requiring a water licence.

Section 10.13 of the Basin Plan allows flexibility for Basin States to accommodate growth in certain forms of take, namely interception by commercial plantations, take under basic water rights and take by runoff dams. The provision allows Basin State water resource plans to account for these forms of take without needing to introduce management or capping. For example, water take for one activity may be increased above 2009 baseline levels for the water resource plan area if there is a corresponding reduction in another form of water take in the same area, or if the changes are not expected to result in the overall water take in the area going above the relevant sustainable diversion limit. This flexibility supports the Basin States to manage water take within the sustainable diversion limit while allowing for changing demands.

As the Basin Plan provides flexibility in how the Basin States may incorporate plantation activities into their water resource plans, the Panel considers that no changes need to be made to the definition of interception activity.

Sustainable diversion limit adjustment mechanism

On 21 November 2012 the Act was amended to provide for a transparent and efficient mechanism to allow the Commonwealth Minister, on the advice of the MDBA, to adjust the sustainable diversion limit within defined limits. The Act sets out the legislative framework for the MDBA to propose an adjustment of the sustainable diversion limit (section 23A of the Act) and for the Minister to adopt a proposed adjustment (section 23B of

the Act). If the Minister decides to adjust the sustainable diversion limits, the Basin Plan amendment must be tabled in both Houses of Parliament and is subject to disallowance.

Chapter 7 of the Basin Plan sets out the criteria and procedures for the operation of the sustainable diversion limit adjustment mechanism.

A number of proposals sought to ensure that the sustainable diversion limit adjustment mechanism operates transparently and delivers on the environmental objects of the Act. Environment groups generally did not accept that sustainable diversion limit supply measures will provide genuine sustainable diversion limit offsets or that these offsets will be locked in over the longer term.

Environment groups expressed concern about the methodology for determining environmental equivalence of supply measures and associated sustainable diversion limit offsets as well as the risks that such offsets may not be enduring or effective over the long term, particularly compared to water entitlements managed by the Commonwealth Environmental Water Holder.

The Panel is of the view that the Act and the Basin Plan contain safeguards that appear appropriate and adequate to ensure that the Act's objectives are achieved in the sustainable diversion limit adjustment mechanism process. For example:

- (a) the test for environmental equivalence must be science based, fit for purpose and independently reviewed; it has been developed by a CSIRO-led consortium of scientists
- (b) there are limits of change specified in the Basin Plan to protect outcomes
- (c) there is an overall limit of five per cent for the net adjustment of the Basin-wide sustainable diversion limit
- (d) the MDBA must be satisfied that sustainable diversion limit adjustment projects deliver equivalent or better environmental, social and economic outcomes before it can propose an adjustment
- (e) adjustment measures must not impact on the reliability of water access entitlements
- (f) Basin States and the Australian Government, via the Murray–Darling Basin Ministerial Council, all need to agree on the measures to be included in the mechanism
- (g) the Basin Plan provides for a reconciliation adjustment in 2024, at which point the MDBA can review adjustment amounts in light of progress in implementing supply measures
- (h) future reviews of the Basin Plan will provide opportunities to conduct research and investigation into sustainable diversion limits or any other aspect of the Basin Plan.

In addition, Schedule 1 of the *2013 Intergovernmental Agreement on Implementing Water Reform in the Murray Darling Basin* sets out the protocol for consideration of the sustainable diversion limit adjustment supply measures and the three phases of their assessment: feasibility studies, business cases and confirmation of projects. The intentions of the protocol and arrangements are to:

- (a) identify and analyse all significant operating risks and impacts and detail robust mitigation strategies
- (b) identify ongoing operation and maintenance costs and proposed financial responsibility for ongoing asset ownership costs and the agency that will undertake this role, to ensure that the sustainable diversion limit adjustment will be maintained over the life of the asset.

The successful operation of the sustainable diversion limit adjustment mechanism is critical for the implementation of the Basin Plan overall and broader stakeholder and community support for the reforms.

The MDBA, in consultation with Basin States, is finalising a benchmark model against which the outcomes associated with proposed sustainable diversion limit adjustment measures will be assessed. A successful supply measure will allow the volume of water recovery to be reduced, while maintaining the benchmark environmental outcomes.

Ensuring environmental outcomes equivalent to those in the Basin Plan is a key requirement for any ‘supply contribution’ under the sustainable diversion limit adjustment mechanism. The test compares environmental outcomes for fish, waterbirds and plants achieved under the Basin Plan, with environmental outcomes achieved for a scenario including the supply measures, coupled with higher sustainable diversion limits (a sustainable diversion limit adjustment scenario).

The MDBA commissioned CSIRO to develop an ecological elements method that is used in the environmental equivalence test. Basin States provided input during the development of the method. The method developed by CSIRO is available on the MDBA website, together with an independent review of it. The method is being tested during a trial implementation phase. The MDBA will determine whether the test is suitable for use to assess the package of adjustment proposals taking into account the views of Basin governments, the CSIRO and an Independent Review Panel of four eminent scientists.

The Panel has concluded that the settings governing the operation of the sustainable diversion limit adjustment mechanism are appropriate and consistent with the Act’s objectives. As with many other key features of the Act and the Basin Plan, its success relies on relevant bodies making rigorous and transparent decisions that are consistent with these settings. At the same time the Panel acknowledges the apprehension on the part of some stakeholders and believes that it is necessary for the MDBA and all governments to engage with stakeholders, clearly communicating how the adjustment mechanism will operate and rigorously testing its methods and processes so that stakeholders have confidence in the mechanism. The Panel also notes that proposed sustainable diversion limit adjustments must be tabled in Parliament as a disallowable instrument.

2.3: SUSTAINABLE DIVERSION LIMIT ADJUSTMENT MECHANISM

The Act and the Basin Plan contain safeguards that appear appropriate and adequate to ensure that the Act’s objects will be achieved in the sustainable diversion limit adjustment mechanism process.

The Murray–Darling Basin Authority and Basin States should engage openly with stakeholders, clearly communicating how the sustainable diversion limit adjustment mechanism will operate, explaining roles and responsibilities and rigorously testing its methods and processes so that stakeholders have confidence in its future operation in a manner consistent with the Act’s objects.

Subdivision C—Environmental management

This subdivision sets out requirements for the Environmental Watering Plan to be included in the Basin Plan, including its purpose and what it must specify (e.g. objectives, targets and principles). It also provides that the MDBA must consult holders and managers of environmental water in implementing the Environmental Watering Plan, may coordinate the delivery of environmental water and must account for all held environmental water.

Coordination of environmental water and roles and responsibilities

One of the important aspects raised in submissions is ensuring that duplication in environmental water management is minimised and that the environmental water held by different agencies is used to maximise environmental outcomes.

The Panel notes that the Environmental Watering Plan itself sets out objectives, principles and methods to coordinate planning and reporting by holders and managers of environmental water. It encourages a flexible approach, enabling priorities to be quickly identified and updated. The management framework sets out the roles and responsibilities of holders and managers of environmental water, encouraging them to work together to achieve the Environmental Watering Plan’s objectives—for example by guiding the watering of sites that require coordinated contributions from several upstream catchments, including those in different states.

Under the Environmental Watering Plan the broad roles are:

- (a) The MDBA, as regulator and Basin-wide standard-setter, is responsible for developing, implementing, monitoring and ensuring compliance with the Environmental Watering Plan and must develop the Basin-wide environmental watering strategy and Basin annual environmental watering priorities
- (b) The Commonwealth Environmental Water Holder manages the Commonwealth environmental water holdings consistent with the Environmental Watering Plan and having regard to Basin Plan annual environmental watering priorities
- (c) The Basin States develop regional (catchment-scale) long-term environmental watering plans (as part of their water resource plans) and annual regional priorities, and manage state environmental water including held water (through entitlements) and planned water (water set aside in water resource plans for environmental outcomes).

The Panel considers that one factor that has contributed to a lack of clarity about roles and responsibilities and the level of coordination is that water holders such as the Commonwealth Environmental Water Holder have had to commence environmental watering, including planning for delivery and management of the holdings to meet obligations and operational needs while, simultaneously, long-term strategies have remained under preparation by the MDBA and Basin States. It is important that the MDBA and the Commonwealth Environmental Water Holder undertake their roles and responsibilities according to the Basin Plan framework and coordinate their work to reduce duplication in delivering outcomes and community engagement.

Another factor potentially contributing to a lack of clarity of roles is that coordinating environmental water delivery necessarily involves a number of bodies, including the Australian Government, Basin States and their agencies, Basin communities and industries, Indigenous groups and the operators and managers of river structures (dams, locks and weirs).

The complexity associated with the delivery of environmental watering events is influenced by a range of factors, including the extent of river regulation in the catchment, the extent to which environmental watering has occurred previously, the existence of supporting arrangements, and whether coordination between multiple Basin States and water holders is required.

For example, in the unregulated Paroo river system in Queensland, environmental watering is effectively achieved through the relevant Basin State water resource plan, with no active management of environmental water required. However, challenges exist in the southern Basin, particularly where the Murray and its larger tributaries, such as the Goulburn and Murrumbidgee, meet. Where several jurisdictions are involved it is important for all relevant parties to work together to devise solutions consistent with the Environmental Watering Plan.

The Panel recognises that there are complexities associated with the number of entities that have a role to play in delivering water to the environment across the Basin. Tensions between Basin-wide and local perspectives and outcomes are not surprising and are likely to continue in the foreseeable future. With these complexities and tensions come additional expertise, new ideas and innovative solutions. Successful environmental watering relies on all parties working cooperatively, adhering to their roles and not seeking to duplicate others' expertise. It is important that the MDBA operates at the Basin-wide scale, utilising local community input as much as possible. The Panel considers that if this occurs, and all parties work together to ensure that any duplication or implementation issues are identified and addressed, these settings will achieve their intended benefits.

After consultation with the MDBA and the Commonwealth Environmental Water Holder, it became clear that the roles of both agencies are still developing but they recognise a delineation of roles. The MDBA is responsible for setting high-level objectives that inform and guide environmental water planning, prioritisation and use at a Basin scale. It also sets targets to measure progress against objectives, requires the development of plans with regard to the views of local communities and reviews Basin-wide plans and strategies as new knowledge is developed.

The Commonwealth Environmental Water Holder and Basin States, as holders and managers of environmental water, then plan for the management of that water, taking into account annual and local conditions and the views of the local community, all within the larger framework set by the MDBA. As there are a number of managers of environmental water, who operate on different spatial scales, there is a need for a hierarchy of plans, targets and priorities at each level (Basin wide, catchment scale and local) and over time (annual and long term) for different areas of the Basin.

The Panel notes that the MDBA has the capacity and expertise in these fields necessary to inform the Basin-wide environmental watering standard-setting function it has been tasked with, including access to sophisticated hydrologic modelling, practical river operations experience and environmental water management. In addition, environmental watering will comprise a key component of the Basin State water resource plans, which the MDBA is responsible for assessing prior to accreditation.

The Panel also notes the benefit of the Commonwealth Environmental Water Holder and staff of the Commonwealth Environmental Water Office engaging with the Basin community and stakeholders directly to inform its portfolio and water use planning. This includes site visits and participating in meetings with stakeholder groups and Basin State government environmental water advisory groups. Then, through consultation with the MDBA, Basin State government agencies and river operators, the delivery of the environmental water (often consisting of both Commonwealth and state environmental water) is arranged. The Commonwealth Environmental Water Holder then works with its delivery partners, other environmental water holders, advisory panels such as the Environmental Water Scientific Advisory Panel, and landowners to manage and monitor the use of environmental water in the Basin.

In addition, stakeholders believe that the management of entitlements under The Living Murray should be integrated with the Basin Plan framework and directed toward achieving its broader objectives, with the portfolio managed by the Commonwealth Environmental Water Holder. This proposal is also discussed in Chapter 6 of this report.

The Panel welcomes the recent agreement by the Murray–Darling Basin Ministerial Council to establish a new Committee to coordinate the delivery of all environmental water in the southern connected Basin, including the allocation and management of The Living Murray portfolio, consistent with the Basin Plan’s Environmental Watering Plan.

The Panel encourages the continuation of this collaborative approach to the delivery and management of environmental water between governments and between agencies and recognises that it is in the process of maturing into a well-understood and effective process for the management of environmental water. Further discussion on the Commonwealth Environmental Water Holder is at Chapter 6.

2.4: ENVIRONMENTAL WATERING: COORDINATION

The Australian Government, Basin States and water holders should work together to communicate to stakeholders and the community on:

- (a) the roles and responsibilities of all parties involved in environmental watering**
- (b) the arrangements in place to coordinate environmental watering to maximise the achievement of the Basin Plan’s environmental objectives.**

Environmental watering to achieve social and economic and cultural outcomes

The Panel heard a number of proposals on options for use of environmental water delivery to support social and economic outcomes such as recreational fishing and boating, or to achieve Indigenous cultural outcomes.

An example raised in two submissions was that at Easter 2014, lower river levels between Yarrawonga and Echuca meant that power boating and associated activities (e.g. water skiing) were not possible. This had consequent negative impacts for the tourism industry in this area.

River levels are determined by a range of factors, including seasonal conditions and river inflows and releases from storages for environmental watering, irrigation deliveries and other purposes. The Panel understands that the Easter 2014 condition around Yarrawonga and Echuca was the confluence of a range of unusual circumstances for that time of year, including higher than average rainfall and an associated reduction in water deliveries for irrigation purposes. It appears that this situation did not arise as a consequence of the Basin Plan or any action or neglect on the part of the Commonwealth Environmental Water Holder as a holder of environmental water or the MDBA as river operator.

The Panel considers that the costs of delivering water for the purpose of addressing low river levels at this time of year are significant, estimated by the MDBA to be between \$1.8 million and \$3 million.

The Panel also heard that, while environmental flows are not the same as cultural flows (see Box 1.2), it is recognised that some of the outcomes they are trying to achieve overlap. As such, in seeking to achieve environmental outcomes in the Murray–Darling Basin, there is an opportunity for environmental water to also support Indigenous values and provide cultural benefits. Under the Basin Plan, environmental watering must be undertaken having regard to Indigenous values.

The Panel notes that under the Basin Plan Environmental Watering Plan, environmental watering must be undertaken having regard to, among other factors:

- (a) social and economic outcomes
- (b) coordinating environmental watering with flows regulated for consumptive use; and persons materially affected by the management of environmental water
- (c) the views of local communities.

In relation to Indigenous outcomes, the Environmental Watering Plan specifies that environmental watering must be undertaken in a way that maximises its benefits and effectiveness by having regard to Indigenous values (section 8.35b(iv) of the Basin Plan), defined as ‘the social, spiritual and cultural values of Indigenous people that relate to the water resources of the water resource plan area’ (section 10.52 of the Basin Plan).

The Act and the Basin Plan do not prescribe particular systems, operations or governance arrangements to meet these requirements. This allows consultation to be flexible and fit for purpose and involve the relevant representative bodies in different catchments.

The Panel believes that the Basin Plan Environmental Watering Plan allows decision-makers to reflect social, economic and cultural outcomes, subject to the delivery of the Basin Plan’s environmental objectives. However, this can only be realised when the MDBA, Commonwealth Environmental Water Holder, Basin State governments and their agencies and Basin industries, communities and Indigenous people work together. This will assist decision-makers to better understand social, economic and cultural priorities so that they can be taken into account for the purposes of providing complementary outcomes as much as possible. Just as environmental watering priorities change over time, so too will social and economic priorities; this points to the need for a regular and continuing dialogue to ensure that complementary outcomes can be achieved wherever possible.

In seeking to optimise environmental outcomes from the available water, the process of making environmental watering decisions also provides an important opportunity to consider the potential for complementary economic, cultural and social benefits. The Panel encourages all governments and water holders to fully engage with the Basin's industries and communities in order to identify such opportunities and to capitalise on them wherever possible.

2.5: ACHIEVING COMPLEMENTARY OUTCOMES THROUGH ENVIRONMENTAL WATERING DECISIONS

All Basin water holders and managers should fully engage with the Basin's industries and communities to understand and identify social, economic and cultural priorities that may be achieved together with the environmental objectives of environmental watering events.

Subdivision D—Effect of the Basin Plan

The current obligations of Commonwealth agencies as set out in sections 34 and 58 of the Act are expressed more positively than the obligations of Basin States and their agencies in sections 35 and 59 of the Act. One submission proposed that these provisions be amended to render Parts 8 and 10 of the Act (relating to enforcement and special powers such as entry to land provisions) and the Commonwealth Minister's step-in powers (to make a water resource plan) options of last resort only. It was felt that the wording of sections 35 and 59 undermines the cooperation needed to ensure the Basin Plan is successful.

Section 34 provides that Commonwealth agencies must perform their functions, and exercise their powers consistently with, and in a manner that gives effect to, the Basin Plan. Section 58 mirrors this approach for accredited water resource plans.

Section 35 provides that an agency of a Basin State (as well as infrastructure operators and water holders) must not do an act in relation to Basin water resources if the act is inconsistent with the Basin Plan or fail to do an act if the failure to do that act is inconsistent with the Basin Plan. Section 59 mirrors this approach for accredited water resource plans.

The Panel understands that the difference in the wording between provisions that relate to the Commonwealth and Commonwealth agencies, compared to Basin State agencies and other non-Commonwealth entities, reflects the extent of the Commonwealth's legislative power. Commonwealth legislation can impose on Commonwealth agencies a broad, positive obligation to perform their functions and exercise their powers consistently with, and in a manner that gives effect to, the Basin Plan and accredited Basin State water resource plans (sections 34 and 58 of the Act).

The Panel was advised that the MDBA and the Australian Government have consistently indicated that implementation of the Basin Plan will be undertaken in a cooperative and consultative manner. This sentiment is mirrored in the MDBA Compliance Strategy released in April 2014. The strategy establishes an escalating approach to managing non-compliance, with a strong focus on negotiation and mediation, and relying on enforcement as a last resort.

There is no evidence that the current formulation of Basin State obligations set out in sections 35 and 59 of the Act has placed a significant burden on the Basin States and other non-Commonwealth entities. The Panel encourages all states and the MDBA to work together cooperatively in the spirit of the *2013 Basin Plan Implementation Agreement* (made under Section 1.12 of the Basin Plan) with the aim of identifying and resolving any instances of non-compliance as quickly as possible.

In this context, the Panel heard some suggestions of non-compliance by some Basin States in relation to the Basin Plan water trading rules that commenced on 1 July 2014. While it may not be unusual for some teething issues to be identified and addressed as part of the roll-out of new obligations such as the water trading rules, the Panel notes that industry is also subject to obligations that it must meet and that Basin States need to meet their obligations in a similar fashion. A failure by Basin States to meet their obligations will reduce industry confidence in the requirements of the Basin Plan.

In the interests of ensuring that the benefits of the Basin Plan water trading rules are achieved as intended, and in view of the efforts of other non-government entities to ensure compliance with the water trading rules, the Panel believes that any areas of non-compliance should be identified and addressed as soon as possible.

2.6: ENFORCEMENT OF BASIN PLAN WATER TRADING RULES

All Basin States and the Murray–Darling Basin Authority should identify and resolve any areas of non-compliance with the Basin Plan water trading rules as soon as possible, noting that a commonsense approach to resolving issues should be taken.

Subdivision E—Procedure for making the Basin Plan

Subdivision E of the Act sets out the process for the MDBA to prepare the Basin Plan and for the Minister to adopt the Basin Plan. It also sets out the consultation process that must be followed by the MDBA.

The Basin Plan was adopted in 2012 in accordance with these provisions. There were no issues raised in relation to this subdivision.

Subdivision F—Amendment of the Basin Plan

Subdivision F of the Act sets out the process for amending the Basin Plan, including preparation of the amendment by the MDBA, consultation processes and the process for the adoption of amendments by the Minister. Section 49 of the Act also provides that regulations may be made to provide that the MDBA may make a specified kind of minor, or non-substantive, amendment of the Basin Plan and set out the process for the making of those amendments.

A few stakeholders suggested that there could be simplified or streamlined arrangements for amending the Basin Plan, in certain circumstances—for instance:

- (a) where amendments do not have Basin-wide implications
- (b) where the amendment process could provide for a discrete period for consultation with all parties including the general public, so that the MDBA could prepare and provide advice and the proposed amendments within a shorter timeframe
- (c) the Act should provide for minor adjustments to sustainable diversion limits as they relate to new knowledge of a water resource.

One submission sought to enable sustainable diversion limits to be amended to take into account new information on new water resources and to include low-quality water. The Panel notes that the Basin Plan provides for new information to be included in the calculation of sustainable diversion limits (section 7.25(1) of the Basin Plan) and, other than where new information comes to light, includes all of the Basin's surface water and groundwater resources (including low-quality water) in the existing sustainable diversion limits.

2.7: NEW INFORMATION AND ADJUSTMENTS TO SUSTAINABLE DIVERSION LIMITS

Industry, Basin States and the Murray–Darling Basin Authority should work together to ensure that new information concerning water resources, whether produced by industry or by government, is comprehensively considered so as to inform possible sustainable diversion limit amendments.

The Panel notes that, to date, no regulations have been made to allow the MDBA to make certain minor, or non-substantive, amendments of the Basin Plan. The Panel recommends that regulations be made to provide a simplified process for making minor or non-substantive amendments of the Basin Plan. The current process set out for amendments suits situations where major amendments are required to the Basin Plan but is unwieldy when minor amendments need to be made. The Panel recommends that a process should be devised that streamlines the process for less substantive amendments to the Basin Plan.

The Panel also notes that, to date, there has not been an amendment to the Basin Plan, so the requirements of sections 46, 47 and 48 have not yet been utilised.

RECOMMENDATION 3

The Panel recommends that regulations be made to set out a process for minor amendments to the Basin Plan, consistent with section 49 of the Act.

Subdivision G—Review of the Basin Plan

Subdivision G sets out the process for a review of the Basin Plan. Currently the MDBA must review the Basin Plan during the 10th year of the period that starts when the Basin Plan first takes effect and then review the Basin Plan on a 10-yearly cycle from the time the MDBA gives its report to the Minister. The Basin Plan may be reviewed earlier if the Minister requests the MDBA to do so or all the Basin States request the MDBA to do so; however, this may not occur within the first five years of the Basin Plan taking effect.

The terms of reference for the Review task the Panel to consider appropriate future review points for the Basin Plan and the Act, noting the 2019 date from which the sustainable diversion limits take effect. Reviews of the Act are dealt with in Chapter 11 of this report.

While a few submissions advocated for the retention of the 2022 Basin Plan review, the majority felt that a review of the Basin Plan at this time would be premature. This is because sustainable diversion limits and most accredited Basin State water resource plans will have been in place for only three years and the review would precede the scheduled 2024 reconciliation of sustainable diversion limits. Most submissions proposed a review somewhere between 2024 and 2029.

The Panel noted that the timing of the review of the Basin Plan would ideally strike a balance between:

- (a) providing sufficient time to observe outcomes and collect evidence from 2019 onwards to inform a comprehensive assessment of the Basin Plan upon full implementation, as well as sufficient time to incorporate the likely effects of the operation of the sustainable diversion limit adjustment mechanism
- (b) providing time for the review of the Basin Plan to be conducted and amendments made, which would then inform the next iteration of Basin State water resource plans, noting that water resource plans are accredited for 10 years under the Act and most will expire around 2029.

The timing of the review should also consider other key milestones such as the 2024 reconciliation of sustainable diversion limits and other reviews—for example the five-yearly audits of Basin Plan implementation and Basin State water resource plans under Part 3 of the Act, which are proposed to continue following the anticipated wind-up of the National Water Commission (see Chapter 3 of this report for further information).²⁵ The five-yearly audits would provide a useful evidence base for future reviews.

Assuming that the review could take up to 12 months to complete with a further six months to make any amendments to the Basin Plan, the Panel considers that a review of the Basin Plan in 2026 strikes an appropriate balance between the need to undertake a comprehensive assessment and the need to allow for amendments to be made to inform the next wave of Basin State water resource plans, generally due to expire under the Act around 2029. The review should be completed by the end of 2026 to maximise time to inform water resource plan preparation.

A number of reviews have been incorporated into the design of the Basin Plan and Act. A total of 16 reviews (or similar processes such as the sustainable diversion limit adjustment) are scheduled to occur between 2014 and 2024.

A number of suggestions for consolidating or rephrasing various reviews were also considered by the Panel.

The Panel considered that the following changes would enhance the various review processes:

- (a) The one-off five-yearly advice to the Murray–Darling Basin Ministerial Council on Basin Plan impacts (section 49A of the Act) should be postponed from 2017 to 2020. This would ensure that the advice is undertaken after sustainable diversion limits take effect, and that it would better inform the review of the Act (recommended to occur in 2024)
- (b) The five-yearly reviews of the Water Quality and Salinity Management Plan and Environmental Watering Plan should be postponed from 2017 to 2020.

Combined with the proposed dates for the review of the Act and the Basin Plan (recommended to occur in 2026), the Panel considers that the rephrasing and aligning of these other reviews will provide a simpler and more effective approach to the current reviews required. That is, 10-yearly reviews of the Basin Plan will be informed by five-yearly evaluations. Figure 2.1 illustrates the timing of currently scheduled and proposed key reviews and processes under the Act and the Basin Plan.

For example, if the reporting period for Category A matters under Schedule 12 of the Basin Plan were postponed to commence in 2020,²⁶ then a recurring cycle would be established whereby every second evaluation would occur one year prior to the Basin Plan review, with the evaluations occurring in 2025 and 2035 immediately prior to Basin Plan reviews in 2026 and 2036. By delaying commencement of these activities a few years the results would be more meaningful, given that full implementation of the Basin Plan will not be achieved until 2019, or in the case of sustainable diversion limit adjustment measures, 2024.

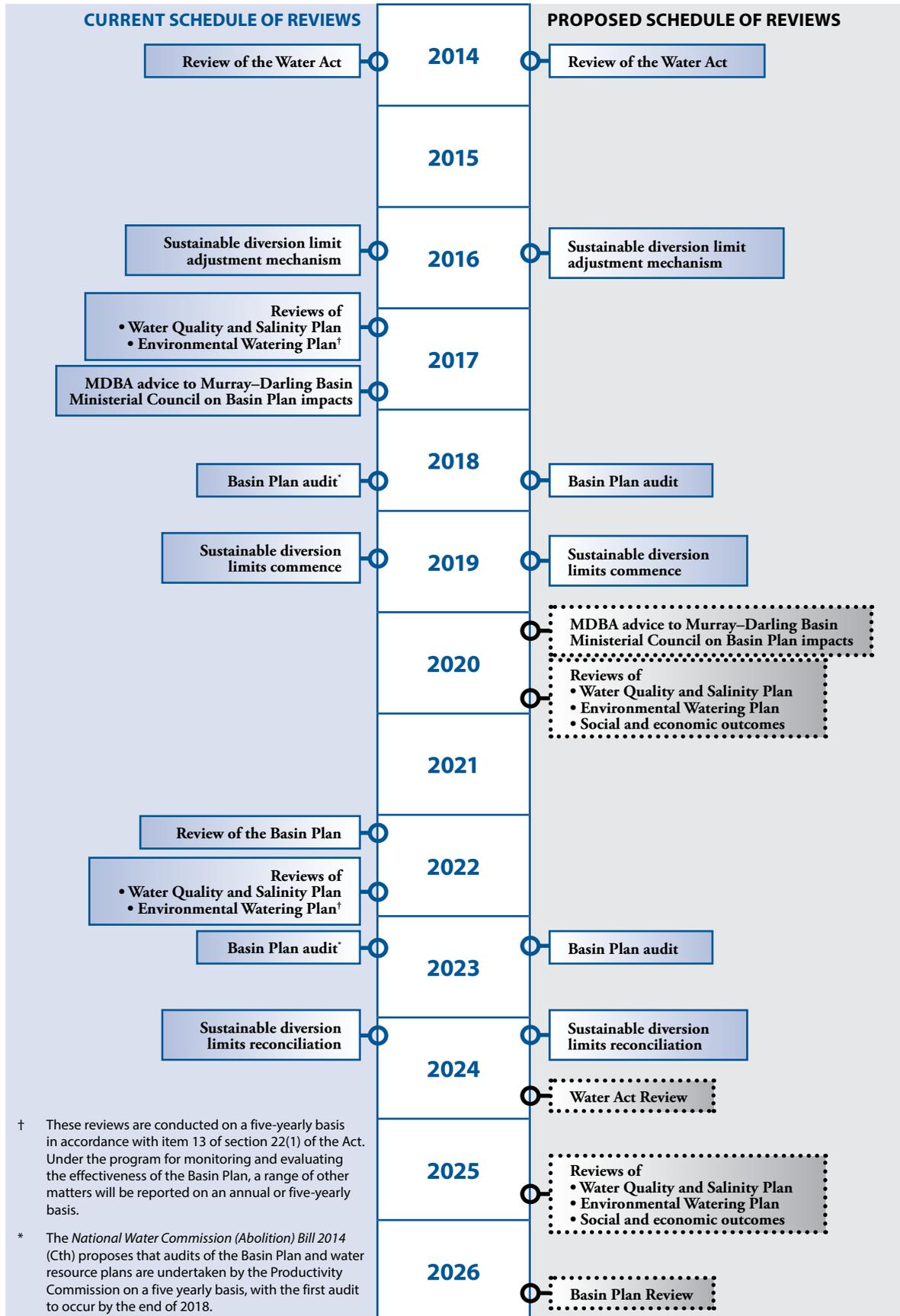
A number of proposals were submitted in relation to strengthening consultation with the public on future reviews of the Basin Plan or the Act. These included:

- (a) suggestions to insert ‘the public’ in various sections of the Act dealing with amendment and review of the Basin Plan
- (b) mixed views on the benefits of prescribing mandatory terms of reference for future reviews.

²⁵ As provided in the *National Water Commission (Abolition) Bill 2014* (Cth).

²⁶ The five-yearly evaluations under Chapter 13 could commence from 2020 subject to agreement between the MDBA and Basin States and revision to the *Murray–Darling Basin Plan 2012 Implementation Agreement, 2013*.

FIGURE 2.1: TIMELINE OF KEY REVIEWS AND MILESTONES IN THE WATER ACT AND BASIN PLAN



The Panel noted that existing provisions in the Act provide for substantial public consultation on amendment and review of the Basin Plan, with eightweek and 12-week public consultation processes respectively. Additionally, in advance of such public consultation the Basin Community Committee must be formally consulted by the MDBA.

RECOMMENDATION 4

The Panel recommends that:

- (a) section 50 of the Act be amended to provide for the next scheduled review of the Basin Plan to be finalised in 2026, with 10-yearly reviews thereafter**
- (b) other review points be amended or re-phased as follows:**
 - (i) amend section 49A of the Act to postpone the first five-yearly report on Basin Plan impacts to the Murray–Darling Basin Ministerial Council from 2017 to 2020**
 - (ii) postpone the first of the five-yearly reviews of the Environmental Watering Plan and Water Quality and Salinity Management Plan from 2017 to 2020, then undertake the reviews concurrently every five years (this will require an amendment to the Basin Plan)**
 - (iii) undertake the social and economic evaluation (see Recommendation 2) concurrently with those reviews and every five years thereafter, consistent with the Basin Plan.**

Divisions 2 and 3—Water resource plans

These divisions of the Act set out the requirements for water resource plans, the effects of water resource plans, the process for accrediting water resource plans prepared by Basin States and the process for adopting water resource plans prepared by the MDBA under the step-in powers. Division 3 sets out the procedure to be followed before taking step-in action.

Division 2, Subdivision B—Water resource plans

Subdivision B of Division 2 of the Act requires water resource plans to be developed for all areas of the Basin (section 54 of the Act), and to be consistent with the Basin Plan including the requirements for water resource plans (set out in Chapter 10 of the Basin Plan) and the sustainable diversion limit for the water resource plan area. This subdivision also sets out the general basis for accrediting and making a water resource plan including the version of the Basin Plan which must be used for the purposes of accreditation.

Currently section 56(2) of the Act provides that water resource plans should be assessed against the original version of the Basin Plan (if it is submitted within two years of the Basin Plan first taking effect on 24 November 2012) or the version in effect two years prior to the water resource plan being submitted to the Minister for accreditation (if the water resource plan is submitted after two years of the Basin Plan first taking effect, i.e. after 24 November 2014). The MDBA has proposed that section 56(2) be amended to provide Basin States with flexibility to nominate a more recent version of the Basin Plan that the MDBA should use when assessing water resource plans for accreditation.

The Panel understands that the approach established in the Act was intended to give Basin States certainty that their water resource plans would be assessed against the Basin Plan that was in place at the time the water resource plan was prepared and provided to communities for consultation. This avoided the possibility that a water resource plan might be prepared based on one set of requirements, and assessed against another more recent set of requirements in a recently revised version of the Basin Plan.

The MDBA's proposed approach may be beneficial to a Basin State as the increased flexibility may provide an opportunity to consider water resource plans in line with any improvements made to the Basin Plan, in cases where doing so accords with state processes and timeframes. It could also provide a more efficient and effective management of Basin water resources by allowing water resource plans to incorporate the most current and up-to-date requirements under the Basin Plan. The Panel supports this proposal noting that Basin States are still able to elect the version of the Basin Plan in place two years prior to accreditation if this is preferred.

RECOMMENDATION 5

The Panel recommends that section 56(2) be amended to provide flexibility for Basin States to nominate a more recent version of the Basin Plan for the Murray–Darling Basin Authority to use when assessing water resource plans for accreditation.

Division 2, Subdivision D—Accrediting water resource plans prepared by Basin States

The Panel received Basin State submissions on the accreditation of Basin State water resource plans. The Panel recognises that the accreditation of Basin State water resource plans is central to the effective implementation of key elements of the Basin Plan and securing the benefits for the community associated with managing Australia's largest river system in the national interest.

Basin States remain responsible for water resource planning and allocating water between the various uses—including irrigation, the environment, urban and social and cultural uses—within the sustainable diversion limits. The Basin Plan requirements are designed to incorporate and, where necessary, build on the various water planning arrangements of the Basin States.

Basin States are working towards preparing water resource plans to be accredited under the Act by 1 July 2019. In the meantime the Act provides, as a transitional measure, for the continuing operation of relevant Basin State water planning instruments (for a period defined in the Act and the *Water Regulations 2008* (Cth)) after the Basin Plan first takes effect by recognising these instruments as transitional and interim water resource plans. Provisions of transitional and interim water resource plans that are inconsistent with the Basin Plan override the Basin Plan to the extent of the inconsistency (see Chapter 10 for further discussion). Transitional arrangements will gradually be phased out as Basin State water resource plans are accredited in the period from 2015 to mid-2019. All Basin States have nominated at least one pilot water resource plan for earlier accreditation and have generally agreed on a work program to progressively finalise water resource plans during this period.

Water resource plans prepared by Basin States are required under the Act to go through an accreditation process to determine consistency with Basin Plan requirements (section 54(2)(a)). Water resource plans must be consistent with the Basin Plan water resource plan requirements set out in Chapter 10 of the Basin Plan and the sustainable diversion limits (section 55(2)). The process for accrediting water resource plans prepared by Basin States is outlined in section 63 of the Act.

Chapter 10 of the Basin Plan sets out the requirements for accreditation by the Minister of water resource plans prepared by Basin States. In addition to meeting these specific requirements a water resource plan must be consistent with the Basin Plan. The specific Chapter 10 requirements relate to matters such as rules for managing take for consumptive use, rules to meet environmental and water quality objectives, and must take account of existing and emerging risks to water resources. Water resource plans are accredited for a period of 10 years if they have not ceased to have effect under state law before that time (section 64 of the Act).

Amendments by Basin States will not have effect as part of an accredited water resource plan unless they are accredited under section 65. Regulations may be made under section 66 to define and provide for a process separate to section 65 for minor or non-substantive amendments to accredited water resource plans.

Currently the Basin States, with assistance from the MDBA,²⁷ are preparing water resource plans that meet Basin Plan requirements. Part of this early work towards water resource plan development is occurring within the Basin Plan Implementation Committee's water resource plan working group, which includes officials from the MDBA, each Basin State and the Australian Government Department of the Environment.

To ensure compliance with Basin Plan provisions, Basin States will need to review their legislation, regulation and policy frameworks as well as related decision-making and operational structures, processes and systems. The extent of the work varies across the Basin States. Some Basin States have already updated legislation—for example to ensure compliance with the Basin Plan water trading rules by removing restrictions on trade such as the volumetric limits on trade.

Water resource plan accreditation framework

Some Basin State submissions highlighted the importance of ensuring that the water resource plan accreditation process is as flexible and as streamlined as possible, noting that 36 water resource plans must be assessed and accredited between 2015 and 2019.

There is also a strong desire to ensure that there is clarity about the respective roles of all of the parties involved in the assessment and accreditation process, including the MDBA, the Australian Government Department of the Environment and Basin State agencies and that all parties approach the accreditation task respecting, rather than seeking to duplicate, others' roles and expertise.

One submission expressed concern that the water resource plan requirements in the Basin Plan are unnecessarily prescriptive, and cannot accommodate a fit-for-purpose approach. To address this, it proposed that bilateral agreements between the Commonwealth and Basin States be established to accredit state planning frameworks and processes or allow self-assessment of compliance with Basin Plan requirements.

The proposed change would replace assessment and accreditation of Basin State water resource plans by the MDBA and the Commonwealth Minister with arrangements in which water resource plans are both prepared and assessed by the Basin States. Any such arrangement would need to apply agreed standards or criteria for assessment to ensure the Basin Plan is fully implemented by 1 July 2019.

The Panel believes that the proposal represents a fundamental change to the Basin Plan's accreditation framework, recently settled after extensive consultation with the Basin States. The Panel considers that the proposal would represent a risk to the achievement of the Basin Plan's objectives and to the Australian Government's significant investments in the reforms to date. The Panel further considers that a robust and collectively accountable framework for Basin State water resource planning is necessary.

The Panel believes that implementing the proposal at this stage of the reform would be premature and would delay implementation of the Basin Plan beyond 2019. The next review of the Act (proposed by the Panel to be conducted in 2024—referred to in Recommendation 23) should consider the effectiveness of the accreditation framework and recommend any necessary changes at that time.

²⁷ Section 67 of the *Water Act 2007* (Cth) provides that the MDBA may advise, or assist, a Basin State in preparing a water resource plan, or an amendment of a water resource plan, to be given to the Minister for accreditation under section 63 or 65.

Instead, the Panel recognises that there will always be an inherent tension between the pursuit of a Basin-wide consistent approach and flexibility for Basin States to tailor their own water resource management to meet local needs and circumstances. The Panel believes that the framework established under the Act and the Basin Plan strikes an appropriate balance between these objectives, and considers that no regulatory changes are required.

Furthermore, the existing framework provides considerable scope for the parties to the assessment and accreditation process to resolve any process concerns at an operational level. The Panel notes the following operational level arrangements in place to support an effective accreditation process.

In most cases, the Basin State's existing water planning instruments will form the main component of accredited Basin State water resource plans thereby building on planning already undertaken by Basin States.

Basin States are being funded by the Commonwealth to implement the Basin Plan under the *National Partnership Agreement on Implementing Water Reform in the Basin*, including any work that is additional to state water planning processes necessary to prepare Basin Plan compliant water resource plans.

The MDBA, the Basin States and the Australian Government Department of the Environment are working together through the water resource plan working group to ensure that all parties' expectations in terms of the technical requirements, resourcing and timeframes required to develop water resource plans capable of being accredited by the Commonwealth Minister are aligned.

The MDBA has published the *Handbook for Practitioners: Water resource plan requirements*, which sets out a collaborative, risk-based and iterative approach to the preparation and assessment of water resource plans through bilateral engagement between the MDBA and each Basin State.

The Panel emphasises that it is necessary for the MDBA and Basin States to partner together, respecting each other's roles and expertise, in the development and assessment of water resource plans for accreditation. This involves Basin State agencies proactively raising potential issues with the MDBA and both parties cooperating on solutions. The Panel considers it important that the MDBA provides relevant and transparent guidance and demonstrates to Basin States the spectrum of circumstances and acceptable water resource plan responses that could be accredited.

2.8: WATER RESOURCE PLAN ACCREDITATION

The Murray–Darling Basin Authority and Basin States should work together in partnership, each respecting the others' roles, responsibilities and expertise, to facilitate the successful accreditation of all Basin State water resource plans by 1 July 2019.

Streamlining water resource plan accreditation processes

Some submissions, predominantly from Basin States and the MDBA, proposed some changes to the Act's water resource plan accreditation process aimed at ensuring that the process is as streamlined and flexible as possible while delivering on intended objectives.

A number of other proposals were put forward to streamline water resource plan accreditation processes. In some cases the Panel considered that the proposals had not been adequately explained, particularly in terms of the problem that the proposal was seeking to address and the kind of amendment that would be necessary. The Panel considers the accreditation processes set out in the Act to be generally sound and is cognisant that they have not yet been tested in practice. For these reasons the Panel has taken a cautious approach to recommending changes to the current accreditation process set out in the Act.

One submission suggested removing section 63(2) of the Act, which provides that if a water resource plan area is adjacent to a water resource plan area in another Basin State, the proposed water resource plan must be prepared in consultation with that other Basin State. The argument put forward is that this is an unnecessary and duplicative overlay to the existing long-standing cooperative arrangements enshrined in the Murray–Darling Basin Agreement (Schedule 1 to the Act). The Panel has considered this proposal and notes that the Agreement does not impose a legally binding obligation on Basin States to consult with neighbouring Basin States when they are developing water-sharing arrangements for adjacent catchments.

The Panel therefore is of the view that section 63(2) is an important protection of the objects of the Act against the potential for one Basin State to introduce water resource management arrangements that impact on a neighbouring Basin State without the affected Basin State having the opportunity to engage on the proposed changes to mitigate those impacts.

While no clear problems with section 65 were articulated by Basin States during the Review, the Panel supports the Australian Government exploring, in consultation with the Basin States, the possibility of streamlining the process relating to water resource plan amendments under section 65 of the Act with the aim of ensuring that implementation of the Basin Plan through Basin State frameworks is as responsive as possible.

The Panel notes that currently regulations can be made under sections 63(9) and 65(9) of the Act to deal with the time and process to be taken for the accreditation of a water resource plan or an amendment to a water resource plan. Regulations may also be made under section 66 that define and provide for a process separate to section 65 for minor or non-substantive amendments to accredited Basin State water resource plans. To date, regulations have not been made under any of these provisions.

The proposal to make regulations would require further consideration by the Australian Government to determine approaches that minimise regulatory impact and avoid any risk to the objects of the Act and the Basin Plan. However, in each case the starting point would need to be based on the existing water resource plan requirements of Chapter 10 of the Basin Plan. Requirements such as achieving the sustainable diversion limit or maintaining water quality may need to be ring-fenced from any alternative assessment pathways to ensure the overall integrity of the Basin Plan. Criteria for determining what constitutes a minor or non-substantive amendment to a Basin State water resource plan would also need to be developed.

RECOMMENDATION 6

The Panel recommends that the Australian Government consult Basin States on:

- (a) making regulations under section 66 of the Act to avoid the need for minor, non-substantive amendments to water resource plans to go through a full accreditation process**
- (b) amending the Act to streamline accreditation processes for water resource plan amendments with the aim of ensuring that implementation of the Basin Plan through Basin State frameworks is as responsive as possible.**

Water resource plan accreditation and Basin Plan water trading rules

One submission expressed concern about the potential for inadvertent accreditation of water resource plan provisions that are inconsistent with the Basin Plan water trading rules, and therefore proposed that the Act should provide that the water trading rules prevail over accredited water resource plan provisions to the extent of any inconsistency. The Panel notes that a key principle of the Act is that the Basin Plan will generally take effect through accredited water resource plans prepared by the Basin States. The water trading rules are unusual in that

they mostly have direct legal effect (i.e. are not operationalised through water resource plans), with the exception of some rules mainly relating to groundwater trade. The water resource plan accreditation requirements relating directly to trade are very limited (Part 8 of Chapter 10 of the Basin Plan). In summary these relate to groundwater trade and trade between groundwater and surface water resources. If surface water trading rules are included in the documents submitted as part of the water resource plan for accreditation, this material will not be considered for accreditation.

The Panel notes that if the Basin State water resource plan accreditation process is conducted in a careful and proper way, provisions inconsistent with the Basin Plan will not be included in the material forming an accredited water resource plan.

2.9: BASIN STATE WATER RESOURCE PLANS AND BASIN PLAN WATER TRADING RULES

The Murray–Darling Basin Authority and the Australian Competition and Consumer Commission should work together on those aspects of Basin State water resource plans that relate to trade, to ensure that accredited provisions are consistent with the Basin Plan water trading rules.

Division 2, Subdivision E—Water resource plans prepared by the Authority and adopted by the Minister

There is provision for plans to be prepared by the MDBA and adopted by the Commonwealth Minister in exceptional circumstances where the Commonwealth and the Basin State are unable to reach agreement (section 68 of the Act). The Panel understands that this power would only be invoked as a last resort. One submission suggested that this provision could be removed as the intention is to implement the Basin Plan in a cooperative fashion and this provision does not recognise and support that cooperative intent. The Panel does not agree that the provision should be removed as the provision is required as a last resort. While the Panel recognises that it would be extremely unlikely that a Basin State would or could not develop a water resource plan, the need to be able to implement the Basin Plan fully, means that there must be some capacity to ensure that water resource plans are in place in all areas, and this provision is in place for that purpose.

A common language for water resource plans

The Panel also supports in principle the concept of common terminology (or language) for Basin State water resource plans, as proposed in one submission to the Review.

The Australian Bureau of Agricultural and Resource Economics and Science recently reported that the introduction of the Basin Plan may go some way towards improving consistency between Basin States through its system-wide approach to water management.²⁸ The Panel notes, however, that accredited Basin State water resource plans, being first and foremost state instruments, will necessarily continue to have different terminology and formats as dictated by their own legal frameworks. The differences that exist include definitions of water property rights and measurement and security.

The time and costs involved with moving towards a uniform language are likely to be significant and would need to be given effect through legislation in each Basin State. This is beyond the scope of this Review. However, the Panel encourages all Basin States to proactively take opportunities to work towards greater uniformity, noting that there would be benefits for regulatory clarity across Basin States for water users, including for market participants who may find the differences hard to understand.

²⁸ Gibbs, C. Harris-Adams, K. & Davidson, A., 2013, *Review of Selected Regulatory Burdens on Agriculture and Forestry Businesses*, ABARES.

2.10: HARMONISATION OF STATE WATER PLANNING AND MANAGEMENT TERMINOLOGY

All Basin State governments should proactively take opportunities to work towards greater uniformity of terminology used under their water planning frameworks.

Division 4—Allocation of risks in relation to reductions in water availability

The Act's risk assignment provisions under Division 4 draw on the relevant provisions of the National Water Initiative (clauses 48 to 50, which are reproduced in Schedule 3A to the Act). The National Water Initiative risk assignment framework was intended to ensure water access entitlements established through transparent processes were respected and could not be arbitrarily eroded to any significant extent without compensation, while also recognising that agribusiness is subject to a range of natural and climatic risks that are a normal part of doing business in that sector.²⁹

The Act codifies the Australian Government's obligations under the National Water Initiative risk assignment framework, providing that the Australian Government must take steps to manage its share of the impact of the reduction in Basin Plan sustainable diversion limits on the holders of water access entitlements as well as any change in the reliability of water allocations arising from other changes to the Basin Plan. It provides that the Basin Plan must allocate the risks of the reduction between the Australian Government, Basin States and entitlement holders and set out any change in the reliability of water allocations arising from other changes to the Basin Plan.

The current Basin Plan provides that 100 per cent of the sustainable diversion limit reduction is the result of changes in Australian Government policy (Basin Plan section 6.13(4)). This means that the Australian Government has a potential liability in relation to reductions in allocations or changes in reliability that result from the Basin Plan diversion limit reduction. The Basin Plan also states that nothing in the Basin Plan requires a change in the reliability of water allocations for reasons other than the diversion limit reduction.

Successive Australian Governments have agreed to manage the sustainable diversion limit reduction by recovering all of the water that is necessary to bridge the gap between the baseline diversion limit and sustainable diversion limit set out in the Basin Plan. The Water Recovery Strategy outlines the approach to recovering the water to bridge the gap to ensure that the risk framework will not be triggered.

If, despite the Australian Government's efforts, the water allocation of an entitlement holder is reduced or there is a change in the reliability of the allocations and the reduction or change is attributable to the Australian Government's share of the reduction, the holder would be entitled to compensation under section 77 of the Act, subject to other relevant statutory criteria being met.

A number of industry stakeholders expressed a view that sections of the Act dealing with the allocation of risks (Subdivision A, Division 4, Part 2 of the Act) resulting from reductions in diversions are redundant and therefore should be removed or amended to reflect the Australian Government's responsibility to compensate for changes as a result of the Basin Plan or the Act (100 per cent of the risk reliability). Stakeholders also proposed that the Australian Government's commitment to bridging the gap be legislated in the Act.

The Panel does not consider it appropriate to repeal the risk assignment provisions. These provisions are likely to be of continuing importance, particularly for future Basin Plans and, in the event that the sustainable diversion limit gap is not bridged in a catchment for reasons beyond the Australian Government's control, the risk assignment provisions are important for ensuring that entitlement holders have access to compensation.

²⁹ National Water Commission, 2014, *Australia's Water Blueprint: National Reform Assessment 2014*.

However, the Panel considers that the intent of the risk assignment provisions could be made clearer by including a new provision that clearly states that, for the purposes of an amount payable by the Australian Government, there should be a presumption that the entitlement holder should be fully compensated for any reduction in the market value of the entitlement attributable to the Australian Government share of the diversion limit reduction.

RECOMMENDATION 7

The Panel recommends that a new provision be included in section 77(5) of the Act to require that, for the purposes of an amount payable by the Commonwealth, regard must be had to a presumption that a water access entitlement holder should be fully compensated for any reduction in the market value of the entitlement that is reasonably attributable to the Commonwealth share of the diversion limit reduction, consistent with sections 77(4) and 77(6).

Beyond the Australian Government, adoption of the National Water Initiative risk assignment framework is limited to New South Wales and Queensland only. The NWC considers that this may be because it is considered difficult to interpret and apply and jurisdictions have generally put other arrangements in place, including through carryover and trade provisions.³⁰ The Panel believes that all Basin States that have not adopted the framework in their own legislation should provide clear and transparent information on the alternative arrangements that have been put in place to build entitlement holders' confidence that entitlements will not be eroded without appropriate compensation in relevant circumstances.³¹

2.11: RISK ASSIGNMENT FRAMEWORK

Basin States that have not adopted the National Water Initiative risk assignment framework in their own legislation should provide clear and transparent information on the alternative arrangements that have been put in place to build entitlement holders' confidence that entitlements will not be eroded without appropriate compensation in relevant circumstances.

2.5 Part 2AA Water for the Environment Special Account

The Act was amended in 2012 to establish a Water for the Environment Special Account. Under these provisions over \$1.7 billion has been appropriated to the Special Account for efficiency measure projects and for easing or removing constraints onto the delivery of environmental water.

Efficiency measure projects are expected to commence in 2015–16 and deliver 450 GL of additional water available for environmental use. The additional water can only be recovered through projects that ensure social and economic outcomes for Basin communities are maintained or improved. Funding of over \$1.5 billion is available from the Special Account to support the recovery of this additional environmental water over the nine years to 2023–24.

The Special Account also provides funding for the removal or relaxation of constraints that limit the outcomes achievable with the available environmental water. Funding of \$200 million under the Special Account is available for this purpose.

Under the *2013 Intergovernmental Agreement on Implementing Water Reform in the Murray Darling Basin*, the Australian Government has committed to prepare program guidelines and consult closely with Basin States on the design of efficiency measure programs (including targeted volumes of water recovery and their regional

³⁰ National Water Commission, 2014, *Australia's Water Blueprint: National Reform Assessment 2014*.

³¹ National Water Commission, 2009, *Second biennial assessment of progress in implementation of the National Water Initiative*.

distribution) and on arrangements for their subsequent delivery and implementation, particularly in securing farm-level participation and the achievement of socially and economically neutral or beneficial outcomes.

The Australian Government currently administers a number of programs similar to the proposed efficiency measures program. These programs are being examined to identify the preferred delivery model for efficiency measures with a view to consulting with Basin States and with stakeholders in late 2014 and through 2015 on the proposed program design.

A number of submissions sought to provide for recovery of up to 450 GL to allow flexibility to utilise funds to respond to constraints management and social and economic outcomes, and sought to ensure that the activities funded under the Special Account would not have inequitable outcomes. There were also a number of proposals for Special Account funding to be used more broadly, such as to fund environmental works and measures.

The Panel notes that, similarly to the sustainable diversion limit adjustment mechanism itself, the Special Account is a fundamental feature of the Basin Plan and that the extent to which it delivers on its object and the objects of the Act more broadly will hinge on the program design for efficiency measures and associated implementation decisions.

It is clear from submissions that some stakeholders do not yet have confidence that the recovery of the additional 450 GL of water will have neutral or improved social and economic outcomes. The Panel notes that the Basin Plan requires social and economic neutrality for efficiency measures compared with benchmark outcomes as evidenced by (a) the participation of consumptive water users in projects that recover water through works to improve irrigation water use efficiency on their farms or (b) alternative arrangements proposed by a Basin State that are assessed by that state as achieving water recovery with neutral or improved social and economic outcomes.

2.12: EFFICIENCY MEASURES

The Australian Government should engage and communicate with stakeholders at an early stage on the program design for efficiency measures, demonstrating clearly how the additional water is to be recovered while maintaining the benchmark social and economic outcomes of the Basin Plan.

The Murray–Darling Basin Authority should also monitor the impact of efficiency measures as part of its broader Basin Plan Monitoring and Evaluation Program so that the impacts can be appropriately scrutinised and made transparent.

2.6 Part 2A—Critical human water needs

Part 2A provides that the Basin Plan must be prepared having regard to the fact that the Australian Government and the Basin States have agreed that critical human water needs are the highest priority water use for communities who are dependent on Basin water resources and that, to give effect to this priority in the River Murray System, conveyance water will receive first priority from the water available in the system. Critical human water needs are the needs for a minimum amount of water, which can only be reasonably provided from Basin water resources, required to meet:

- (a) core human needs such as drinking, food preparation and hygiene
- (b) essential community services including emergency services, hospitals and schools
- (c) commercial and industrial purposes, essential for social or economic reasons or national security reasons.

The Panel received no submissions related to these provisions of the Act.

Chapter 3: Audits by National Water Commission

The purpose of Part 3 of the *Water Act 2007* (Cth) (the Act) is to provide for five-yearly audits of the effectiveness of implementation of the Basin Plan and water resource plans. The five-yearly audits are an important element of the governance arrangements for Basin water management established by the Act.

Section 88 of the Act requires the first audit to be conducted within five years of the commencement of the Act, and requires subsequent audits to be conducted within five years of the most recent audit. Section 89 requires copies of the report to be provided to the Commonwealth Minister, the Murray–Darling Basin Authority (MDBA) and Basin State Ministers.

In March 2013, the National Water Commission (NWC) prepared its first report, *Murray–Darling Basin Plan implementation: initial report*. Reflecting the limited time since the commencement of the Basin Plan six months earlier, the initial report highlighted future issues for particular attention in subsequent Basin Plan audits.

The NWC noted that the aim of the report was to improve public confidence, strengthen accountability and promote continuous improvement in management of Basin water resources.

On 25 September 2014, the *National Water Commission (Abolition) Bill 2014* (Cth) (the NWC Abolition Bill) was introduced into the Australian Parliament to give effect to the Australian Government's 2014–15 Budget announcement that the NWC would be abolished from the end of 2014 and some of its responsibilities reallocated to other agencies. The NWC Abolition Bill will close the NWC with effect from 1 January 2015 by repealing the *National Water Commission Act 2004* (Cth). The NWC Abolition Bill also amends Part 3 of the Act to provide for the five-yearly Basin Plan audits to be undertaken by the Productivity Commission on an ongoing basis. Audits will continue to assess the effectiveness of the implementation of the Basin Plan and water resource plans.

The NWC Abolition Bill provides that the Productivity Commission will be required to conduct its first audit by 31 December 2018 and to deliver its report to the Minister with portfolio responsibility for the Productivity Commission (Productivity Minister). The Productivity Commission will also be required to conduct subsequent audits on a five-yearly basis. The NWC Abolition Bill will preserve the requirement for copies of the report to be provided to the MDBA and relevant State Ministers for each of the Basin States.

In addition to transferring the Basin Plan audit function to the Productivity Commission, Part 3 will also be amended to enshrine as a statutory function triennial assessments of progress by National Water Initiative parties towards achieving the National Water Initiative outcomes and objectives. The first triennial assessment to be conducted by the Productivity Commission must be delivered to the Productivity Minister by 31 December 2017, and subsequent triennial assessments are to be delivered on an ongoing basis.

Stakeholders expressed strong support for the continuation of the five-yearly audits of the Basin Plan following the proposed closure of the NWC. Stakeholders clearly valued the role of the NWC. The audit reports are seen as an important tool for ensuring that the Basin Plan is effectively implemented.

The Panel considers that the NWC Abolition Bill addresses the concerns of most stakeholders around the closure of the NWC by providing for an independent body with significant monitoring and reporting expertise, the Productivity Commission, to undertake the regular auditing of the Basin Plan. The NWC Abolition Bill provides that the next Basin Plan audit will be undertaken by the Productivity Commission in 2018 and at further five-yearly intervals. The Panel considers that 2018 is an appropriate time for the Productivity Commission to assess

key aspects of Basin Plan implementation, as the Basin Plan water trading rules have been implemented from July 2014, a number of Basin State water resource plans are anticipated to have been accredited by 2018, and environmental watering actions will have been undertaken under the Basin Plan Environmental Watering Plan and Basin-wide environmental watering strategy (currently expected to be released in November 2014).

Moreover, given the Productivity Commission's significant economic policy expertise, the transfer of former NWC functions to the Productivity Commission is likely to ensure that water continues to be recognised as an enabler of economic growth. This is consistent with the NWC's finding in its recent report *Australia's water blueprint: national reform assessment 2014* that water reform needs to increasingly focus on infrastructure, industry and market-related issues. The Panel expects that the Productivity Commission will bring a whole-of-government economic perspective to the five-yearly audits, while also ensuring that monitoring of the implementation of environmental and social aspects of the Basin Plan continues.

In addition, the Panel notes that the closure of the NWC will reduce the number of bodies involved solely in national water management and lead to reductions in some reporting burdens—for example the discontinuation of the annual national performance reports of rural water providers, which relied on voluntary reporting by a number of rural water providers.

3.1: BASIN PLAN AUDITS

The continuation of five-yearly audits of Basin Plan implementation by an independent expert body is essential to the successful delivery of the Basin Plan.

Chapter 4: Basin Water Charge and Water Market Rules

Part 4 of the *Water Act 2007* (Cth) (the Act) supports consistency in Basin water-charging regimes and efficiency in Basin water markets by enabling the Commonwealth Minister, with the support of the Australian Competition and Consumer Commission (ACCC), to make Basin-wide water charge and market rules. These rules contribute to the Basin water charging objectives (Schedule 2 of the Act) and Basin water market and trading objectives (Schedule 3 of the Act) which are based on clauses 64–77 and 58–63 of the National Water Initiative respectively.

Part 4A allows Basin States to extend the geographical application of the ACCC's regulatory role in relation to water charges and water markets. The intent of Part 4A is to allow Basin States to choose to achieve a uniform approach to regulation across their jurisdictions. The ability to opt in also applies to jurisdictions outside the Basin, including Western Australia, Northern Territory and Tasmania, should they choose to.

Part 4 supports the Act's objects to maximise the net economic returns to the Australian community from the use and management of the Basin water resources (section 3(d)(iii)), and to achieve efficient and cost-effective water management and administrative practices in relation to Basin water resources (section 3(g)). This is achieved through a number of measures intended to support efficient and effective water trading, including facilitating efficient interstate and intrastate trade, minimising transaction costs, enabling an appropriate product mix, protecting the needs of the environment, and protecting third-party interests.

There are currently four sets of rules made under Part 4: the *Water Charge (Termination Fees) Rules 2009*, *Water Charge (Infrastructure) Rules 2010*, *Water Charge (Planning and Management Information) Rules 2010* and *Water Market Rules 2009*. See Box 4.1 for information on these rules and on the Basin Plan water trading rules.

The ACCC is empowered to take action to enforce compliance with the rules made under Part 4 of the Act. Annual monitoring reports by the ACCC assess compliance with the rules.

BOX 4.1: WATER MARKET, WATER CHARGE AND BASIN PLAN WATER TRADING RULES

Water Market Rules 2009

These rules regulate transformation, which is the process whereby an irrigator transforms an irrigation right into a water access entitlement. An irrigator must transform an irrigation right³² into a water access entitlement³³ in order to trade their permanent right to water to a buyer outside their irrigation network. The rules prohibit an irrigation infrastructure operator from preventing or unreasonably delaying an irrigator from transforming all or part of their irrigation right into a water access entitlement, which would act as a barrier to trade.

Water Charge (Termination Fees) Rules 2009

These rules cap the amount that an irrigation infrastructure operator can charge an irrigator who terminates their access to the operator's irrigation network. The termination fee rules provide a statutory limit on the discretion of irrigation infrastructure operators to impose termination fees that discourage or prevent their customers from trading their water and leaving the network.

Water Charge (Infrastructure) Rules 2010

These rules govern infrastructure operators' fees and charges for bulk water services and irrigation infrastructure operators' charges for access to the irrigation network and related services. The rules follow a three-tiered regulatory structure applicable to different operators depending on the ownership and size of each operator. They require transparency of all infrastructure operators' regulated charges, with greater obligations applying to larger operators and non-discriminatory pricing requirements applying to member-owned operators.

Water Charge (Planning and Management Information) Rules 2010

The Planning and Management Information Rules require Basin State government departments and water authorities to publish information on their water planning and management costs, activities and charges. They do not include a determination process for planning and management charges.

Basin Plan water trading rules

The Basin Plan water trading rules, set out in Chapter 12 of the Basin Plan, are designed to provide greater clarity and consistency in the operation of the Basin's water markets and ensure that trade is free of certain restrictions. The water trading rules also ensure that location-related restrictions are not applied to trade within and between regulated surface water systems and within unregulated surface water systems, except where these restrictions are necessary for certain defined reasons. The water trading rules require that certain information be made available on water announcements, the characteristics of water access rights, and the water trading rules applied by Basin State governments and irrigation infrastructure operators.

The Basin Plan water trading rules are enforced by the Murray–Darling Basin Authority.

32 An irrigation right is a right—other than a water access right or a water delivery right—that a person has against an irrigation infrastructure operator to receive water.

33 A water access entitlement is a perpetual or ongoing entitlement, by or under a law of a state, to exclusive access to a share of the water resources of a water resource plan area.

4.1 Basin water markets

Basin water markets comprise a number of separate water markets, each defined by water system boundaries and each with its own characteristics. The Basin's water markets range from the smaller, generally unconnected markets in the Northern Basin to the large, connected Southern Basin market. Each Basin State has its own legislative and administrative arrangements in place to facilitate the operation of its water markets.

The Basin water markets have evolved over many years of reform since the 1980s, including through reforms agreed under the *1994 Council of Australian Governments (COAG) Water Reform Framework*, National Competition Policy reforms during the mid-1990s and the National Water Initiative in 2004.

The Act legislated measures and institutional arrangements that are consistent with National Water Initiative principles and build on these earlier reforms.

Water markets operating within the Basin are the most active and developed of Australia's water markets, which are regarded as an international success story.

The National Water Commission (NWC) estimated that the value of entitlements on issue in the Basin in 2012–13 at approximately \$13 billion using average prices per megalitre for that year.³⁴ Overall, the turnover in Australia's water markets for 2012–13 was \$1.4 billion, comprising around \$1.1 billion in entitlement trade and almost \$300 million in allocation trade.³⁵ The ACCC noted in its submission that water allocation trade had more than quadrupled (by volume) since 2007–08.³⁶

A number of reports have found that water markets are making a major contribution to a key objective of the National Water Initiative and the Act: to optimise the economic, social and environmental value of water.³⁷ Water trading benefits individuals and industry by providing increased flexibility in water use and production decisions. It allows water users to adapt to prevailing economic and environmental conditions such as commodity prices and drought. The productivity gains associated with optimal decisions by individuals and business in turn benefit the economy and the nation. Ensuring that water markets are as efficient and effective as possible is important for locking in these gains and building on them in the future.

In addition to considering the effectiveness of the Act in meeting its objects relating to efficient and effective markets, this chapter also addresses:

- (a) the extent to which water trading is occurring effectively and efficiently
- (b) the extent to which water is being used in higher value uses.

These specific terms of reference are addressed below, focusing on how the Act and its instruments, particularly those made under Part 4 of the Act, support efficient and effective markets and optimal water use. To provide a full picture of how the Act supports markets and water trading, this chapter also deals with the Basin Plan water trading rules made under Part 2 of the Act and included in Chapter 12 of the Basin Plan.

³⁴ National Water Commission, 2013, *Australian water markets report 2012–13*.

³⁵ National Water Commission, 2013, *Australian water markets report 2012–13*.

³⁶ Australian Competition and Consumer Commission submission to the Review of the *Water Act 2007* (Cth), dated 4 July 2014.

³⁷ National Water Commission, 2013, *Current issues influencing Australian water markets*; Australian Competition and Consumer Commission, 2014, *ACCC Water Monitoring Report 2012–13*.

4.2 Efficient and effective Basin water trading

The Basin water market and trading objectives and principles are set out in Schedule 3 of the Act. The objectives are shown in Box 4.2.

BOX 4.2: BASIN WATER MARKET AND TRADING OBJECTIVES

The objectives of the water market and trading arrangements for the Basin are:

- (a) to facilitate the operation of efficient water markets and the opportunities for trading, within and between Basin States, where water resources are physically shared or hydrologic connections and water supply considerations will permit water trading; and
- (b) to minimise transaction cost on water trades, including through good information flows in the market and compatible entitlement, registry, regulatory and other arrangements across jurisdictions; and
- (c) to enable the appropriate mix of water products to develop based on water access entitlements which can be traded either in whole or in part, and either temporarily or permanently, or through lease arrangements or other trading options that may evolve over time; and
- (d) to recognise and protect the needs of the environment; and
- (e) to provide appropriate protection of third-party interests.

Some submissions noted that there had been improvements in the efficiency of water markets and recognised the contribution of the Act in reducing barriers to trade.

Others argued that water trading has become more efficient as water markets have matured and that this would have occurred in the absence of the Act. One submission stated: ‘water is now firmly established as a commodity with a value which is applied by users, both irrigators and the environment’.

In assessing the extent to which trading is efficient and effective, the Panel has drawn on the NWC’s prerequisites for efficient and effective markets as outlined in its 2011 report *Strengthening Australia’s water markets*. The prerequisites, which the NWC notes are common to all markets, are legal (or regulatory) certainty, transparent market rules, effective governance, timely and accurate information, low transaction costs, confidence in water market intermediaries and adequate enforcement of market rules and regulations. Because this Review is focused on the Act, the Panel’s focus is particularly on how the Act and policies of the Australian Government contribute to these foundations of effective and efficient water trading.

Regulatory certainty

The Panel notes the NWC’s finding that regulatory certainty has been somewhat enhanced under National Water Initiative reforms, including the unbundling of water rights from land, the establishment of statutory water resource plans and entitlements, and water registers in Basin States.³⁸ In relation to unbundling of water rights, the ACCC submitted that Basin States should consider further unbundling water access rights into their distinct parts, including storage, carryover and delivery where appropriate.

The Panel notes that Basin States are responsible for water registers, which are official records of water access entitlements. Under the National Water Initiative, water access entitlements should be recorded in reliable,

³⁸ National Water Commission, 2011, *Strengthening Australia’s Water Markets*.

publicly accessible water registers. The NWC notes that water registers underpin public confidence by showing ownership, location, encumbrances, volume of water attributable to each licence and trading activity. Across the Basin there were 15 registers operating in 2012–13, of which 13 were publicly accessible.³⁹

The NWC recently reported that there has been some improvement in the functionality of state-based registers, with Victoria, New South Wales, Queensland and South Australia all having online registers that have improved the efficiency of transactions and access to market information.⁴⁰

The Australian Government recently announced the discontinuation of the National Water Markets System program, which aimed to strengthen national water markets by improving access to water market information, improving water trade management and providing a mechanism for the development of processes to assist with seamless data transfer in interstate water trading through interoperable registries (see further discussion on this program below under ‘Timely and accurate information’). Given that the National Water Markets System program has been discontinued, the Panel considers that other options need to be taken to address some of the concerns raised in this Review and to deliver benefits for water markets and water market participants more broadly.

During consultations the Panel heard about issues faced by financiers in taking security over irrigation rights provided by irrigation infrastructure operators where no central register exists, as well as their concerns about using inconsistent state-based registers for details of statutory water entitlements. The Panel notes that a review of the *Personal Property Securities Act 2009* (Cth) is underway. In a draft consultation paper released on 22 September 2014, that review recommended that water rights be brought within the scheme of the Personal Property Securities Act and therefore included on the Personal Property Securities Register. The Personal Property Securities Act review is due to report by the end of January 2015. Addressing these concerns will require the cooperation of the Australian and state governments, as the Personal Property Securities Act is supported by an intergovernmental agreement, the *Personal Property Securities Law Agreement 2008*, and the referral of state powers.

Effective market rules

The Water Market Rules, Water Charge (Termination Fees) Rules and Basin Plan water trading rules have a combined aim to promote efficient and effective water trading in the Basin.

Water Market Rules

The Water Market Rules regulate the transformation of the whole or part of an irrigation right (refer to Box 4.1). Relatively few submissions dealt with the Water Market Rules, which suggests that the process of transformation and trade of water has generally become business as usual for irrigation infrastructure operators and their customers.

The ACCC’s water monitoring reports have found that the Water Market Rules have assisted in reducing irrigation infrastructure operator barriers to trade, while the impact on irrigation infrastructure operators has been manageable to date. Irrigators are increasingly electing to retain their connection to the irrigation infrastructure operator network when they transform their irrigation rights.

One submission did, however, suggest that the Act be amended to mandate transformation, arguing that would be simpler for irrigators and less costly for irrigation infrastructure operators and governments than the current voluntary approach. It would then be possible to repeal the Water Market Rules altogether. During consultations, the Panel heard that transformation of irrigation rights may increase an individual’s access to credit and potentially do so at lower cost, as water held against irrigation rights provides lenders with less security than statutory water access entitlements.

³⁹ National Water Commission, 2013, *Australian water markets report 2012–13*.

⁴⁰ National Water Commission, 2014, *Australia’s Water Blueprint: National Reform Assessment 2014*.

The Panel does not support imposing mandatory transformation at this time. Industry does not appear to consider that the Water Market Rules impose an undue regulatory burden, and a mandatory process would incur costs for many individuals who may not wish to transform their irrigation rights.

The ACCC estimates that just over 13 per cent of irrigation rights held against reporting irrigation infrastructure operators have been transformed to date, suggesting that a significant volume of irrigation rights would require processing.⁴¹ The processing costs borne by irrigation infrastructure operators could be expected to be passed on to all members of the irrigation infrastructure operator.

Water Charge (Termination Fees) Rules

The Water Charge (Termination Fees) Rules support the efficient functioning of water markets by placing a limit on the termination fees an operator can charge. These rules aim to ensure a reasonable balance between investment certainty for operators and flexibility for irrigators. The Panel received no submissions on these rules, which may suggest that they are operating effectively.

Basin Plan water trading rules

The Basin Plan water trading rules, made under the Act and set out in Chapter 12 of the Basin Plan, aim to provide greater clarity and consistency in the operation of the Basin's water markets and remove a range of restrictions on trade. The Basin Plan water trading rules commenced on 1 July 2014.

The Basin Plan water trading rules require that certain information be made available on water announcements, the characteristics of water access rights, and the water trading rules applied by Basin State governments and irrigation infrastructure operators. One submission noted that the efficiency and effectiveness of water trading will be enhanced by the water trading rules made under the Act.

The ACCC notes that the effectiveness of the Basin Plan water trading rules will depend on how the rules are implemented by Basin States and irrigation infrastructure operators and enforced by the Murray–Darling Basin Authority (MDBA), and the degree to which the trading-related provisions of water resource plans are fully consistent with the rules.

Many submissions noted that because the Basin Plan water trading rules had only just commenced it was difficult to assess their contribution to effective and efficient water trading. Others suggested changes to the water trading rules, including the removal of the term 'over-allocation', the removal of rules relating to water delivery rights and the revision of rules that are considered to be discriminatory (e.g. section 12.05, which excludes Basin States from being pursued for damages suffered by a person).

The Panel notes that there are some specific reasons underpinning the particular rules raised in submissions, including that states have certain immunities against the application of Commonwealth laws, which prevent section 12.05 from applying to Basin States.

Many submissions considered regulation of trade of water delivery rights to be unnecessary since water delivery rights are non-transferable outside the relevant irrigation infrastructure operator network and are generally sold with land. The trade of water delivery rights is provided for under the Act (tradeable water rights means water access rights, water delivery rights or irrigation rights). The Basin Plan water trading rules enable irrigators to trade their access to the irrigation network to another irrigator rather than terminate their water delivery right and incur a termination fee.

41 Australian Competition and Consumer Commission, 2014, *ACCC Water Monitoring Report 2012–13*.

Additionally, the Basin Plan water trading rules provide for a range of factors that may be taken into account in deciding whether a restriction on trade of a water delivery right can be reasonably imposed by the irrigation infrastructure operator (section 12.29), including:

- (a) connectivity between specific parts of the irrigation infrastructure operator's network
- (b) capacity in the parts of irrigation infrastructure operator's network to which water would potentially be delivered under the traded water delivery right
- (c) whether the proposed trade would result in the water delivery right being held by a person who does not own or occupy land in the area serviced by the irrigation infrastructure operator.

Others suggested a cost–benefit analysis of each of the Basin Plan water trading rules. In this regard, the Panel notes that the Basin Plan regulation impact statement included a cost–benefit analysis of the water trading rules. The regulation impact statement emphasised that providing a consistent set of rules across the Basin for trade will improve the efficiency of the water market, with benefits for irrigators as water can move more easily to its optimal use.

Under the Basin Plan's monitoring and evaluation framework, the implementation of the Basin Plan water trading rules is subject to annual reporting by the MDBA and reporting every five years on their facilitation of efficient and effective water markets and tradable water rights reaching the most productive use.

Given that the Basin Plan water trading rules have only recently commenced, the Panel does not support the proposed changes. The Panel considers that the preferred course of action is to take an evidence-based approach to reviewing the effectiveness of the water trading rules over the medium to longer term once outcomes can be assessed.

4.1: BASIN PLAN WATER TRADING RULES

The Basin Plan water trading rules, which commenced on 1 July 2014, should be implemented in their current form and should then be assessed over the medium to longer term when assessment of outcomes is possible, before any changes are made to the rules.

One submission noted that the ability of the Basin Plan water trading rules to promote efficient water trading also depends on effective arrangements to reconcile inter-valley and interstate water trade between individuals with wholesale-level state water accounts, which are governed under Schedule D of the Murray–Darling Basin Agreement. The ACCC has similarly highlighted examples of restrictions on water allocation trade when storages were full or close to full. The suspensions were imposed to prevent trades that would reduce the ability of the destination state to capture subsequent inflows and thereby reduce the amount of water that would be available to water access entitlement holders in the following year.

The MDBA is currently in the process of reviewing Schedule D and dealing with the issue of inconsistency between the Basin Plan water trading rules and Schedule D, and working with relevant Basin States to consider amendments to Schedule D.

One example of an inconsistency is that Schedule D currently allows for wider usage of exchange rates than the Basin Plan water trading rules permit. Section 12.21 of the Basin Plan water trading rules prohibits the trade of water access entitlements within and between regulated systems if an exchange rate is to be applied as a condition of the trade. An exchange rate is a method to address differences in water entitlements traded within and between regulated systems. This is because differences may occur in delivering the volume of water when water is traded to a new location. The ability to deliver water may be affected by a range of factors including transmission losses and opportunities for delivery (e.g. from a different dam storage).

Noting the potential for any inconsistencies to reduce stakeholder confidence and clarity and impede efficient and effective trading, the Panel believes that the MDBA and Basin States should progress work on addressing any inconsistencies between Schedule D of the Murray–Darling Basin Agreement and the Basin Plan water trading rules as a matter of priority.

4.2: BASIN PLAN WATER TRADING RULES: INTERACTION WITH SCHEDULE D OF THE MURRAY–DARLING BASIN AGREEMENT

The Murray–Darling Basin Authority and Basin States should progress work on addressing any inconsistencies between Schedule D of the Murray–Darling Basin Agreement and the Basin Plan water trading rules, such as differences in how exchange rates are used within and between regulated systems, as a matter of priority.

Effective governance

Under the Act, the ACCC is responsible for monitoring and enforcing the water market and charge rules and the MDBA is responsible for the implementation and enforcement of the Basin Plan water trading rules.

Some submissions suggested that the regulation of the Basin Plan water trading rules should be transferred from the MDBA to the ACCC. This appears to be partly driven by a desire to streamline regulation and minimise the number of agencies irrigation infrastructure operators need to interact with, as well as a view that the ACCC will deliver more effective and consistent enforcement. One submission also noted that not all Basin States have amended their legislation to be compliant with the water trading rules, and hence expressed concerns about the potential for uneven enforcement of the rules, noting that irrigation infrastructure operators had made great efforts to become compliant.

The Basin Plan water trading rules provide similar or, in some cases, identical rules for Basin State and irrigation infrastructure operator administered trades, so it is appropriate that trading activity is regulated by a single agency to ensure consistent application of the rules. The Panel also recognises that the water trading rules are linked to river operations, water resource planning (surface water and groundwater) and environmental outcomes, which are key areas in managing water entitlements. The MDBA incorporates knowledge from these multiple areas in its decision-making framework for the purposes of monitoring and enforcing the water trading rules, including assessing allowable restrictions on trade due to physical or environmental reasons.

The Panel understands that this assessment requires an understanding of the underlying water sharing rules (which are governed by the Murray–Darling Basin Agreement and administered by the MDBA) and the associated river operations of a system, as well as environmental objectives.

The costs incurred by the ACCC in building its own capacity and knowledge in the areas outlined above or contracting technical advice would need to be weighed against the possible benefits of the proposal, including:

- (a) potentially more effective and consistent oversight and enforcement by an experienced regulator
- (b) the benefits for entitlement holders of dealing with a single agency for all water market and trading regulation
- (c) the potential for synergies by combining oversight of all water trading and market regulation at the Commonwealth level within a single agency.

What is clear, however, is that either agency would need to rely on the expert advice of the other to effectively administer and enforce the Basin Plan water trading rules.

A detailed analysis of the reassignment of the Basin Plan water trading rules should be undertaken to ensure that the highest benefit for both stakeholders and government can be achieved.

RECOMMENDATION 8

The Panel recommends that a detailed analysis of the potential benefits of reassigning the Basin Plan water trading rules function from the Murray–Darling Basin Authority to the Australian Competition and Consumer Commission be undertaken.

Timely and accurate information

A key feature of an efficient and effective market is the availability of reliable, timely and comparable information on which market participants can base decisions. This is recognised in the Basin water market and trading objectives, which include ‘minimising transaction costs on water trades including through good information flows in the market’. Price information is one of the critical pieces of information, because changing market prices signal the prevailing value of water.

In 2010 the ACCC found that, while some information on price is already collected by a variety of sources, this is not necessarily comprehensive, comparable or reported back to the market.⁴² More recently, the NWC found that the availability and quality of water market price and volume data is less than optimal in all water market sectors, noting that market participants must gather information from various sources to inform trading decisions.⁴³

These findings are consistent with concerns raised by stakeholders during the Review on the lack of a single authoritative source of price information. It was noted that market participants may need to access many sources of information in order to gain an informed view on prices, trends and volatility. This in turn can lead to higher transaction costs and inefficient outcomes. Some submissions also registered a lack of confidence in the accuracy of pricing information.

One submission proposed the establishment of a timely, comprehensive, reliable and consistent water market reporting system, including a central, timely information source for all water market and trading announcements. The submission noted that this would ensure that water market participants (such as intermediaries) have access to reliable, timely and trusted information.

In this context, many submissions noted the Australian Government’s 2014–15 Budget decision to cease the COAG National Water Market System program agreed in 2008, which involved considerable investment in working with state governments to improve the operation of state water registers.

The program resulted in some enhancements to interstate trade in the Basin, the development of a suite of information products to improve water registry operations and the establishment of the National Water Market System website. The process of transferring custodianship of the website and distributing information products to states is nearing completion.

While a central reliable source of water market information would, in principle, enhance water markets, the Panel notes the NWC’s recent finding that private water brokers, which handle at least 60 per cent of all trades, are having a significant positive impact on the availability of information by providing a combination of publicly available data and some price and market information.⁴⁴

42 Australian Competition and Consumer Commission, 2010, *Water trading rules: final advice*.

43 National Water Commission, 2014, *Australia’s Water Blueprint: National Reform Assessment 2014*.

44 National Water Commission, 2014, *Australia’s Water Blueprint: National Reform Assessment*.

Following the discontinuation of the National Water Market System program, the Panel believes that Basin States should continue to work together to enhance interoperability of registers, building on the work that has been undertaken through the National Water Market System to provide more efficient services for users. The Panel notes that this will require commitment and funding as resources permit.

In the meantime, the Panel concludes that the Act is expected to improve the coverage and availability of water market information by requiring the publication of trading information under the Basin Plan water trading rules, which is now available on the MDBA's website as well as water broker sites and the electronic platforms of some Basin States (such as Victoria). This is in addition to the annual water markets reports produced by the NWC (and proposed to be prepared by ABARES in future⁴⁵) and water information provided by the Bureau of Meteorology under Part 7 of the Act. The Panel acknowledges that the historic and annual reports, while still considered valuable by stakeholders, are not sufficiently timely to inform water market participants' trading decisions.

4.3: INTEROPERABILITY AND EFFICIENCY OF BASIN STATE WATER REGISTERS

Basin State governments should take opportunities to enhance the interoperability of registers, building on the work that has been undertaken through the National Water Markets System program to create more efficient services for users.

Transaction costs

Transaction costs include the direct fees and charges levied on water traders plus the time associated with completing forms, searching for information and trading opportunities and getting applications assessed and approved. Delays lead to business uncertainty and the potential for lost production if water is not available at critical times.

Some submissions raised concerns about trade processing times and fees. In particular the inconsistency in fees across Basin jurisdictions was pointed out, with one stakeholder noting that fees in some jurisdictions were up to 700 per cent higher than those in other jurisdictions. Other submissions argued that Basin State agencies should be subject to penalties for non-compliance with sensible service standards.

Since 2007–08, COAG has adopted a set of agreed service standards for processing times for trades in the Basin. The standards require public reporting of the percentage of trades that are processed within set times. From 1 July 2009, 90 per cent of intrastate water allocation trades were to be processed within five business days and 90 per cent of interstate water allocation trades were to be processed within 10 business days (except in South Australia, which aimed to process 90 per cent of intrastate and interstate water allocation trades within 10 and 20 business days respectively). In addition, 90 per cent of entitlement trades are to be processed within 20 business days for the approval stage and 10 business days for the registration stage (after approval). The Panel notes that NWC monitoring shows that Basin States are generally meeting the COAG agreed service standards.⁴⁶

Trade application fees are collected by Basin State government agencies and corporations and irrigation infrastructure operators. Costs will vary as the revenue requirements for such organisations vary based on structure, size and operational factors. Generally fees should reflect efficient administration costs and Basin States cost recovery policies.

The Panel is concerned at the high level of fees for assessing trade applications and considers this a potential barrier to efficient and effective water trading. Furthermore the Panel believes that, as the COAG agreed service standards for trade application and approval timeframes are now largely being met by Basin States, those states should continue to improve their performance against these benchmark timeframes, given that 20 business days for processing transactions can be significant in the context of the water market.

⁴⁵ As proposed in the *National Water Commission (Abolition) Bill 2014* (Cth).

⁴⁶ National Water Commission, 2013, *Australian water markets report 2012–13*.

4.4: TRANSACTION FEES AND TIMEFRAMES

Fees imposed by Basin States for trade processing should be efficient, and variations of fees between the Basin States should be reduced. Basin States should continue to improve their performance against the service standards agreed by COAG for trade processing and approval times.

Confidence in intermediaries

The development of water markets has been accompanied by the emergence of water market intermediaries. Intermediaries include water brokers or water exchanges. They play an important role in water markets by facilitating trade. Research undertaken by the NWC in 2011 identified fewer than 100 brokers operating across the country; 20 to 30 of these brokers are estimated to account for 80 per cent of broker-assisted trades.⁴⁷

Some submissions expressed support for a national registration and licensing scheme for water market intermediaries and the introduction of minimum standards of professional conduct.

Currently, there is no industry-specific legislation to regulate water market intermediaries. However, the industry body representing the interests of water market intermediaries, the Australian Water Brokers Association, is governed by a constitution and requires their members to operate under its voluntary code of conduct.

While water market intermediaries are subject to general laws such as the *Competition and Consumer Act 2010* (Cth), criminal law and contract law, a survey by the ACCC published in 2010 found that two-thirds of surveyed irrigators were unaware that existing consumer and fair trading laws applied to intermediaries.⁴⁸ To help improve the awareness of existing regulation, the ACCC published guidance materials to help intermediaries and their customers understand their fair trading rights and obligations under the *Competition and Consumer Act*.⁴⁹

The Panel also notes that, under the auspices of COAG's water reform program, the Australian Government Department of the Environment prepared a COAG consultation regulation impact statement⁵⁰ in 2013 exploring options to address concerns about the potential for misconduct among water market intermediaries. This work was informed by the ACCC's 2010 report on the industry.⁵¹

The Panel appreciates that additional regulation cannot remove all risk of misconduct. Although the COAG regulation impact statement found that there had been very few reported cases of water market intermediary misconduct and no ready evidence of overall adverse affects on the market, the Panel is of the view that an emerging market of this size would benefit from cost-effective, adequate and effective safeguards:

- (a) to protect consumers from theft and fraud, loss or damage through the misuse of their funds, or losses through insolvency or bankruptcy
- (b) to minimise the risk of tarnishing the industry's reputation given the reasonable apprehension and concerns around the large amounts of money being transacted.

47 National Water Commission, 2011, *Strengthening Australia's water markets*; National Water Commission, 2007, *Improving market confidence in water intermediaries*.

48 Ashton D., 2010, *Irrigators' experiences with water market intermediaries*, ABARE–BRS report to the Australian Competition and Consumer Commission.

49 Australian Competition and Consumer Commission, 2011, *Water brokers and exchanges—your fair trading obligations*.

50 Draft Council of Australian Governments regulation impact statement for consultation, Regulation of Water market intermediaries, April 2013: <http://ris.dpmc.gov.au/2013/04/19/regulation-of-water-market-intermediaries-coag-consultation-regulation-impact-statement-standing-council-on-environment-and-water>

51 Australian Competition and Consumer Commission, 2010, Water market intermediaries—industry developments and practices: https://www.accc.gov.au/system/files/Water%20market%20intermediaries%20-%20industry%20developments%20and%20practices_0.pdf

The NWC noted that it is not uncommon for an intermediary to hold over \$1 million of client funds (as a deposit or pre-payment) at any one time for up to several days or weeks.⁵² This is an indicator of the size of the risk if a defalcation occurs and, in the context of the water market, may cause a serious loss of confidence.

It is important that water market participants can be confident that their interests are sufficiently protected when they employ water market intermediaries. It may only take one or two instances of misconduct to severely affect water users and, more broadly, water markets and the position of intermediaries.

In 2010, a survey commissioned by the ACCC on irrigators' experience with water market intermediaries indicated that some of those surveyed had a concern about a water market intermediary and that fewer than half of these irrigators had reported the problem, as many did not know to whom they would report a problem. The survey also found that nearly half of those surveyed felt that there should be additional regulation of water market intermediaries such as an accreditation or licensing scheme.⁵³

As such, the Panel supports an industry-led scheme of self-regulation being developed in consultation with the Australian Government. An advantage of such a scheme is that it would allow the industry to build up a strong, trusting relationship with customers, thus promoting further confidence and use of water market intermediaries. It would also provide more flexibility for the scheme to adapt to changes in markets without the complexity of government processes.

The Panel recommends that the Australian Government work with industry to ensure that an appropriate and effective scheme of industry self-regulation is developed. This might involve voluntary accreditation, a code of conduct and/or a defalcation fund. As water markets mature, trade volumes increase and the role of water market intermediaries becomes more important, the Australian Government should act to ensure that proportionate and cost-effective regulatory safeguards are put in place to protect market participants from potential misconduct or negligence on the part of water market intermediaries.

In designing the scheme, the Australian Government and industry should be mindful about ensuring that adequate and effective safeguards can be put in place with minimum regulatory costs imposed on the industry.

If an appropriate scheme is not developed, the Panel recommends that the Australian Government consider implementing industry-specific regulation of water market intermediaries directly, noting this would first require the agreement of, and referral of powers from, States. Recognising that water market intermediaries facilitate interstate trade of water, the Panel is of the view that there is a case for Australian Government involvement if an industry-led scheme is not implemented.

RECOMMENDATION 9

The Panel recommends that industry develop, in consultation with the Australian Government, an industry-led scheme of regulation for water market intermediaries. The scheme could include voluntary accreditation, a code of conduct and a defalcation fund. If a scheme is not developed, the Australian Government should regulate water market intermediaries. State referrals would be necessary to give effect to Basin-wide or national regulation.

⁵² National Water Commission, 2011, *Strengthening Australia's Water Markets*.

⁵³ Ashton, D., 2010, *Irrigators' experiences with water market intermediaries*, ABARE-BRS report to the Australian Competition and Consumer Commission.

Market participation by the Commonwealth Environmental Water Holder

A number of submissions commented that the Commonwealth Environmental Water Holder is the single largest holder of water access entitlements in the Basin and raised concerns about the impact of its activities on the market. To date, the Commonwealth Environmental Water Holder has undertaken two sets of small water trades commencing in 2014. The Commonwealth Environmental Water Holder's entitlements are spread throughout the whole Basin in 36 water resource areas (16 catchments). The Panel notes that the Commonwealth Environmental Water Holder is required to adhere to the Basin Plan water trading rules in the same way as other water market participants.

Market impacts

Some submissions were concerned with the impact that the Commonwealth Environmental Water Holder, as a large holder of water, could have on water prices, both through its capacity to trade large volumes of water and through carryover of water in storage for use in subsequent years.

The Commonwealth Environmental Water Holder's primary purpose is to protect and restore environmental assets of the Basin. It is not established to provide water for consumptive purposes or to profit from water trading. Like other entitlement holders, the Commonwealth Environmental Water Holder has options to use water allocations in the year they are received, carry over water for future use, or trade (buy or sell) allocations or entitlements. Consistent with its purpose, the majority of its allocations are delivered to the environment every year.⁵⁴ The Panel understands that the Commonwealth Environmental Water Holder does not expect to sell or buy more than a small proportion of water in any given year.

The Commonwealth Environmental Water Holder has released its Trading Framework, which was developed in consultation with stakeholders and industry.⁵⁵ The framework seeks to provide stakeholders with reassurance that the Commonwealth Environmental Water Holder will buy and sell water allocations or entitlements in a financially responsible, fair, equitable, transparent and accountable manner. It includes measures to minimise impacts on the water market and steps to address any potential access to market-sensitive information.

The Trading Framework includes operating rules that provide clear guidelines on how the Commonwealth Environmental Water Holder will behave through the trading process, including:

- (a) identifying trading opportunities that will enhance capacity to support environmental objectives
- (b) making a trade decision
- (c) approaching the market, including announcements
- (d) evaluating offers
- (e) approving trades
- (f) announcing results.

The Panel notes that water access entitlements in the Commonwealth environmental water holdings retain the same characteristics they had before they were acquired for environmental purposes. The holdings are managed within the water trading and Basin government rules (for trading and carryover) that apply to all other equivalent entitlement holders (typically agricultural users), are subject to the same fees and charges and receive the same annual allocations as equivalent entitlements. Further discussion of carryover activity by the Commonwealth Environmental Water Holder is provided in Chapter 6.

⁵⁴ Annual reports on Commonwealth environmental water set out use, carryover and trade volumes; they are available at: <http://www.environment.gov.au/water/cewo/publications>

⁵⁵ The *Commonwealth environmental water Trading Framework* is available at: <http://www.environment.gov.au/water/cewo/publications/water-trading-framework>

The Panel notes that other environmental water holders also participate in the market, such as the Victorian Environmental Water Holder and Riverbank in New South Wales. The Panel notes that the NWC's assessments have found no evidence of environmental water holders distorting market outcomes or of allocation trades by environmental water holders distorting market prices.⁵⁶

Transparency of behaviour

The Commonwealth Environmental Water Holder's functions are to be performed for the purpose of protecting or restoring environmental assets. Planning for Commonwealth environmental water use is undertaken annually, with annual water use options documents published each July on the Commonwealth Environmental Water Office's website. The options developed have regard to the MDBA's Basin annual environmental watering priorities.

Decisions to use Commonwealth environmental water are made throughout the year, based on whether water use meets published criteria and in consideration of current seasonal, operational and management conditions. Decisions on whether Commonwealth environmental water allocations are traded are made only after ensuring environmental needs are met through water use and, where relevant, after considering the optimum level of carryover required to meet future environmental needs.

The Panel notes that the management of the Commonwealth's environmental water holdings is subject to the same uncertainties that affect other owners of water. Continuous assessment occurs as the potential for changes in conditions (for example a sudden change in weather conditions) may mean that plans for the use, trade or carryover of environmental water may need to vary during the course of the year.

To be as transparent as possible in its trading intentions and activities, the Commonwealth Environmental Water Holder provides information to the water market prior to undertaking any trading action. This includes making quarterly portfolio management statements throughout the water year available via the Commonwealth Environmental Water Office's website.

The Panel considers that the Commonwealth Environmental Water Holder should continue to provide such information in a timely and transparent manner and that there is opportunity to increase stakeholder awareness of its Trading Framework and quarterly portfolio management statements.

4.5: COMMONWEALTH ENVIRONMENTAL WATER HOLDER: TRADING TRANSPARENCY

The Commonwealth Environmental Water Holder should continue to provide timely and transparent information to the market, including by raising stakeholder awareness of its Trading Framework and quarterly portfolio management statements.

⁵⁶ National Water Commission, 2014, *Australia's Water Blueprint: National Reform Assessment 2014*.

4.3 Extent to which water is being used in higher value uses

Water markets, supported by the Act and by state and private sector activities, are facilitating the movement of water to its optimal use. Research by the NWC and others has shown that water markets serve to optimise the economic, social and environmental values of scarce water resources by allowing users to adjust to prevailing conditions, such as drought and commodity prices.⁵⁷

Optimisation is occurring at the water use level (e.g. market price signals encourage the use of water in the most productively efficient manner) and the entity level (e.g. markets facilitate water moving between competing uses). This is encouraging investment in practices to improve productive efficiency and reduce less efficient water application, and enable the movement of water to different or new uses within and between water resources where extractions are capped.⁵⁸

One submission noted the finding of Frontier Economics' 2012 Impacts of Trade Report for the NWC that interregional and intraregional water trading reduced the impact of the drought on regional gross domestic product in the southern Basin from \$11.3 billion to \$7 billion over the five-year period from 2006–07 to 2010–11.

Trade has also benefited the environment as significant volumes have been traded to environmental managers, particularly the Commonwealth Environmental Water Holder, who manages all water recovered for the environment under the Australian Government's water recovery programs.

In responding to the Review's terms of reference many industry submissions noted that the term 'higher value use' is misleading and should be removed from the Act. Some submissions noted that measures based on the gross value of production per megalitre of water used or the gross margin per megalitre of water used are unreliable as they are unlikely to reflect the broader social and economic value of water use over time. One submission noted that diversification of consumptive water uses—for example across a range of crops or uses—is likely to lead to a more diversified and resilient economy, particularly in regional areas that may have a relatively low economic base. Another submission noted that highest value marginal use is a more accurate measure to rely on.

The Panel agrees with stakeholder views that there are a range of factors that influence water use and that what might be considered a high-value use in one year may not be so the next. These factors include commodity prices, the exchange rate, domestic and international demand, soil type, farming system, climatic conditions and the circumstances of individual irrigators and businesses. For these reasons, the Panel considers it more appropriate to refer to 'optimal use', taking account of all such factors.

The term 'higher value use' appears only once in the Act as part of the mandatory terms of reference for the current Review. The Panel recommends that section 253 be amended to remove this reference.

RECOMMENDATION 10

The Panel recommends that section 253 of the Act be amended to remove the term 'higher value uses'.

See also Recommendation 23 relating to this section.

57 National Water Commission, 2010, *Impacts of water trading in the southern Murray–Darling Basin: an economic, social and environmental assessment*, p. 1.

58 National Water Commission, 2010, *Impacts of water trading in the southern Murray–Darling Basin: an economic, social and environmental assessment*, p. 99.

4.4 Basin water charge regimes

A key objective of the Act is the development of a consistent Basin-wide approach to charging. This is distinct from an aim of consistent charges. The objective is reflected in the Act's objects, including the achievement of efficient and cost-effective water management and administrative practices in relation to Basin water resources (section 3(g)) and the water charging objectives and principles set out at Schedule 2 to the Act. The water charging objectives, among other things, aim to give effect to the principle of user pays, achieve pricing transparency and promote the efficient and sustainable use of Basin water resources. The water charging objectives are set out in Box 4.3 below.

There are three sets of rules made under Part 4 of the Act that contribute to the Basin water charging objectives. These are the Water Charge (Termination Fees) Rules, the Water Charge (Infrastructure) Rules and the Water Charge (Planning and Management Information) Rules. Information on each of these is at Box 4.1.

The ACCC is empowered to take action to enforce compliance with the rules. Annual monitoring reports by the ACCC assess compliance.

In addition to considering the effectiveness of Part 4 of the Act in meeting relevant objects, this chapter also assesses the following specific terms of reference:

- (a) the level of Basin-wide consistency in water charging regimes
- (b) the contribution made by those charging regimes to the Basin water charging objectives.

BOX 4.3 WATER CHARGING OBJECTIVES

The water charging objectives are:

- (a) to promote the economically efficient and sustainable use of:
 - (i) water resources; and
 - (ii) water infrastructure assets; and
 - (iii) government resources devoted to the management of water resources; and
- (b) to ensure sufficient revenue streams to allow efficient delivery of the required services; and
- (c) to facilitate the efficient functioning of water markets (including inter-jurisdictional water markets, and in both rural and urban settings); and
- (d) to give effect to the principles of user-pays and achieve pricing transparency in respect of water storage and delivery in irrigation systems and cost recovery for water planning and management; and
- (e) to avoid perverse or unintended pricing outcomes.

Water Charge (Infrastructure) Rules: three-tiered approach

The Water Charge (Infrastructure) Rules govern infrastructure operators' fees and charges for bulk water services and irrigation infrastructure operators' charges for access to the irrigation network and related services.

According to the ACCC, economic regulation of monopoly or other infrastructure where there is limited competition among providers seeks to protect, strengthen and supplement competitive market processes to improve the efficiency of the economy and increase the welfare of Australians.

Recognising the various types, sizes and governance of operators across the Basin, a three-tiered approach to regulation, with greater obligations applying to larger operators, was developed under the Water Charge (Infrastructure) Rules. The three tiers are:

- (a) Tier 1 (Parts 3, 4 and 7) applies to all infrastructure operators in the Basin. All operators are required to publish regulated water charges, with wider publication requirements for operators that provide services in relation to more than 10 GL of water from managed water resources
- (b) Tier 2 (Part 5) applies to large member-owned and medium-sized nonmember-owned infrastructure operators. They are required to develop a network service plan for a five-year period and consult with their customers on the plan. There are currently five operators in this tier
- (c) Tier 3 (Part 6) provides for the approval or determination of regulated charges levied by large non-member-owned operators. Approvals and determinations are undertaken by the ACCC or an ACCC-accredited state regulator. Tier 3 rules address the potential misuse of market power and resulting inefficiencies of monopoly pricing. There are currently three operators in this tier.

Submissions have questioned whether the Water Market Rules and Water Charge (Infrastructure) Rules effectively regulate all small trusts, districts and cooperatives in the Basin. They stated that failure to do so would have consequences for competitive neutrality in the sector, noting that there were some concerns about the lack of requirements imposed on smaller operators.

The Panel acknowledges the concerns that some smaller operators, due to the size of their operation, will either fall just outside or inside the scope of the publication requirements of the Water Charge (Infrastructure) Rules. This is invariably a result of the tiered approach and could only be addressed through the application of the rules irrespective of the size of the operator. The Panel notes that the costs of applying the same regulatory framework to very small operators may very well exceed the benefits.

In addition, the Panel is aware that there may be circumstances where it is difficult to apply the rules to certain forms of joint water supply schemes in New South Wales, some of which may fall outside the definition of irrigation infrastructure operators provided in the Act and thus the scope of the rules. There is merit in considering whether there is a case for regulating all joint water supply schemes under the Act to further contribute to the Basin water market and changing objectives.

One submission proposed changes to the regulation of medium-sized and member-owned infrastructure operators under the Water Charge (Infrastructure) Rules. While the Water Charge (Infrastructure) Rules place transparency and consultation requirements on these infrastructure operators, they do not require the ACCC or an ACCC-accredited regulator to determine their charges, as is required for large infrastructure operators. According to the submission, the Water Charge (Infrastructure) Rules fail to encourage consistent water charging regimes as they do not require the determination of charges for medium-sized and member-owned infrastructure operators.

While the submission does not describe what regulation could be applied, any additional requirements are likely to impose additional costs for infrastructure operators that are already regulated by the Water Charge (Infrastructure) Rules. As the tiered-structure of the rules provides for regulation proportionate to the volume of water managed by the infrastructure operator and its ownership structure—that is, member-owned or non-member-owned—larger operators have greater obligations.

The Panel understands that where an entity is an irrigation infrastructure operator and the ACCC believes that the irrigation infrastructure operator may have contravened the Water Market Rules or Water Charge (Infrastructure) Rules, the ACCC will investigate and develop an appropriate enforcement response, depending on the nature of the contravention. The approach taken by the ACCC to an investigation does not vary with the size of the operator; however, the ACCC will take into account the size and governance structure of the operator when considering mitigating factors for the conduct and the resources available to achieve compliance.

Given the variety of issues and proposals raised in the submissions, with some potentially reducing regulatory costs (e.g. proposals to reduce obligations for member-owned operators) and potentially increasing costs (e.g. proposals to increase regulation of small and very small operators), the Panel recommends that an analysis of these proposals would be best undertaken in a separate review of the water charge rules (Recommendation 11).

Basin-wide consistency in water charging regimes

A number of submissions argued that consistency of water charging regimes had not been achieved. Some submissions sought a review of the extent to which the water charge rules had been implemented, any impediments to implementation and options for how implementation could be improved.

Some submissions sought consistency in water charges, either through Basin-wide or state-wide pricing (compared to the current valley-based approach).

The Panel notes that the aim of the functions of the ACCC is to ensure that water markets can operate freely across state boundaries and that perverse outcomes from inconsistent water charging arrangements are avoided.⁵⁹

The intention of Part 4 was to ensure that water charges are set on a consistent basis; it is not intended to produce consistent charges per se. This was acknowledged by many stakeholders during consultations.

Charging regimes in the Basin vary considerably for both bulk water charges (imposed by bulk water suppliers on a valley-by-valley basis) and irrigation network charges (imposed by irrigation infrastructure operators). This reflects differences in operators' technology, scale, level of service, infrastructure age, business models, input costs, owners' requirements and applicable regulatory approaches.⁶⁰ The Panel notes that it is consistent with the objects of the Act that users in higher cost systems pay higher charges.

The ACCC noted in its submission that another example proposed the replacement of valley-based charges with a uniform Basin-wide charge. The ACCC has noted while valley-based charging is not prescribed in the Act or the Water Charge (Infrastructure) Rules, it is near-universal practice in Basin States. Valley-based charging allows for charges to reflect the costs of infrastructure, operational arrangements and other cost drivers applicable in each valley.

The Panel notes that the use of a Basin-wide charge would be contrary to the user-pays and price transparency objectives of the Act and to the National Water Initiative pricing principles, and would result in cross-subsidisation and inefficient use of the infrastructure services and water.

One submission recommended removing ambiguous terms that invite regulatory discretion when determining water charges, and thus inconsistencies. The submitter focused on the specific objective of avoiding perverse or unintended pricing outcomes (Schedule 2, Part 2, section 2(e)), which it considered had not been appropriately applied by the ACCC in determining the New South Wales State Water Corporation's (State Water's) charges for 2014–17.

While this objective may provide for broader interpretation than other Basin water charging objectives, the Panel notes that the ACCC has provided its interpretation in its guidelines. The ACCC identifies price shocks as an example of a perverse outcome that regulators should avoid when determining charges.⁶¹ This objective must also be interpreted in the context of the other objectives. As stated in one submission, the objective should be interpreted in a way that would best achieve the objectives as a whole, in line with section 15AA of the *Acts Interpretation Act 1901* (Cth).

⁵⁹ Revised Explanatory Memorandum, *Water Bill 2007* (Cth).

⁶⁰ Australian Competition and Consumer Commission, 2014, *ACCC Water Monitoring Report 2012–13*, p. xiv.

⁶¹ ACCC 2011, *Pricing principles for price approvals and determinations under the Water Charge (Infrastructure) Rules 2010*, p. 24: <https://www.accc.gov.au/publications/water-charge-infrastructure-rules/pricing-principles-for-price-approvals-determinations-under-the-water-charge-infrastructure-rules>

A separate submission recommended that the Act define 'perverse outcomes' in a way that would prohibit large differences in charges between valleys. The submission was primarily concerned with the large difference in State Water's charges in the Peel Valley compared to other valleys. The Panel understands that the charges in the Peel Valley are higher than those in other valleys due to the relatively small volume of water extracted in the valley and the high fixed costs of operating the valley's dam and associated infrastructure.

The Act already provides for circumstances where charges are high. Where full cost recovery is unlikely to be achieved, community service obligation subsidies can be provided and reported (Schedule 2, Part 3, clause 3(6)). State governments have discretion to provide such subsidies.

The Panel notes that limiting charge differentials may affect the achievement of the Act's user-pays objective and lead to circumstances where other users would subsidise users in valleys where higher costs apply.

The Panel's focus therefore is on the extent to which the Act is providing for a consistent and efficient charging regime that is consistent with the charging objectives and principles in the Act.

The Panel considers a number of factors have contributed to some inconsistency in charges set under the Water Charge (Infrastructure) Rules.

One is the sharing of regulatory responsibilities through accreditation. The ACCC notes that, while the Essential Service Commission in Victoria has been accredited by the ACCC under Part 9 of the Water Charge (Infrastructure) Rules and must apply the ACCC's pricing principles, the regulatory approaches of the ACCC and the Essential Services Commission (and therefore the water charging regimes in New South Wales and Victoria) are not currently identical.

The ACCC notes that another example of different approaches under the same regulatory regime is where an irrigation infrastructure operator is member owned or is below the threshold size set out in Part 6 of the Water Charge (Infrastructure) Rules. Due to the three-tiered approach explained earlier, which takes a fit-for-purpose and risk-based approach to regulation, these irrigation infrastructure operators are free to set their own charges and structure their tariffs as they see fit. Therefore there is some inherent trade-off between the level of consistency and the tiered approach to regulation of water charges under the Act.

Water planning and management charges imposed by Basin States are one area where there is significant inconsistency in the approach to water charging across Basin States. The ACCC notes that these differences in approach create challenges for the regulatory framework under the Act to effectively contribute to achieving the Act's Basin water charging objectives. Differences in water resource planning and management charges are generally considered unlikely to be sufficiently material to distort water markets. However, the ACCC stated in its submission that it will continue to monitor the market for material or adverse impacts.⁶²

The Water Charge (Planning and Management Information) Rules require the publication of information on fees and charges imposed by, or on behalf of, Basin States relating to water planning and management activities, and the costs of these activities. These rules are intended to promote pricing transparency and to improve water users' understanding of the relationship between charges that are levied and the costs of the related water planning and management activities.

In consultation sessions, Basin State government officials raised concerns about the compliance burden the Water Charge (Planning and Management Information) Rules place on Basin State agencies. In doing so, participants questioned the scope and value of the rules.

⁶² Australian Competition and Consumer Commission submission to the Review of the *Water Act 2007* (Cth), dated 4 July 2014.

The ACCC's more recent water monitoring reports have noted the difficulties encountered by some Basin States in satisfying the requirements of these rules. These difficulties arise from the diversity and complexity of their institutional and administrative arrangements. In each Basin State a number of agencies undertake water planning and management activities and these activities span multiple water resources inside and outside the Basin. For these reasons, it is difficult to delineate activity costs for a specific resource and their relationship with user charges. Attributing these costs and charges may also require significant administrative changes in some Basin States, and the costs may outweigh any benefits gained. Encouraging compliance in such instances also results in costs for the Australian Government borne by the ACCC.

Further, the ACCC has noted that the ability of these rules to contribute to the Basin water charging objectives has been reduced by their limited application to Basin areas and their inability to require disclosure on relevant costs that are not cost-recovered through water planning and management charges.

On the information provided, the Panel considers that there may be a case for repealing the Water (Planning and Management Information) Rules and that this should be considered as part of the proposed broader review of the water charge rules (Recommendation 11).

Consistency through greater prescription

A range of proposals were aimed at addressing inconsistencies in water charging across the Basin. These mostly focused on increasing the prescription of the rules and objectives and defining terms with a view to reducing discretion by regulators in determining charges.

Some submissions recommended that the Act be amended to provide a hierarchy in Basin water charging objectives (Schedule 2 of the Act) in order to indicate which objectives should be given greater weight in charge determinations. While the submissions did not indicate which objectives should be given greater priority over others, some suggested making changes could ensure that the objectives are more appropriately balanced in charge determinations.

The Panel considers that there is merit in assessing the development of a hierarchy to the Basin water charging objectives, including likely increases in consistency in charge determinations. A hierarchy could be informed by related reviews, such as the National Competition Policy Review currently underway, specifically taking account of any recommendations regarding infrastructure charging.

Applying the hierarchy approach could address concerns raised by some submissions that differences exist regarding the implementation of the Water Charge (Infrastructure) Rules in Victoria by the Essential Services Commission and in New South Wales by the ACCC. However, the Panel notes that the Water Charge (Infrastructure) Rules pricing principles are broadly consistent with the pricing determination methodology used by other relevant state regulators. This suggests that improving the consistency of charging regimes may be achieved through a review of the application of the pricing principles used by relevant regulators, with the aim of adopting a consistent price-setting methodology.

Another approach suggested by some submissions includes measures to reduce the discretion of regulators when interpreting the Act and Water Charge (Infrastructure) Rules. They propose a guided discretion model based on the current national energy regulation framework. The model would involve amending the Act and Water Charge (Infrastructure) Rules to prescribe in more detail procedural, transparency and decision-making arrangements. The submissions stated that this model would encourage greater predictability, transparency, accountability and consistency in charging determinations, and reduce the risk of regulatory errors.

Adopting these aspects of a guided discretion model would not require amendments to the Act. However, as amendments would be required to the Water Charge (Infrastructure) Rules, the merits and limitations of this approach and alternative approaches are best considered in the review of the charge rules proposed at Recommendation 11.

Standardising form and content

One submission suggested that all regulators use the same format for all charge determinations. The format could require regulators to report on the consistency of their determination with the water charging objectives and principles. This could build on the work already undertaken by regulators to communicate their decisions through the publication of issues papers and draft and final decisions.

While there may be merit in standardising the form and content of determinations, further increases in prescription would need to be carefully considered to ensure that regulators would have sufficient flexibility to address unexpected circumstances. It is worth noting that guidelines already exist regarding the application of the Basin water charging objectives and principles in determinations,⁶³ the procedural and information requirements for regulated entities under the Water Charge (Infrastructure) Rules,⁶⁴ and enforcement of the rules.⁶⁵

The Panel recommends assessing this as part of the review of the water charge rules (Recommendation 11).

Regulatory authorities

A number of submissions raised concerns about the number of regulators involved in regulating water charges and the potential for this to lead to inefficiency. For example, in New South Wales the Independent Pricing and Regulatory Tribunal regulates State Water's urban water operations and the ACCC regulates its Basin water resource operations, meaning that State Water must interact with more than one regulator, increasing administrative costs and duplicating effort.

There are provisions under the Act to overcome these concerns—for example through accreditation of state regulators, as is the case in Victoria with the Essential Services Commission—or for States to opt to extend the geographical application of the ACCC's regulatory role in relation to water charges and/or water markets to areas outside the Basin. This would provide for a uniform approach to regulation across their jurisdictions. The ability to opt in also applies to jurisdictions outside the Basin, including Western Australia and Tasmania, should they choose to refer their powers, and the Northern Territory.

However, the Independent Pricing and Regulatory Tribunal in New South Wales has not sought accreditation and no states have sought to extend the geographical reach of the water charge rules to include non-Basin water resources. Some suggested that the Water Charge (Infrastructure) Rules accreditation arrangements are overly prescriptive and may deter regulators from seeking accreditation.

The ACCC notes that the ongoing split of responsibility for water charges between Basin and non-Basin areas, when entities may operate across both areas, means that Basin-wide consistency in charging regimes is arguably achieved at the expense of consistency across a whole Basin State.

63 Australian Competition and Consumer Commission, 2011, *Pricing principles for price approvals and determinations under the Water Charge (Infrastructure) Rules 2010*: <https://www.accc.gov.au/publications/water-charge-infrastructure-rules/pricing-principles-for-price-approvals-determinations-under-the-water-charge-infrastructure-rules>

64 Australian Competition and Consumer Commission, 2011, *Guide to the Water Charge (Infrastructure) Rules: Pricing application for Part 6 operators*: <https://www.accc.gov.au/publications/water-charge-infrastructure-rules/a-guide-to-the-water-charge-infrastructure-rules-pricing-application-for-part-6-operators>

65 Australian Competition and Consumer Commission, 2011, *ACCC enforcement guide—water market and water charge rules*: <https://www.accc.gov.au/publications/accc-enforcement-guide-water-market-water-charge-rules>

The Panel notes the draft finding of the National Competition Policy Review that the ACCC's water price regulation and related advisory roles under the Act should be transferred to a separate access and pricing regulator to oversee all industries currently regulated by the Australian Government. Further, the Review suggests that, as circumstances permit, a national approach to urban and rural water regulation should be encouraged, with state and territory regulatory functions being transferred to the proposed new national regulator.⁶⁶

Should such a recommendation be made in the final report and adopted by governments, this would overcome the issues associated with multiple regulators raised in many submissions to this Review, such as inconsistent application of the Water Charge (Infrastructure) Rules and increased regulatory and administrative burden for operators, leading to increased costs for water users.

The Panel understands that in the development of the Water Charge (Infrastructure) Rules the ACCC proposed a single-regulator approach to ensure the consistent setting of charges across the Basin and facilitate efficient water markets and efficient use of water resources and infrastructure. However, provisions were made for Basin States to seek accreditation for state regulators if they wished to do so.

Two submissions proposed the establishment of a merits review mechanism, to allow for the review of all water charge determinations made under the Water Charge (Infrastructure) Rules, as well as the creation of a statutory right for judicial review, to provide infrastructure operators with an explicit right to appeal decisions. The proponents propose using the merits review mechanism adopted by the energy sector under the Australian Competition Tribunal. Aggrieved parties can appeal charge determinations to the tribunal which, over time, builds a body of precedent. These arrangements are considered to (1) increase regulatory accountability, (2) reduce opportunities for inconsistent or erroneous decisions and (3) increase protection for infrastructure operators and customers.

Similarly, one submission suggested the introduction of an ombudsman system whereby customers of infrastructure operators and irrigation infrastructure operators could submit complaints for assessment and resolution (similar to the Telecommunications Industry Ombudsman).

While the Panel notes possible merit in having an appeal mechanism, adding an ombudsman system to the existing regime may result in duplication by providing a second layer of regulation. Additionally, it would be difficult and complex to achieve a single appeal mechanism given the number of regulators and the different Basin State arrangements.

The ACCC has proposed that any future review of the water charge rules should consider the merits of streamlining the three sets of water charge rules into a single consolidated instrument. This approach could lead to some harmonisation of publication requirements for water planning and management charges and infrastructure charges and a more transparent approach to the provision of information on the calculation of termination fees.

Having heard from all interested parties, the Panel considers that many issues raised concern the water charging objectives and the rules rather than the main operative provisions of the Act. Given this, the Panel recommends that a separate review be undertaken of the water charge rules.

66 Australian Government Competition Policy Review: *Draft Report*, September 2014

RECOMMENDATION 11

The Panel recommends a separate review of the Water Charge (Infrastructure) Rules, the Water Charge (Termination Fees) Rules and the Water Charge (Planning and Management Information) Rules. The review should be undertaken by the Australian Competition and Consumer Commission in consultation with industry and Basin State governments. It should focus on reducing the cost to industry and governments and should report on:

- (a) the continuing appropriateness of tiered regulation of infrastructure operators and the potential for streamlining or eliminating regulation, including whether to remove the current requirements for member-owned operators under Part 5 of the Water Charge (Infrastructure) Rules
- (b) the current process for accreditation of Basin States' regulators, the effectiveness in applying water charging regimes by different regulators, and the form and content of charge determinations by all regulators
- (c) opportunities for advancing the consistent application of the water charging objectives and principles, including options to rank objectives and define terms
- (d) lessons learned from other sectors in relation to appeal mechanisms
- (e) opportunities to combine the water charge rules and Water Market Rules in one instrument
- (f) consistency with the Australian Government's deregulation objectives
- (g) the effectiveness of the Water Charge (Planning and Management Information) Rules, the extent to which their effectiveness could be enhanced and the likely impacts if they were to be repealed.

The review should take into account the views the Panel has expressed in this report, submissions made to this Review and any further submissions.

Duration of regulatory periods applying to price determinations and charge approvals

The ACCC suggested amendments to the Act to enable regulators to set the duration of a pricing determination or approval of charges, in order to be more responsive to wider economic conditions, or other factors that may influence the efficiency and operation of existing or future determinations. The ACCC proposes that section 92(4) be redrafted to provide that the water charge rules may also provide for the duration to be determined by the ACCC or relevant accredited regulator.

Another submission expressed concerns regarding the existing determination process, in particular the ability for ACCC to adjust charges for the second and subsequent years of a regulatory period through an annual review process; and the ability for an operator to apply for a variation of a determination. The Panel notes that provision for adjustments to charges during a regulatory period are necessary to account for variations in demand from the level forecast and for the purposes of price stability. The ability for an operator to apply for a variation of a determination is subject to a materiality threshold and the requirement that the change is necessary for a reason that could not reasonably be foreseen at the time of determination. The Panel understands that such provisions are consistent with regulatory practice in other sectors.

The Panel considers that consultation should be undertaken on amending section 92(4) to allow the ACCC or an ACCC accredited regulator to determine the regulatory period applying to a price determination or charge approval. The Panel recommends that regulators' discretion to amend the regulatory period be limited to extending the period relative to the periods specified in the rules, to provide flexibility for regulators without reducing certainty or increasing costs for regulated entities and their customers.

RECOMMENDATION 12

The Panel recommends that section 92(4) of the Act be amended to give regulators applying the Water Charge (Infrastructure) Rules the discretion to determine or vary regulatory periods, so long as the regulatory periods are longer than those already provided for in the rules.

Clarifying definitions and terms in the Act

One submission raised concerns regarding the clarity in the definitions and terminology in the Act, mainly the term 'bulk water charges', and the definition of infrastructure operators and irrigation infrastructure operators.

The Panel understands that the current definition of 'bulk water charges' means a charge payable for the storage of water for, and the delivery of water to, relevant operators. One interpretation of this definition would mean a charge imposed by an infrastructure operator relating to the storage (but not delivery) of water, or the delivery (but not storage) of water would not be considered 'bulk water charges' even where the infrastructure provides both storage and delivery services. If such an interpretation was taken, the Water Charge (Infrastructure) Rules may not apply to these charges.

Additionally, the submission noted that section 7 of the Act may be unclear, and it may be confusing to some stakeholders as to whether they are an infrastructure operator or an irrigation infrastructure operator and what obligations apply to them, in particular where infrastructure is owned by one party but operated by another.

The Panel considers that these terms and definitions are of a technical nature, and supports their amendments provided it reflects the intended policy.

RECOMMENDATION 13

The Panel recommends that minor technical amendments be made to the definitions in the Act for 'bulk water charge', 'infrastructure operators' and 'irrigation infrastructure operators' to remove ambiguity for stakeholders.

4.5 Streamlining red tape under Part 4 of the Act

The rules under Part 4 of the Act impose direct obligations on business, individuals and Basin State governments. Based on the input of interested parties the Panel considers there is scope to reduce the regulatory burden imposed under these rules.

In particular, many submissions have proposed the removal of Part 5 of the Water Charge (Infrastructure) Rules (Tier 2). These obligations are considered to be costly and onerous as they necessitate the development of complete business cases for all intended capital works, preparation of five-yearly projections on revenue, expenditure and charges, and consultation and communication with all customers.

The Panel heard during consultations that one irrigation infrastructure operator (in accordance with the Water Charge (Infrastructure) Rules) sent the network service plan to 365 members by post with only two members responding (equivalent to less than a one per cent response rate). The irrigation infrastructure operator stated that the development of the plan cost \$40,000 with costs passed on to customers of the network.

The Panel appreciates that at the time of its development, the three tiered approach was identified by the ACCC to deliver the greatest net benefit compared with other regulatory models. The tiers provide for proportionate regulation that reflects the size, resources and ownership of operators, including whether they are member owned. The Water Charge (Infrastructure) Rules avoid the placement of overly onerous obligations, and the associated costs of compliance, on small operators that deliver relatively low volumes of water, and put greater requirements on larger operators reflecting their relative monopoly power and the greater materiality of any resulting inefficiencies.

Nonetheless, the Panel believes that there is merit in reviewing the application of Part 5 to member-owned operators. A review of the rules could consider how current Part 5 requirements could be incorporated into existing consultation and reporting activities undertaken by member-owned operators, or whether the obligations should apply at all. The preferences of customers of member-owned operators for receiving and using business information would be critical in such a review.

Further, some submissions noted that there are opportunities to reduce regulatory costs and reporting burden while maintaining an effective and efficient market. This includes changing publication requirements as provided in the Water Charge (Infrastructure) Rules. Some submissions propose that the rules be amended to require infrastructure operators to 'make available' (publish) the listed documents to customers, instead of having to 'provide' (send) the documents as they do now. However, the Panel notes that currently, under the Water Charge (Infrastructure) Rules, infrastructure operators can already meet their obligations by emailing links to a document where customers have email access, and posting hardcopies of the material to customers who do not.⁶⁷ The rules specifically provide for sending material in electronic form, either attached to, or as a hyperlink in, an email sent to the customer's email address (rule 3(6)).

The Panel acknowledges that this obligation may be costly as it often necessitates the printing and posting of large volumes of hard-copy material. By comparison, publishing the documents on a web site would attract much smaller costs. This is not consistent with government and business practice.

⁶⁷ *Water Charge (Infrastructure) Rules* (Cth), r. 3(6). See also ACCC 2011; *A guide to the Water Charge (Infrastructure) Rules: publishing and non-discriminatory charging requirements*, p. 22. The ACCC has also provided guidance to individual infrastructure operators, irrigation infrastructure operators and industry representatives to the effect that information can be provided electronically where the operator is aware that the customer can access the information in the form provided. The ACCC recommended that the operator seek consent from customers where they proposed to provide information electronically.

In relation to reporting burdens, the Panel understands that the ACCC takes steps to use publicly available information where possible and attempts to minimise the reporting burden on Basin State agencies, irrigation infrastructure operators and bulk water suppliers in discharging its role to monitor and enforce the water market and charge rules made under Part 4 of the Act. The ACCC uses the information it obtains to prepare an annual water monitoring report for the Minister.

The ACCC has advised the Panel that it has taken steps to streamline its 'request for information' sent to reporting entities and to pre-fill many parts with information obtained in previous years or obtained from other sources. The Request for Information for the 2013–14 water monitoring report was further streamlined to eliminate some sections altogether, further reducing reporting burdens on entities. Reporting burdens are dealt with in detail at Chapter 7 on Water Information.

4.6: ELECTRONIC ACCESS TO WATER CHARGE INFORMATION

Electronic transmission of, or online access to, information is desirable. Regulators should recognise the efficiency and desirability of electronic communication when developing and applying regulation.

Chapter 5: Murray–Darling Basin Water Rights Information Service

Part 5 of the *Water Act 2007* (Cth) (the Act) provides that the Murray–Darling Basin Authority (MDBA) may establish an information service (the ‘Water Rights Information Service’) providing access to registrable water rights information for the Basin.

The registrable water rights that may be included in the Water Rights Information Service are water access rights, irrigation rights and delivery rights in relation to Basin water resources; and rights that relate to access to, or use of, Basin water resources and are on registers kept by a Basin State, an agency of a Basin State, an infrastructure operator or a prescribed person.

Part 5 also provides for regulations that may specify the form and type of information to be provided and who must provide information (including but not limited to persons who keep an applicable register). The regulations may also provide for access, technical, compatibility, interoperability and use arrangements for the Water Rights Information Service. This regulation-making power implies that at least one purpose of the Water Rights Information Service is for the MDBA (the prescribed person) to monitor and report on registrable water rights and transactions in relation to registrable water rights.

There are currently no direct regulatory impacts for business or individuals under Part 5, as the Water Rights Information Service has not been established. However, if it is implemented there are likely to be regulatory impacts for businesses and Basin State government agencies associated with any information reporting requirements imposed on these bodies.

The provisions are designed to facilitate the operation of efficient water markets and minimise transaction costs for market participants by providing information about the Basin that is easy to access and consistent. This is consistent with objectives in the Act and the National Water Initiative to support efficient and effective markets. In turn, this contributes to the Act’s objects to maximise net economic returns to the Australian community from the use and management of the Basin water resources (section 3(d)(iii)) and to provide for the collection, collation, analysis and dissemination of information about Australia’s water resources and the use and management of water in Australia (section 3(h)).

A Water Rights Information Service had not been established under Part 5 of the Act at the time of this Review.

The Panel understands that the Water Rights Information Service may not have been considered necessary while the National Water Markets System program was being undertaken jointly by the Australian Government and the States. However the program was terminated in the 2014–15 Budget following an assessment that the remaining work would exceed the resources available. A key component of the National Water Markets System program was the establishment of a national common registry solution and increased interoperability of state and territory water registers, which would have delivered against the same objects as those of the Water Rights Information Service.

Several other initiatives being undertaken by Australian Government agencies are contributing towards improved information necessary to support effective and efficient markets. These initiatives include the Basin Plan water trading rules and Category 6 information collected under the *Water Regulations 2008* (Cth) (the Water Regulations) made under Part 7 of the Act.

The Basin Plan water trading rules require certain information to be made publicly available (via the MDBA in a central location) to facilitate the operation of efficient water markets and opportunities for trading. For example,

the MDBA must publish information about classes of water access rights conferred by or under a law of a Basin State, copies of Basin State rules that regulate the trade of tradeable water rights, and copies of certain irrigation infrastructure operators' rules that regulate the trade of tradeable water rights. The MDBA publishes this information on its website. This is distinct from the focus of the water rights information service, which is about achieving a central register of information across the Basin.

Information on water access rights and irrigation rights, trades and leases of water access entitlements and irrigation rights, and trades of water allocations is currently collected under the Water Regulations by the Bureau of Meteorology (Bureau) from the States and rural water utilities. This information is sought on a national (as opposed to a Basin) basis. Water market information collected by the Bureau is made publicly available through regular water market reports and a regional dashboard as part of the National Water Market website. It is also presented in the Bureau's National Climate and Water Briefings, held every three months, and in the National Water Commission's annual Australian water markets report (which is proposed to be prepared by ABARES on behalf of the Department of the Environment in future).

While some submissions advocated for a nationally consistent water entitlement registration system, a reliable and consistent water market transaction reporting system and a central, timely information source for all water market trading announcements, another expressed concern that such a service would duplicate existing water entitlement registration systems of the Basin States and private water infrastructure operators.

A number of submissions also indicated general support for water information functions to be retained.

The Panel recommends that Part 5 be repealed, noting that the Water Rights Information Service has not been implemented to date and there are no current plans to implement it in the future. Other policy settings, such as the Basin Plan water trading rules, which commenced on 1 July 2014, are expected to contribute to open and efficient Basin water markets. A Water Rights Information Service might also duplicate Basin States' responsibilities and existing Basin State water registers, require Basin State cooperation and require funding, resourcing and commitment by all Basin jurisdictions to support its establishment.

In making this recommendation, the Panel is also cognisant of the Australian Government's deregulation agenda and broader concerns raised in submissions about existing information reporting requirements under the Act and associated costs for businesses. Should such a service be considered in future, it should be assessed against other possible policy options, including the relative benefits of a Basin-wide rather than a national solution, and be supported by a full cost-benefit analysis to ensure that any regulatory impacts are necessary and are outweighed by the benefits to the market and market participants. Any necessary legislative amendments could be prepared at that time and be tailored to the delivery of the preferred option.

RECOMMENDATION 14

The Panel recommends that Part 5 of the Act, 'Murray-Darling Basin Water Rights Information Service', be repealed.

Chapter 6: Commonwealth Environmental Water Holder

Part 6 of the *Water Act 2007* (Cth) (the Act) establishes the role and powers of the Commonwealth Environmental Water Holder in the use, management and trade of water recovered for the environment (Commonwealth environmental water holdings).

The Commonwealth Environmental Water Holder manages water recovered by the Australian Government so as to protect and restore environmental assets such as rivers, wetlands and floodplains, consistent with the Basin Plan Environmental Watering Plan. The Commonwealth Environmental Water Holder is a statutory office holder supported by the Commonwealth Environmental Water Office, a division of the Australian Government Department of the Environment.

Part 6 also places limitations on the powers of the Commonwealth Environmental Water Holder, establishes the Environmental Water Holdings Special Account and prescribes reporting requirements.

The Panel notes that this Part primarily supports the object of the Act to protect, restore and provide for the ecological values and ecosystem services of the Basin (taking into account, in particular, the impact that the taking of water has on watercourses, lakes, wetlands, groundwater and water-dependent ecosystems that are part of the Basin water resources and on associated biodiversity) (section 3(d)(ii)).

Part 6 also relates to objects dealing with international agreements (section 3b), the return to environmentally sustainable levels of extraction (section 3(d)(i)) and the management of Basin water resources, taking account of the broader management of natural resources in the Basin (section 3(f)).

Water entitlements acquired through the Australian Government's water recovery initiatives become part of the Commonwealth environmental water holdings and are managed by the Commonwealth Environmental Water Holder. At 30 September 2014, Commonwealth environmental water holdings totalled 2,195 GL of water access entitlement (with a long-term average annual yield of 1,510 GL) and were valued at approximately \$2 billion.

The provisions of this Part require that Commonwealth environmental water holdings be managed for the purpose of protecting and restoring environmental assets. The Commonwealth Environmental Water Holder is responsible for decisions relating to Commonwealth environmental water, including managing the portfolio so that it maximises environmental outcomes across the Basin over time in accordance with the Basin Plan. This requires the Commonwealth environmental water portfolio to be actively managed with ongoing assessment of available portfolio management options, including:

- (a) the delivery of water to meet environmental needs
- (b) carryover (i.e. carrying over water in storages for use in future years to meet future environmental needs)
- (c) trade (disposal or acquisition).

Each of these aspects of the Commonwealth Environmental Water Holder's management of water is discussed below, including relevant stakeholder feedback and proposals.

6.1 Environmental watering to date

The Act requires the Commonwealth Environmental Water Holder to perform its functions for the purpose of protecting or restoring environmental assets and requires that Commonwealth environmental water be managed in accordance with the Basin Plan Environmental Watering Plan, which includes to protect and restore the native flora and fauna biodiversity, habitat and ecosystem functions of water-dependent ecosystems.

In the use of Commonwealth environmental water, the Commonwealth Environmental Water Holder is required to have regard to Basin annual environmental watering priorities, apply the principles to be applied in environmental watering, and undertake watering consistent with the Basin-wide environmental watering strategy due for release in November 2014.

The Panel notes the advice of the Commonwealth Environmental Water Holder that, since 2009, over 3,500 GL of Commonwealth environmental water (as at 30 September 2014) has been delivered to help achieve a sustainable Basin.

Details of outcomes are available in annual Commonwealth Environmental Water Office Outcomes Reports, available on the Commonwealth Environmental Water Office's website.

Use of Commonwealth environmental water for Indigenous purposes

The Panel heard many specific proposals relating to the use of Commonwealth environmental water to deliver on Indigenous outcomes, including through the provision of environmental water that is excess to requirements, allocating a percentage of Commonwealth environmental water to be managed by Indigenous communities, and/or providing a role for Traditional Owners in the governance of the Commonwealth Environmental Water Holder.

The Panel notes that Commonwealth environmental water held by the Australian Government and managed by the Commonwealth Environmental Water Holder cannot provide cultural flows that meet the Northern Basin Aboriginal Nations' and Murray Lower Darling Rivers Indigenous Nations' definition of cultural flows (see Chapter 1 and Box 1.2 for more detail on cultural flows), because the definition refers to entitlements 'legally and beneficially owned by Indigenous Nations.' The Panel believes that the Environmental Watering Plan enables the Commonwealth Environmental Water Holder to secure complementary cultural outcomes as part of its environmental watering activities. The Environmental Watering Plan specifies that environmental watering must be undertaken in a way that maximises its benefits and effectiveness by having regard to Indigenous values (section 8.35(b)(iv) of the Basin Plan)—defined as 'the social, spiritual and cultural values of Indigenous people that relate to the water resources of the water resource plan area' (section 10.52 of the Basin Plan).

The Act also allows the Commonwealth Environmental Water Holder to enter into arrangements in relation to the use of Commonwealth environmental water. This could include an arrangement in which Indigenous people manage Commonwealth environmental water to achieve cultural and environmental outcomes or where a local body manages Commonwealth environmental water on its behalf. The current provisions provide flexibility to enter into arrangements that meet the Commonwealth Environmental Water Holder's statutory obligations, the objects of the Act and the needs of different organisations. For example the Commonwealth Environmental Water Holder has entered into arrangements with a not-for-profit organisation, Nature Foundation South Australia, to manage the use of up to 50 GL of Commonwealth environmental water locally over a five-year period.

BOX 6.1: COMMONWEALTH ENVIRONMENTAL WATER HOLDER AND LOCALISM AT WORK IN THE MURRUMBIDGEE

Using Commonwealth environmental water to its best effect relies on careful consideration of local needs, in the context of a connected river system.

The Murrumbidgee River is a major tributary of the Murray River and the second-largest river in Australia. The region is known for its diversity of native fish species including Murray cod, golden perch and Australian smelt, as well as frogs, mammals and plants.

The Commonwealth Environmental Water Holder, and other water managers, make decisions on the basis that the water delivered in one part of the Murray–Darling affects the whole of the food chain.

A range of groups with representatives from Indigenous communities, field naturalists and water users have been working with the Australian and New South Wales governments to assist with environmental water planning, delivery and monitoring through their membership of the Murrumbidgee Environmental Water Allowance Reference Group.

Local landholders and the community have an important role to play in sharing knowledge and contributing to the outcomes.

Local landholders are also working closely with the scientists charged with monitoring and evaluating the benefits of Commonwealth environmental water to the Basin environment.

The Murrumbidgee system is one of seven areas selected for long-term intervention monitoring. This monitoring is being conducted by Charles Sturt University in collaboration with the University of New South Wales, the New South Wales Department of Primary Industries (Fisheries), Riverina Local Land Services, and the New South Wales Office of Environment and Heritage.

The Commonwealth Environmental Water Holder considers this collaborative effort to be part of its commitment to facilitating the sharing of knowledge and expertise among the many people across the Basin who are contributing to, or have an interest in, environmental water.

The Commonwealth Environmental Water Holder and Commonwealth Environmental Water Office have advised the Panel of the actions they take in order to meet Basin Plan obligations, including their processes for consultation with Indigenous people in the Basin on water planning and delivery. While cultural and environmental outcomes are different, there is some overlap. Such consultation can identify opportunities for environmental watering to achieve complementary cultural outcomes.

The Commonwealth Environmental Water Holder engages directly with the Northern Basin Aboriginal Nations and the Murray Lower Darling Rivers Indigenous Nations. The Commonwealth Environmental Water Office also engages with the Ngarrindjeri, Yorta Yorta and Nari Nari nations and the Barkindji Maraura Elders Environment Team.

The Panel heard that the Commonwealth Environmental Water Holder and Commonwealth Environmental Water Office have established mechanisms to allow local community groups, including Indigenous groups, to make proposals for environmental water use through the Commonwealth Environmental Water Office website or by discussing proposals directly with Commonwealth Environmental Water Office staff. The Commonwealth Environmental Water Office:

- (a) has consulted with state government-established local environmental watering advisory groups, which typically include Indigenous representatives as well as local environmental advocates, irrigation representatives, interested community business and landowners
- (b) has appointed officers in six regions of the Basin who will facilitate more direct and regular engagement with local communities and Indigenous peoples

- (c) is working with the National Native Title Council to support the National Cultural Flows Research Project, which aims to develop a methodology for identifying and quantifying cultural flow requirements that can be applied across Australia to inform water management.

The Panel acknowledges the Commonwealth Environmental Water Holder's engagement with Indigenous groups and believes that the Commonwealth Environmental Water Holder should consider opportunities to build on this engagement in future, including through a more structured approach to engagement. In the Panel's view this would build on the established relationships between the Commonwealth Environmental Water Holder and Indigenous groups, facilitate the exchange of knowledge and help with identification and delivery of opportunities for complementary Indigenous outcomes where the Commonwealth Environmental Water Holder's environmental objectives are still achieved.

6.1: COMMONWEALTH ENVIRONMENTAL WATER HOLDER: INDIGENOUS ENGAGEMENT

The Commonwealth Environmental Water Holder should develop a more structured, transparent approach to Indigenous engagement to complement current engagement arrangements.

6.2 Commonwealth Environmental Water Holder's approach to localism

The Panel heard widespread positive feedback on the Commonwealth Environmental Water Holder's approach to engagement, particularly at the local level (see Box 6.1 on local engagement). During this Review, the Commonwealth Environmental Water Holder also built on its commitment to localism by appointing six local engagement officers (see Box 6.2).

The Panel encourages the Commonwealth Environmental Water Holder to continue to build on its localism approach, particularly by giving consideration to entering into additional arrangements with local bodies to manage environmental water in a way that meets the Commonwealth Environmental Water Holder's statutory obligations and the objects of the Act, similar to the current arrangement in place with the Nature Foundation South Australia discussed earlier.

BOX 6.2: COMMONWEALTH ENVIRONMENTAL WATER—LOCAL ENGAGEMENT OFFICERS

In response to community demands for improved local connections to the national management of environmental water in the Basin, the Commonwealth Environmental Water Holder has appointed six local engagement officers. The officers—who are based in Deniliquin, Leeton and Dubbo in New South Wales, Mildura in Victoria, Berri in South Australia and Goondiwindi in Queensland—took up their posts during September and October 2014, and have begun working with local communities across the Basin to help manage environmental water flows.

The officers have significant connections to Basin communities and experience in regional and remote Australia. They have worked in fishing, agribusiness, land management, education, sustainable resource use and rural finance, and have knowledge of natural resource management and water policies.

The officers are working with communities throughout the Basin to ensure that local knowledge and views are taken into account in environmental water management decisions. They are staff of the Commonwealth Environmental Water Office and complement the Commonwealth Environmental Water Office's existing stakeholder engagement activities, building on existing arrangements for community engagement as undertaken by state and local water managers. Canberra-based staff from the Commonwealth Environmental Water Office will also continue to meet and work with local people in the Basin. The Australian Government has committed \$4.9 million over seven years (2012–13 to 2018–19) to provide for local engagement.

6.3 Carryover

Carryover is another mechanism by which the Commonwealth Environmental Water Holder can manage Commonwealth environmental water.

Carryover provides flexibility in the timing of water delivery across years, enabling the Commonwealth Environmental Water Holder to have access to water for future environmental needs such as watering wetlands or floodplains or providing an in-stream pulse early in a water year. The use of carryover by the Commonwealth Environmental Water Holder does not indicate that environmental water is excess to requirements.

The Panel notes that, in relation to carryover, the Commonwealth's environmental water entitlements are managed according to the same rules established for all users. Under state-based carryover arrangements, no water entitlement holder can access water storage capacity to the exclusion of other water users. Since 2008–09 the Commonwealth Environmental Water Holder has used more and carried over less of its available water than other entitlement holders. The volume of Commonwealth environmental water carried over into 2014–15 was 450 GL, which is equivalent to approximately two per cent of major government storage capacity in the Basin.

6.4 Trade by the Commonwealth Environmental Water Holder

Trade of Commonwealth environmental water, either allocations or entitlements, is one of the management tools that enhance the capacity of the portfolio to meet environmental watering requirements. For example, trade can be used to manage variability in water availability and environmental water demand across the Basin by selling allocations in one catchment where environmental watering needs have largely been met and purchasing in another catchment or at a later time when additional environmental water would provide a net improvement in environmental outcomes. It can also be used to re-balance the portfolio of entitlements based on improvements in knowledge of environmental watering requirements.

Under the Act, trade of Commonwealth environmental water is currently only permitted where either:

- (a) the water is not currently required to meet objectives of the Environmental Watering Plan and would otherwise be forfeited (with proceeds limited to the purposes of the Environmental Water Holdings Special Account) (section 106(1))
- (b) the sale of water or water holdings would allow the Commonwealth Environmental Water Holder to better protect or restore environmental assets through the acquisition of other water or water holdings (section 106(2)).

Under section 106, Commonwealth environmental water or water holdings can be sold or disposed of. Practice to date has focused on trade of water allocations, although the Commonwealth Environmental Water Holder is also able to trade water entitlements.

The Panel notes that the Commonwealth Environmental Water Office has developed a Trading Framework, which includes operating rules, procedures and protocols, and has made the framework available to the public to assist in providing transparency around decision-making.

To date, the Commonwealth Environmental Water Holder has completed two sets of trades. The first set (16 trades) took place in the Gwydir in January 2014 and resulted in the sale of 10 GL of Commonwealth environmental water, with a return of \$3.217 million for the Murray–Darling environment. The second set (seven trades) occurred in the Peel Valley and resulted in the sale of 340 ML of Commonwealth environmental water for a return of \$32,580 for the Murray–Darling environment.

When the trade in the Gwydir took place, local floodplains required a drying phase following consecutive wet years. At a time of extremely low rainfall and hotter than average temperatures, it also provided cotton farmers with the opportunity to decide whether to water to finish their crops or to improve yield or quality.

The Panel heard positive responses from stakeholders on these trades during the course of the Review.

Use of trade proceeds for non-water acquisition

Many submissions sought to vary or limit the Commonwealth Environmental Water Holder's ability to dispose of Commonwealth environmental water and use trade proceeds (under section 106 of the Act) in order to:

- (a) allow the Commonwealth Environmental Water Holder to operate similarly to a commercial entity, using trade revenue to meet operational costs
- (b) limit the use of trade revenue to water acquisition only
- (c) trade for the purposes of supporting social and economic objectives in the Basin
- (d) optimise environmental outcomes by allowing trade revenue to be used for environmental activities other than water acquisitions
- (e) enable greater flexibility to trade if future water allocations are likely to be forgone.

Several submissions proposed that section 106(2) be amended or section 106 removed altogether to allow the Commonwealth Environmental Water Holder to improve environmental outcomes through trade so that the proceeds of trade can be used for environmental purposes such as works and measures or monitoring rather than solely for acquisitions of water.

Those submissions suggested that there is an opportunity for the Act to better support environmental outcomes (and therefore the object, set out at section 3(d)(ii), to protect, restore and provide for ecological values and ecosystem services) by increasing the Commonwealth Environmental Water Holder's flexibility to use proceeds of trade to invest in broader non-water acquisition measures while maintaining environmental outcomes as the primary purpose of trade. This suggestion is also consistent with concerns raised in some submissions that the Basin Plan focuses primarily on environmental water needs, rather than on other measures that could complement environmental watering activities.

Other submissions took the contrary view that the needs of the environment are best served by continuation of the current limitations on the use of proceeds of trade.

The ability to achieve optimal environmental outcomes from the use of Commonwealth environmental water may at times be limited due to (for example) a shortfall in, or lack of, complementary natural resource management activities. The Panel acknowledges that there could be benefits from the Commonwealth Environmental Water Holder providing additional funding for targeted activities to maximise environmental outcomes from environmental water use. For example, the installation of cold water curtains around reservoir outlets could provide greater benefits for native fish, potentially outweighing a small sale of allocations in one year to fund them. Furthermore, such activities by the Commonwealth Environmental Water Holder could support the object of the Act to ensure that the management of Basin water resources takes into account the broader management of natural resources in the Basin (section 3(f)).

The Panel also noted the risk that repeated and large disposals of environmental water without any reciprocal purchase of water would result in less water being available for the environment over the longer term, potentially undermining the sustainable diversion limits and the objects of the Act. However, unlike the proposal that it operate like a

commercial entity, this proposed arrangement would provide the Commonwealth Environmental Water Holder with greater flexibility and discretion in using the proceeds of allocation trade in achieving environmental outcomes.

After a careful assessment of these proposals the Panel recommends amending section 106 to allow the Commonwealth Environmental Water Holder to maximise environmental outcomes by allowing allocation trade revenue to be used for environmental activities in addition to water acquisitions. This could involve investment in fish ladders, complementary natural resource measures such as carp eradication, or investment in works and measures that make watering more efficient.

This approach is recommended subject to stringent safeguards and limitations to ensure that achievement of the Act's objects and the Basin Plan are not compromised. The Panel supports the broadening of section 106 so that the Commonwealth Environmental Water Holder has appropriate flexibility and discretion when trading and using the revenue from trades so as to obtain maximum environmental benefit from the use of environmental water.

The Panel does not support trading of Commonwealth environmental water to meet operational requirements, or trading for the purpose of achieving social or economic outcomes. These approaches would represent a significant variation to the functions of the Commonwealth Environmental Water Holder and would significantly compromise the achievement of the Act's objects. Such a change would also require amendment of the Basin Plan, which is still in the process of implementation. The Panel is cognisant of the potential for Commonwealth environmental water use to have multiple benefits but is equally concerned to ensure that confidence in the reforms—including the Commonwealth Environmental Water Holder's functions—is strengthened rather than eroded and that there is time to implement the reforms in full. Instead, the Panel suggests that a future review of the Act, following the full implementation of the Basin Plan and its settings, is an appropriate time to assess the extent to which the Commonwealth Environmental Water Holder has been able to achieve multiple benefits from environmental watering.

If the Commonwealth Environmental Water Holder were required to meet its operational costs (including fees and charges from the use of its water) from the proceeds of water trade, significant and regular trades to the consumptive pool would be required. For example, fees for holding and delivering water are expected to exceed \$18 million in 2014–15. This would result in reduced volumes being available for the environment and the trading revenue being unavailable to improve the effectiveness of environmental water to achieve environmental outcomes, and would increase consumptive use over time—thereby conflicting with the object of the Act to ensure the return to environmentally sustainable levels of extraction for water resources that are overallocated or overused (section 3(d)(i)).

The Panel also notes the position put forward during consultations with industry groups that Commonwealth Environmental Water Holder operating costs should be treated as a community service obligation and paid through consolidated revenue. As noted by industry groups, if Commonwealth Environmental Water Holder proceeds are required to pay for operating costs, the Commonwealth Environmental Water Holder will need to trade water, which will only be purchased by irrigators; thus all operating costs will effectively be paid by irrigators.

6.2: COMMONWEALTH ENVIRONMENTAL WATER HOLDER: OPERATING COSTS

The Commonwealth Environmental Water Holder's operating costs should continue to be met from Commonwealth consolidated revenue to ensure that the Commonwealth Environmental Water Holder is appropriately and transparently funded to deliver Basin Plan outcomes.

RECOMMENDATION 15

The Panel recommends that section 106(2) of the Act be amended to allow trade revenue to be used for other environmental activities in addition to water acquisitions to maximise environmental outcomes from the use of Commonwealth environmental water, with the following safeguards:

- (a) only revenue generated from the trade of Commonwealth environmental water allocations (not Commonwealth environmental water entitlements) may be used for environmental activities other than acquisitions**
- (b) any disposal of water and use of proceeds for non-water acquisition purposes must reasonably be expected to improve environmental outcomes from the use of Commonwealth environmental water**
- (c) trading activity should not impact on the achievement of sustainable diversion limits in the long-term**
- (d) trade revenue cannot be used to fund operational expenses of the Commonwealth Environmental Water Holder such as holding and delivery fees and charges.**

Enable greater flexibility to trade if future water allocations are likely to be forgone

The Panel noted that in the southern Basin water allocations operate on an annual accounting basis, with limits on how much water can be carried over from one financial year to the next. Water remaining in accounts that is above the carryover limit at the end of the year is forfeited. Under section 106(1) of the Act the Commonwealth Environmental Water Holder has the flexibility to trade if this situation arises.

However, in valleys with continuous accounting systems credits remain until they are drawn down through use or trade, meaning that amounts in credit can prevent the account holder from receiving new allocations that would exceed the account limit. Currently section 106(1) does not provide flexibility to enable trade if this situation arises.

The intent of section 106 is to ensure that the Commonwealth Environmental Water Holder operates to meet environmental objectives, not as a profit-making enterprise. By acting to restrict the Commonwealth Environmental Water Holder's ability to dispose of water when water is excess to requirements and could reasonably be expected to result in forgoing future allocations, section 106(1) unnecessarily restricts the Commonwealth Environmental Water Holder's ability to maximise the utility of its holdings to meet environmental objectives. Therefore the Panel recommends that section 106(1) be amended.

RECOMMENDATION 16

The Panel recommends that section 106(1) of the Act be amended to remove the restriction on disposal of allocations that could be reasonably expected to result in forgoing future allocations, such as in continuous accounting systems.

6.5 Consolidation and coordination of environmental watering functions

Several submissions raised concerns that the environmental watering functions assigned to the MDBA and the Commonwealth Environmental Water Holder may lead to duplication, inefficiency and a lack of coordination.

Management and delivery of environmental water by Commonwealth agencies

Some submissions suggested that there are too many bodies involved in the management and delivery of environmental water. They proposed that the Commonwealth Environmental Water Holder be given full responsibility for all environmental water, including water managed under The Living Murray Program (see box 6.3 on The Living Murray).

BOX 6.3: THE LIVING MURRAY PROGRAM

The Living Murray (originally named The Living Murray Initiative, now known as The Living Murray Program or simply The Living Murray) is a joint government initiative announced in 2003. Its assets and holdings are coordinated by the MDBA on behalf of the Australian, New South Wales, Victorian, South Australian and Australian Capital Territory governments. The governments have pledged \$650 million to the initiative.

The aim of The Living Murray is to restore the health of the River Murray through the recovery of 500 GL of water and the construction of major water management structures at six environmental icon sites: Barmah–Millewa Forest; Gunbower–Koondrook–Perricoota Forest; Hattah Lakes; Chowilla Floodplain and Lindsay–Wallpolla Islands; the Lower Lakes, Coorong and Murray Mouth; and the River Murray Channel.

The MDBA works closely on the initiative with the local communities, including Indigenous communities, land managers, catchment management authorities, water authorities and construction companies. By 2013 The Living Murray had recovered a long-term average of 479,973 ML of water and delivered 657,016 ML of environmental water.

The governance structure of The Living Murray is set out in the 2004 Intergovernmental Agreement on Addressing Water Overallocation and Achieving Environmental Objectives in the Murray–Darling Basin, including the then Murray–Darling Basin Commission’s role as a service provider to the Joint Venture governments. This responsibility was later transferred (as part of the commencement of the Act) to the MDBA.

Section 18H of the Act provides that the MDBA must ‘manage the rights and interests that are held for the purpose of the Living Murray Initiative in accordance with and in a way that gives effect to the Living Murray Initiative’.

All The Living Murray water entitlements are jointly owned by the Australian Government, New South Wales, Victoria and South Australia. In this regard these governments, together with the Australian Capital Territory (which does not own a share of The Living Murray water entitlements) comprise The Living Murray Joint Venture.

- (a) Of the 479.975 GL of jointly held entitlements, 49.8 GL is held by the MDBA and the remaining entitlements are held by New South Wales, Victoria and South Australia. All of the entitlements are held on behalf of The Living Murray Joint Venture.
- (b) The Living Murray is a joint government initiative, and any changes to its governance cannot be made without the agreement of all relevant governments. Further, the Panel understands that the governance, decision-making and cost-sharing arrangements that apply to Commonwealth environmental water holdings and The Living Murray holdings vary considerably.

Commonwealth environmental water holdings are owned and funded solely by the Australian Government, have a single decision-maker (the Commonwealth Environmental Water Holder) and are utilised to protect and restore environmental assets throughout the Basin as a whole.

The Panel notes that The Living Murray Joint Venture partners are currently considering transition arrangements for The Living Murray under the Basin Plan framework.

The Panel agrees with submissions that incorporating all environmental water, including The Living Murray water, into the same Basin Plan planning and decision-making arrangements would deliver benefits and efficiencies. The Panel further agrees that, if the MDBA no longer held The Living Murray entitlements that it currently holds on behalf of the joint venture, a potential source of a conflict of interest for the MDBA in its regulatory role would be removed.

The Panel notes the Murray–Darling Basin Ministerial Council’s recent agreement to improve the coordination of watering activities in the southern connected Basin in order to streamline environmental watering.

6.3: ENVIRONMENTAL WATERING: THE LIVING MURRAY

Environmental watering should be coordinated, including through integration of The Living Murray portfolio within Basin Plan frameworks where possible. Consideration should be given to transferring The Living Murray entitlements held by the Murray–Darling Basin Authority to the Commonwealth Environmental Water Holder.

Planning and prioritising environmental watering

A number of submissions noted that there was confusion about how the processes for planning and prioritising of environmental water fit together. Some submissions proposed that the MDBA’s Basin-wide planning functions be transferred to the Commonwealth Environmental Water Holder. The Panel heard concerns that the time lag between the establishment of the Commonwealth Environmental Water Holder and its portfolio in 2009 (when it began planning for the management of the portfolio, including annual water use options planning) and the finalisation of Basin Plan Environmental Watering Plan arrangements—such as the finalisation of the Basin-wide environmental watering strategy in 2014—has contributed to a feeling of duplication and fragmentation of roles between the MDBA and the Commonwealth Environmental Water Holder.

Consistent with its regulatory and standard-setting role, the MDBA is responsible for developing, implementing, monitoring and ensuring compliance with the Basin Plan Environmental Watering Plan. In addition to this, the Basin Plan requires the MDBA to develop the Basin-wide environmental watering strategy and Basin annual environmental watering priorities. The Basin Plan environmental watering framework is discussed in more detail in Chapter 2.

The Panel notes that the MDBA has capacity and expertise in these fields, including access to sophisticated hydrologic modelling and practical river operations experience. In addition, environmental watering will be a key component of Basin State water resource plans, which the MDBA is responsible for assessing prior to accreditation.

The Basin Plan requires Basin States to develop catchment-scale long-term watering plans and catchment annual environmental watering priorities.

The Commonwealth Environmental Water Holder is required under the Act to act in accordance with the Environmental Watering Plan. The Environmental Watering Plan also requires the Commonwealth Environmental Water Holder to perform its functions and exercise its powers consistently with the Basin-wide environmental watering strategy, and requires that all environmental watering in the Basin be undertaken having regard to the Basin annual environmental watering priorities.

The Commonwealth Environmental Water Office has advised the Panel that it undertakes planning each year to provide a robust information base to support portfolio management decisions on use, carryover and trade throughout the year. The planning process is continuing to evolve and considers the:

- (a) short-term and longer term environmental demands at both the catchment and Basin scales (as informed by the MDBA's and Basin States' annual priorities)
- (b) water available to meet these demands, including both Commonwealth environmental water and other sources of water.

Commonwealth and Basin State government agencies' planning and prioritisation processes are undertaken in collaboration to minimise duplication, support coordinated management and ultimately achieve efficient and effective use of environmental water.

The Panel is aware that the Southern Murray–Darling Basin governments recognise the need to update existing arrangements and have put in place a more streamlined process for the different environmental water holders to work together collaboratively. The Panel notes that the Basin-wide environmental watering strategy is due to be released in November 2014. The Panel believes that any further regulation or restructuring of existing arrangements this early in the implementation phase would be premature and may impact adversely on the ability of all governments to implement the Basin Plan. As such, the Panel believes that the focus needs to be on bedding down current arrangements and on the delivery of water to achieve intended environmental outcomes. As experience is gained, there may be benefit in adapting governance arrangements for greater efficiency

However, based on the feedback from stakeholders, the Panel considers that there is room for improvement in clearly communicating the respective roles and responsibilities of the Commonwealth Environmental Water Holder, the MDBA, Basin State governments, river operators and other water holders in the management and delivery of environmental water under the Basin Plan (see Panel conclusion 2.4).

6.6 Environmental Water Holdings Special Account

Section 111 of the Act establishes the Environmental Water Holdings Special Account (Holdings Special Account). The purposes of the Holdings Special Account are stated in section 113 of the Act. The Holdings Special Account can be used for the functions listed under section 105 of the Act, including payment of fees and charges; monitoring and evaluation; grants for environmental works and measures; and development of environmental registers and systems. To date, these functions have been funded through appropriations to the Holdings Special Account. The Holdings Special Account is also used to manage the proceeds from the disposal of Commonwealth environmental water allocations or entitlements, and the expenditure of funds for the purchase of Commonwealth environmental water allocations or entitlements. Section 113(3) of the Act precludes Holdings Special Account funds to be used for the salary of the Commonwealth Environmental Water Holder or the salaries of Commonwealth Environmental Water Office staff, which are provided by the Australian Government Department of the Environment.

6.7 Reporting requirements

A number of proposals suggested that, in order to promote transparency and understanding of trades, the Commonwealth Environmental Water Holder should also include in its annual report the basis for any trading decisions and the longer term environmental benefit of any trades.

Under its Trading Framework,⁶⁸ the Commonwealth Environmental Water Holder has committed to, for each trade, making information publicly available (in a way that protects the privacy of trading partners) on its website that includes, but is not limited to:

- (a) actual and weighted average price at which trades occurred
- (b) the volume traded
- (c) confirmation of details that were announced prior to the trading action being conducted (including a description of any variance).

The Commonwealth Environmental Water Holder has also committed to providing a summary of all trading activity undertaken in a given water year in the Commonwealth Environmental Water Holder's annual report.

The Panel recommends that section 114 of the Act be amended to require the Commonwealth Environmental Water Holder to report annually on trading decisions. Legislating the current Commonwealth Environmental Water Holder practice, as described earlier, will provide greater confidence that trade is improving environmental outcomes by increasing the legislated transparency of trading decisions.

RECOMMENDATION 17

The Panel recommends that section 114 of the Act be amended to require the Commonwealth Environmental Water Holder to report annually on trading decisions.

6.8 Monitoring and evaluation effectiveness

As also applies to the MDBA, Basin States and the Australian Government Department of the Environment, the Commonwealth Environmental Water Holder's monitoring and evaluation role is governed by monitoring and evaluation principles in Chapter 13 of the Basin Plan and reporting requirements in Schedule 12. The Commonwealth Environmental Water Holder is investing around \$35 million for monitoring and evaluation over eight years (from 2011–12 to 2018–19). Under Schedule 12, the Commonwealth Environmental Water Holder reports annually on the use of Commonwealth environmental water and the implementation of the Environmental Watering Plan. The Commonwealth Environmental Water Holder is also responsible for five-yearly reports from 2012 on the contribution of Commonwealth environmental water to the environmental objectives of the Basin Plan.

The Commonwealth Environmental Water Holder's monitoring and evaluation aims to support the efficient and effective use and management of Commonwealth environmental water within the planning framework, and demonstrate the environmental objectives achieved from the recovery of water for the environment under the Basin Plan.

The Panel heard positive feedback on the Commonwealth Environmental Water Holder's long-term intervention monitoring project, which measures environmental responses to watering activities in selected areas as part of its *Monitoring, Evaluation, Reporting and Improvement Framework for Commonwealth environmental watering in the Basin*.⁶⁹ As well as supporting the Commonwealth Environmental Water Holder's reporting obligations, this monitoring and evaluation will contribute to the effective use of Commonwealth environmental water and to the MDBA's evaluation of the effectiveness of the Basin Plan.

As discussed in Chapter 2 of this report, the Panel believes it is important that the monitoring and evaluation processes are coordinated to assist in evaluation of the Basin Plan's performance.

⁶⁸ The *Commonwealth environmental water Trading Framework* is available at: <http://www.environment.gov.au/water/cewo/publications/water-trading-framework>

⁶⁹ *Commonwealth Environmental Water Monitoring, Evaluation, Reporting and Improvement Framework*, Commonwealth Environmental Water, June 2013, v. 2.0.

Chapter 7: Water information

Part 7 of the *Water Act 2007* (Cth) (the Act) assigns to the Bureau of Meteorology (Bureau) responsibility for Australia's water information systems. Key functions relate to collecting, holding, managing and disseminating information on water resources, usage and availability; water accounting; forecasting future water availability; and undertaking investigations to enhance understanding of Australia's water resources.

Part 7 directly implements the Act's object to provide for the collection, collation, analysis and dissemination of information about (i) Australia's water resources and (ii) the use and management of water in Australia (section 3(h)).

The Act's definition of water information is quite broad. It encompasses raw data or product that relates to the availability, distribution, quality, use, trading or cost of water, water access rights, water delivery rights or irrigation rights, and related metadata and contextual information (section 125).

The *Water Regulations 2008* (Cth) (the Water Regulations) made under the Act name the organisations that must give specific water information to the Bureau and the timeframe and format in which it must be provided. Currently the Water Regulations name over 200 organisations, including government agencies, local councils, catchment management authorities, major storage owners and operators and urban and rural water utilities.

7.1 Purpose of the water information provisions

The purpose of establishing a national water information system was outlined recently in the Australian National Audit Office's 2014 report *Administration of the Improving Water Information Program*.⁷⁰ The report notes that the severity of the Millennium Drought resulted in a significant period of water reform and analysis. In 2006, concerned about the ready availability of information on water supply and security, the Australian Government appointed experts led by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) to review the availability of information on Australian water resources.

The experts found significant limitations on the availability, comparability and quality of water information. For example, over 400 entities were collecting water data at that time, but this activity was largely undertaken without national coordination and, in the absence of common standards, water measurement methods and definitions varied across jurisdictions. At that time, water information was of limited usefulness for comparison, modelling and analysis, especially on a national scale. This constrained evidence-based policy making.

In January 2007 the then Prime Minister, the Hon. John Howard, announced the establishment of the National Plan for Water Security, which tasked the Bureau with new water information functions and included a commitment of \$450 million over 10 years to improve national water information. This was then legislated in Part 7 of the Act.

7.2 Implementation of improved water information systems

The Panel has been asked to assess the progress of implementation of improved water information systems, including the National Water Account. Given that these systems impose compliance costs on those required to provide information but also have potential benefits to policymakers and stakeholders, the Panel consulted extensively on this topic. A brief summary of the experience to date follows.

⁷⁰ Australian National Audit Office, 2014, *Administration of the Improving Water Information Program*, The Auditor-General, Audit Report No. 18, 2013–14, Performance Audit, p. 13.

Improving Water Information Program

The Improving Water Information Program was designed to enhance the quality and consistency of water information in Australia. Part 7 of the Act establishes the legal framework for the program. Over the past seven years, the Bureau has used its extended powers under the Act and the associated program budget to build systems, tools and processes to deliver a set of water information products and services to policy-makers, industry and the community that were either not available previously or very difficult to assemble—particularly in the timeframes required for problem identification and decision-making.⁷¹

Under the program, named organisations are required to submit a range of water data as specified in the Water Regulations. The Water Regulations set out the types of water data that are to be submitted, any format requirements, and the timeframes for providing the data to the Bureau. There are 11 different categories of data, including:

- (a) surface and groundwater resource information
- (b) water storage information
- (c) meteorological information
- (d) information about water rights, allocations and trades
- (e) water quality information.

The requirements vary depending on the type of data and the organisation that is to provide the data. For example, the Australian Government, States and rural water utilities are required to report trades or leases of water access entitlements and irrigation rights on a weekly basis. Urban water utilities are required to report water taken and supplied on a yearly basis. Some state and local government organisations are required to provide data on the level and discharge of watercourses by the hour to assist with flood forecasting and warnings. It should be noted that named organisations are only required to provide already collected data; there is no requirement to collect new data.

To help water data providers strengthen their water monitoring arrangements the Bureau delivered \$78.1 million of administered funding for 463 projects through its Modernisation and Extension of Hydrologic Monitoring Systems Program between 2007 and 2012.

The Australian National Audit Office reported that most of the Modernisation and Extension of Hydrologic Monitoring Systems Program funding was allocated to projects that focused on modernising and extending monitoring equipment and networks, improving water data management systems, and increasing the quality and accuracy of data.⁷² As a result of these investments, around 80 per cent of all data collected under the Water Regulations and transmitted to the Bureau is now received in the standard Water Data Transfer Format (see Box 7.2 for further information). The Australian National Audit Office also found that the Bureau had collected more than 21 million water data files, containing more than four billion time-series observations.⁷³ The Bureau receives approximately 10,000 new data files each day.

The Panel notes that, as part of the broader Improving Water Information Program, the Bureau coordinates and standardises information and makes it accessible via a range of products and services that have improved the comparability and quality of information. Box 7.1 below sets out the progress made and key activities undertaken by the Bureau to perform its functions under Part 7 of the Act to improve Australia's water information systems.

71 Australian National Audit Office, 2014: *Administration of the Improving Water Information Program*, The Auditor-General, Audit Report No. 18 2013–14, Performance Audit, pp. 128–129.

72 Australian National Audit Office, 2014: *Administration of the Improving Water Information Program*, The Auditor-General, Audit Report No. 18 2013–14, Performance Audit, p. 17.

73 Australian National Audit Office, 2014: *Administration of the Improving Water Information Program*, The Auditor-General, Audit Report No. 18 2013–14, Performance Audit, p. 16.

BOX 7.1: WATER INFORMATION SYSTEMS: PROGRESS TO DATE

Bureau's specific functions under the *Water Act 2007 (Cth)*

120(a) Collecting, holding, managing and disseminating Australia's water information

Progress in implementation of improved water information systems

- The Australian Water Resources Information System (AWRIS) ICT infrastructure, developed to collect, collate and provide access to data, has been receiving and cataloguing Water Regulations data files since 2008. The Water Storage web application, the first water information product supported by this system, was released in June 2010. Since then it has been progressively expanded to deliver a range of water information products and services.
- The AWRIS has encountered some challenges and has been a more complex undertaking than originally estimated, necessitating some redesign and rebuilding. Nonetheless the AWRIS underpins all of the Bureau's products. Since starting in 2008 with the Water Storage application, it has expanded to support a large range of products and services.
- The current range of water information products and services (detailed in Box 7.2) are disseminated via the Bureau's website.
- The Bureau also provides routine and ad hoc water data to external organisations, including Australian Government agencies, the World Meteorological Organisation, universities and industry, to fulfil this responsibility.

120(b) Providing regular reports on the status of Australia's water resources and patterns of usage of those resources

- The Water Storage webpage and iPhone application provide nationally consistent reporting on the status of 97 per cent of Australian major water storage capacity.
- The Australian Water Resources Assessment—a biannual report on the state of Australia's water resources, carried out on a drainage division (major river basin) basis—identifies trends and variability in the availability, supply and use of water resources over months, years and decades.

120(c) Providing regular forecasts on the future availability of Australia's water resources

- Seasonal Streamflow Forecast information for the three months ahead is delivered monthly on the Bureau's website and presented at the monthly National Climate and Water Briefings.
- Short Term Forecasts (one to seven days) are currently being provided to registered users for 11 catchments across Australia, with a public release scheduled for mid-2015.

120(d) Compiling and maintaining water accounts for Australia, including a set of water accounts to be known as the National Water Account

- The National Water Account is an annual report that provides detailed insight into the management of water resources in Australia's most significant water use regions. The nine regions currently reported on are home to over 70 per cent of Australia's population and where more than two-thirds of Australia's total water consumption occurs. For each region, it discloses the total water resource, the volume of water available for use, the rights to take water and the actual use of water for economic, social, cultural and environmental benefit.
- The National Water Account has been released four times, commencing in 2010.

Bureau's specific functions under the *Water Act 2007* (Cth)

Progress in implementation of improved water information systems

120(e) Issuing National Water Information Standards

- Australian Water Accounting Standards have been developed, supported by the Bureau's Water Accounting Standards Board and in collaboration with the Australian Auditing and Assurance Standards Board.
- The Australian Water Information Dictionary, an online list of defined terms and acronyms used in the Bureau's water information products and services, was released in September 2011.
- The Water Data Transfer Format is an Australian standard for water data exchange. The first version (V0.1) was released in August 2008 and the most recent in December 2013.
- Ten national industry guidelines for hydrometric monitoring, released in May 2013, will improve data consistency through improved monitoring and measurement.
- The National Aquifer Framework, which provides nationally consistent terminology for describing and grouping sediment and rock layers with similar hydraulic characteristics, was released in September 2013.

120(f) Giving advice on matters relating to water information

- The expansion of its water information capability has enabled the Bureau to respond to ad hoc information requests received from Australian Government agencies such as the Department of the Environment and the National Water Commission. For example, the Bureau delivered the Mapping Hydrological Indicators component of the National Water Commission's National Inventory of Water Stressed Catchments and Aquifers Project.

120(g) Undertaking and commissioning investigations to enhance understanding of Australia's water resources

- In 2008 the Bureau entered into a research partnership with CSIRO, the Water Information Research and Development Alliance, as the primary mechanism for investment in research and development, to ensure that its water information role is supported by the best available science and technology.
- A number of research projects are also undertaken in partnership with Australian universities.

While some water information products and services may not have been rolled out as fast or as broadly as stakeholders might have expected, the Panel acknowledges that the Bureau has been tasked with vast and challenging new functions under Part 7 of the Act. Overall, the new and improved suite of water information products and services delivered by the Bureau is a significant achievement. The Bureau's current water information products and services are listed in full in Box 7.2.

BOX 7.2: BUREAU OF METEOROLOGY WATER INFORMATION PRODUCTS AND SERVICES

The **National Water Account** is Australia's most comprehensive water information report. It is produced for each water year from 1 July to 30 June. The Account covers nine significant water use regions: Adelaide, Canberra, Daly, Melbourne, Murray–Darling Basin, Ord, Perth, South East Queensland and Sydney. Collectively these regions are home to over 70 per cent of Australia's population and 70 to 80 per cent of total annual water usage. The Account includes an overview of the drivers of water availability and use and, together with climate and weather information, is providing insight into the water situation in each of the regions reported on. It discloses information about water stores and flows, water rights and water use. It also reports on the volumes of water traded, extracted and managed for economic, social, cultural and environmental benefit. The Bureau partners with 51 organisations to produce the National Water Account. These include the Australian Government, state governments, local government authorities, regional councils, water utilities, natural resource management organisations, irrigation companies and energy generation companies. Data is sourced via the Water Regulations, internally from the Bureau and from publicly accessible online information portals.

The **Australian Hydrological Geospatial Fabric (Geofabric)** products and services provide a single, consistent, national geospatial framework for discovering, querying, reporting and modelling water information. The Geofabric includes a suite of well-maintained, evolving, authoritative data products containing a consistent representation of Australian water system features and their connectivity. By detailing the spatial dimensions and relationships of important features (streams, catchments, aquifers, storages, wetlands, monitoring points and other structures) the Geofabric allows users to visualise and model how water is captured, transported and used through the landscape.

The **Australian Water Accounting Standards** are based on financial accounting principles and aim to ensure that adequate measurement, monitoring and reporting systems are in place to account for how water is distributed and used. They provide a standardised reporting format to guide the preparation, presentation and assurance of general purpose water accounting reports, including the National Water Account. The Australian Water Accounting Standards, developed under the National Water Initiative, are world leading, with Australian Water Accounting Standard 1 being the first such standard developed internationally.

The **Australian Water Resources Assessments** use the best available water data, models and analysis to describe the state of the water resources at scales from regional to national, highlighting trends in urban and rural water availability and use; the hydrological condition of rivers, wetlands, storages and aquifers; and water levels of major surface water storages and aquifers. They also highlight any nationally significant rainfall and flooding events that occurred during the report period. Their aim is to improve the understanding of Australia's water resources by policymakers, water resource managers and the broader community, quantifying the interactions between climate, water and the landscape.

The **Australian Water Resource Assessment Modelling System** produces detailed maps of riverflow, soil moisture, groundwater recharge and evaporation across Australia. It was developed to provide inputs to the Bureau's National Water Account and the Australian Water Resources Assessments. It is also used by the Bureau for climate and drought monitoring, and for its National Climate and Water Briefings. The modelling system is currently being used to investigate the potential direct, indirect and cumulative impacts of coal seam gas and coalmining development on water resources in the Australian Government–funded Bioregional Assessment Program.

The Bureau's **Flood Forecasting and Warning Service** provides riverine flood forecasts and warnings to emergency managers and communities in all states and mainland territories of Australia. These forecasts and warnings are delivered in partnership with state and local government agencies and complement and integrate with the Bureau's other extensive activities in monitoring and modelling weather conditions, producing weather forecasts and issuing relevant warnings.

The **Groundwater Dependent Ecosystems Atlas** is a web mapping portal for visualising, analysing and downloading data on the location and characteristics of groundwater-dependent ecosystems in Australia. It is the first comprehensive national inventory of groundwater-dependent ecosystems and incorporates scientific evidence (including fieldwork, literature and mapping from previous studies) and satellite remote sensing data. Its purpose is to improve Australia's understanding of groundwater-dependent ecosystems and facilitate their inclusion in environmental water management—in particular for new developments affecting groundwater conditions.

The purpose of the **Hydrologic Reference Stations** product is to create a national asset that can be used to assess the effects of long-term climate variability and change on water availability across all hydro-climatic regions in Australia on annual, seasonal, monthly and daily timescales. It contains high-quality streamflow information for 221 stations across Australia.

Intensity–Frequency–Duration (IFD) Design Rainfalls are statistics available for any place in Australia for durations from one minute to seven days and for frequencies from one year to 100 years. The IFD Design Rainfalls are part of a larger suite of flood estimation inputs in the Engineers Australia handbook *Australian rainfall and runoff: a guide to flood estimation*. The IFD Design Rainfalls are used in the design of infrastructure including gutters, roofs, culverts, stormwater drains, flood mitigation levees, retarding basins and dams. They are also integral to large dam spillway adequacy assessments undertaken to determine the flood magnitude that existing dams can safely withstand. Other uses include the assigning of probability to an observed rainfall event and making decisions about warnings for severe weather and flash flooding.

The purpose of the **National Industry Guidelines for Hydrometric Monitoring** is to improve the consistency of practices in hydrometric monitoring and of the resulting information generated by agencies that collect and supply data under the Water Regulations. The 10 guidelines present recommended Australian industry practice for a range of aspects of hydrometric monitoring. The documents bring together practical guidance on site establishment, instrument systems, data management and training through to specific recommendations for application of acoustic Doppler instrumentation in a single series.

The Bureau's **Seasonal Streamflow Forecasting Service** issues monthly forecasts of the likelihood of a given volume of water flowing in a stream or catchment in the coming three months. The service commenced in December 2010 and now covers 74 locations in 32 river basins across the Northern Territory, Queensland, New South Wales, the Australian Capital Territory and Victoria. The streamflow forecasts are vital in helping water managers and users make informed decisions. Information on the amount of uncertainty associated with each forecast is provided to users through probabilistic forecasts and historical assessments of forecast quality. The service relies on statistical and dynamic modelling approaches developed jointly by the Bureau, CSIRO and the university sector.

Using data collected under the Water Regulations, the Bureau provides **water market information** through the National Water Market System web portal on the number and volume of entitlements that have been issued and the volumes and prices of entitlements and allocations that have been traded. The allocation trade information is updated weekly and entitlement trade and entitlements on issue information is updated monthly. Bureau-collected water market information is also profiled at the Bureau's National Climate and Water Briefings, is used in the National Water Account and underpins the National Water Commission's annual Australian water markets report.

The **Water Restrictions** website provides a single national summary of current water restriction information across Australia for metropolitan and non-metropolitan urban water authorities. Users can search current water restrictions by state or territory, water agency and restriction name and view information on restriction levels and policy, including what they may and may not do.

The **Water Storage** product provides the only nationally consistent assessment of Australia's public surface water storages (of at least 1 GL capacity). It provides a snapshot of current storage volumes as well as a historical comparison of surface water storage availability across the country, and highlights trends over time. This product covers over 96 per cent of Australia's total publicly owned accessible surface water storage. In addition to data on individual storages, it provides available storage and percentage full data aggregations for capital cities, states and territories and major drainage divisions (including the Basin). The product can be accessed either through the Bureau's website or through the [iPhone application](#).

Water Data Transfer Format is an agreed format for the transfer of water information between organisations. It enables the harmonisation of information from Water Regulations data providers into a single system, the Australian Water Resource Information System. Having an agreed format ensures that the data taken into this national water information system is robust, well understood and consistent.

Additionally the Bureau is developing the following products and services:

- **Water Data Online** to provide greater public access to data collected under the Water Regulations
- **Australian Groundwater Explorer** to provide access to a comprehensive national dataset for groundwater information, including the purpose and construction details of, and log data for, groundwater bores and groundwater levels
- **Climate Resilient Water Sources** to provide public information about desalinated and recycled water streams
- **Monthly Water Updates** to provide accessible snapshots including maps of rainfall and streamflow conditions for river basins for the previous month
- **Short-term Streamflow Forecasting Service** to provide streamflow forecasts for one to seven days ahead.

7.3 Bureau stakeholder engagement

The Bureau undertakes regular engagement with a range of Australian Government and State agencies; water service providers; industry, research, and environmental organisations; and the public. The aim is to ensure efficient provision of data, targeted product development and effective use of services. Engagement activities occur both at a technical level for each individual product or service and at the program level. Most projects have steering groups, expert panels or user groups. External testing is used to guide product development. Significant reference groups for the program include:

- the Jurisdictional Reference Group on Water Information, which includes representatives from lead water agencies
- the National Water Account Committee, which provides strategic advice on the development of the National Water Account and ensures its alignment to user needs.

The Bureau advertises the range and value of its water information products and services through regular communication to users. It maintains a water information website at www.bom.gov.au/water to provide public access to many of its products and services. The site has had over 700,000 visitors for the calendar year to October 2014. Email notifications about individual products are sent to registered users regarding new releases, developments, and updates. For example, the Bureau's monthly seasonal streamflow forecasts are sent to over 2,000 registered users. Other significant channels for the program include:

- the National Climate and Water Briefings, which present a summary of recent climate and water conditions and provide an outlook for coming months

- Product launches and information sessions such as the October 2014 release of the Australian Groundwater Explorer in Canberra
- state-based water information briefings to illustrate to key stakeholders the Bureau's products and services and recent updates.

7.4 Value of the Bureau's products

The Panel believes that the Bureau has made much progress in improving Australia's water information systems in the last seven years, as evidenced by the large volumes and scale of datasets and the high quality of water information now available. This contrasts with the previous fragmented water information approach, serviced through state or regional frameworks, which did not adequately provide a national-scale picture. Overall, stakeholders expressed a positive view of the program and its implementation. As with all major programs, some aspects have been more successfully implemented than others.

During the Review it became apparent a number of stakeholders, particularly in the irrigation sector and most States,⁷⁴ do not find the National Water Account to be of value. One submission noted that there remains a lack of communication as to the value of the National Water Account to people in regional areas. Some governments and irrigation stakeholders advised that the National Water Account is reported at too high a level to inform States' water resource planning arrangements and irrigators' business decisions. The same stakeholders are invariably required by the Water Regulations to provide significant data to the Bureau for the compilation of the National Water Account. Several reported that they did not see proportionate benefits for the region they were interested in, relative to reporting requirements.

One stakeholder, however, submitted that the National Water Account was proving valuable as an evidence base to inform policy on, and development of, northern Australia's water resources.

The Panel also heard that the National Water Account was an occasional tool to inform public policy and development of major infrastructure. To the extent that the National Water Account helps to inform policy choices (for example the relative merits of desalination plants and dams), it could be expected to provide significant benefit by facilitating optimal decisions.

It is not surprising that the National Water Account is not equally useful to all interests, as not all stakeholders require the longer term, bigger picture information that it provides. However, the Panel acknowledges the benefits that the National Water Account can provide to planners and policy-makers faced with decisions about significant infrastructure, for regions undergoing development, and to inform water resource plans and new management regimes.

The Panel also considered that in a number of other areas stakeholders are satisfied that data collected under the Water Regulations is being used by the Bureau to produce valuable products and services.

Many stakeholders reported that they found significant value in the Bureau's short-term products and services, such as the Seasonal Streamflow Forecasts. This service issues monthly forecasts of the likely water flow volumes for a stream or catchment in the coming three months (see Box 7.2). The Bureau has advised that between July 2013 and June 2014 there were over 111,000 unique page views of the forecasts' webpages.

States, in particular, reported that the flood warning and forecasting service is of particular value. States require timely and accurate flood warnings and forecasts to enable agencies to plan their responses to flooding emergencies so as to avoid loss of life, property and key infrastructure. The Panel also appreciates that there will always be an inherent tension in providing water information products that are nationally consistent and

⁷⁴ Throughout this chapter 'states' refers to both states and territories.

presenting them on a scale that is useful for local, regional and national decision-makers. During the Review, it became apparent that the diversity of different stakeholder needs is challenging. Some stakeholder needs are very local; others are at the national scale. Some seek information to inform business and trading decisions; others seek information to inform government policy.

Not all products can meet all needs, and the benefits cannot always be direct and proportionate for users and data providers. In the Panel's view, the Bureau should seek to reconcile this tension wherever possible and work to minimise reporting burdens. The Bureau should undertake continuous dialogue with end users of its products so that they can be adapted and refined to provide greater value.

Stakeholders also need to understand the benefits and uses of the various products developed by the Bureau, and to see their use in policy making demonstrated clearly and transparently. The Bureau should strive to assist stakeholders, particularly those providing large volumes of data, to fully utilise the information products and services that best suit their business.

The Panel considers that these challenges may be due in some degree to the breadth of additional functions that the Bureau has been tasked with under section 120 of the Act. A number of submissions from various sectors acknowledged the benefits of Part 7 of the Act's national water information approach and the role the Bureau has played in delivering improved products and services. These stakeholders also stressed the importance of the continued availability of independent water information products to support fundamental elements of national reform such as facilitation of efficient water markets.

However, the Australian Government may find it timely to consider the current span of the Bureau's functions and powers to ensure that the resulting water information activities remain sufficiently focused and aligned to deliver key objects of the Act and produce information that can inform and support delivery of the Act's policy objectives, including the Basin Plan.

The Panel suggests that one way for the Bureau to meet the challenges of continuing to deliver improved water information systems would be to focus on streamlining its water information products. Stakeholder confidence is likely to increase if the Bureau delivers a narrower range of higher value products and services before expanding to a more ambitious offering.

The Bureau advised the Panel that it has undertaken extensive water industry consultation and stakeholder engagement to both raise awareness of its water information offering and shape its portfolio of products and services. This includes establishing a number of advisory groups and consultative forums, conducting targeted user needs studies, delivering three series of national water information briefings across Australia and holding monthly National Climate and Water Briefings, as well as active use of the Bureau's website and distribution of electronic newsletters and e-alerts.

The Panel considers that the Bureau should continue to engage with stakeholders through these mechanisms, with a particular focus on working with data providers from industry and the business sector, to ensure that reporting activities deliver corresponding benefits in products and services.

7.1: WATER INFORMATION: PRODUCTS AND SERVICES

The Bureau of Meteorology should engage with stakeholders on a continuing basis with a view to developing products where the benefits outweigh the costs, and should adapt and refine its existing product suite in light of user feedback. It should also clearly communicate the benefits of its products and demonstrate their usefulness.

7.5 Reporting burden

An estimate of compliance costs using the Office of Best Practice Regulation business cost calculator was completed before the introduction of the water information provisions in the Water Regulations in 2008. The total cost for the regulatory option across the business sector was estimated to be \$430,000 in the first year and then \$145,000 annually.⁷⁵

However, as the water information reporting burden under the Act is not limited to the Part 7 water information functions, the regulatory cost impact on data providers is likely to be higher than the estimate above for water information reporting to the Bureau. The Australian Competition and Consumer Commission (ACCC), Murray–Darling Basin Authority (MDBA) and National Water Commission (NWC) all collect information under the Act for a range of purposes (see Box 7.3 for details). This was recognised in submissions. Many noted the cumulative impact of reporting requests and the potential for duplication and overlap. This may also be exacerbated by requests from bodies such as the Australian Bureau of Statistics (ABS) and Australian Bureau of Agricultural and Resource Economics and Sciences that do not currently have functions under the Act but produce publications such as the annual Water Account Australia and weekly climate, water and agricultural updates.

The Panel therefore believes that the baseline regulatory burden imposed on data providers should be estimated so that government and stakeholders are aware of the full cost of the reporting requirements under the Act.

Some stakeholders also noted overlap and potential duplication between Australian and State government reporting requirements, particularly in relation to pricing regulation where an organisation is regulated by the ACCC and by a state-based regulator for their Basin water and non-Basin water functions respectively.

The concerns raised by stakeholders are consistent with the findings of the NWC, which recently recommended that water information collection and sharing be streamlined and that the Australian Government review reporting associated with the National Water Account, the Act, the Basin Plan and the ABS Water Account Australia to ensure that efforts are well targeted to stakeholder needs and information is shared and re-used among jurisdictions and agencies.⁷⁶

In relation to reporting burdens, the Panel notes that the Bureau only requires data where organisations would already be collecting information for their own purposes or other reporting purposes. This approach appears to reduce the impost. The NWC reported that several National Water Initiative partner governments have initiated investigations into opportunities to streamline their own water information regulation and processes.⁷⁷

⁷⁵ *Water Regulations 2008* (Cth), Explanatory Statement, Appendix C: Business Cost Calculator (Table 6).

⁷⁶ National Water Commission, 2014, *Australia's water blueprint: national reform assessment 2014*, pp. 8–9.

⁷⁷ National Water Commission, 2014, *Australia's water blueprint: national reform assessment 2014*, p. 8.

BOX 7.3: WATER INFORMATION POWERS AND FUNCTIONS UNDER THE ACT

Other parts of the Act also provide water information-gathering and reporting powers to enable Australian Government agencies such as the MDBA, the ACCC and the NWC to carry out their relevant functions under the Act.

The MDBA collects information necessary to monitor and evaluate the effectiveness of the Basin Plan and to monitor and enforce water resource plan compliance under Chapter 13 of the Basin Plan and section 71 of the Act. These obligations fall on the Basin States and the Australian Government. The MDBA's functions and powers provide that it can also collect, analyse, interpret and disseminate information about Basin water resources and water-dependent ecosystems as necessary or convenient (sections 172 and 173 of the Act).

The Basin Plan water trading rules also require information to be provided to the MDBA for publication. For example, Basin States are required to provide information about the characteristics of different classes of water access rights (excluding water allocations), and certain irrigation infrastructure operators are required to provide copies of their water trading rules.

The MDBA also has the power, under section 238 of the Act, to compel persons to provide information that relates to the preparation or implementation of the Basin Plan, the investigation of a possible contravention of Part 2 of the Act (or regulations made for the purposes of that part), or a matter relevant to the performance of the MDBA's functions that is specified in regulations. This information-gathering power, which includes civil penalties for non-compliance, has not been used by the MDBA to date.

The ACCC requires information to carry out its monitoring and regulatory functions in relation to regulated water charges, transformation arrangements and the water charge rules and Water Market Rules. The ACCC uses this information to prepare an annual water monitoring report for the Minister.

These obligations fall on Basin States, irrigation infrastructure operators and bulk water suppliers.

The ACCC may also use its formal powers under section 155 of the *Competition and Consumer Act 2010* (Cth) (recognised by section 100A of the Act) to compel persons to provide information, documents and evidence.

The NWC has used its power to audit the Basin Plan and water resource plans (section 87 of the Act) to seek water information to prepare the Murray–Darling Basin implementation: initial report released in 2013.

To deliver these functions the NWC has generally sought information from the Australian and Basin State governments, and—in the case of the National Water Initiative assessments (which are proposed to be legislated under Part 3 of the Act and to be undertaken in future by the Productivity Commission)—also from industry stakeholders and the public.

To overcome some of these issues, several submissions suggested that the collection and use of water information should be on a 'collect once, use many times' principle, preferably with a single portal, and that requests should be limited in frequency where appropriate. Other submissions suggested that there should be greater sharing and re-use of water information between State and Australian Government agencies, and that reporting requests should be tailored to differences between jurisdictions (e.g. where water markets are less developed and the benefits of frequent data provision are diminished).

The Panel met with the ACCC, the MDBA and the Bureau with the aim of testing stakeholders' concerns about reporting burdens. During these discussions, the agencies acknowledged that minimising reporting burdens is important and outlined some actions that have already been undertaken or are underway to reduce the regulatory burden, as follows.

- (a) Through the Modernisation and Extension of Hydrologic Monitoring Systems Program from 2007 to 2012, the Bureau assisted persons named in the Water Regulations to update monitoring systems and improve the quality of data delivered to the Bureau. As a result, around 80 per cent of all Regulations data transmitted to the Bureau is now received in the standard Water Data Transfer Format.

- (b) The ACCC reported that for its most recent water monitoring report (covering the 2012–13 financial year) it eliminated redundant parts of its request for information and pre-filled many other parts with information obtained from other sources and previous years' responses. Further streamlining was undertaken for the 2013–14 request for information.
- (c) The Bureau is undertaking an internal review of its collection and use of Water Regulations data with the aim of identifying reporting requirements that can be relaxed, including current requirements on rural water utilities.
- (d) The Bureau has signed an interagency agreement with the MDBA to provide it with Water Regulations data in 2014 for use in Basin Plan reporting and assessment.
- (e) The Bureau provided water markets data to the Australian Government Department of the Environment for publication as part of the National Water Market System, avoiding double-handling of data.
- (f) The Bureau has undertaken an initial analysis of Australian Government agency reporting requirements.

While the Panel believes that these measures represent a genuine effort on the part of the Australian Government, the Panel considers that further work is required to build on these early actions and ensure that stakeholder concerns are adequately addressed.

7.2: WATER INFORMATION: REPORTING REQUIREMENTS

Australian Government agencies should ensure that data collected under the Act is collected in the right form at the right time for the right purpose and used to create information that is of value, while minimising regulatory burdens and any duplication of requests imposed on data providers.

Given the scope of the issues raised and the limited time this Review had to consider the Act's subordinate instruments in detail, the Panel recommends that the Australian Government establish an interagency working group, led by the Bureau, tasked with reporting to the Australian Government in the first half of 2015 on:

- (a) current water information reporting requirements and associated regulatory burdens for data providers, including an estimate of costs
- (b) the benefits of the present suite of water information products, with reference to associated costs borne by providers of information
- (c) options to reduce the regulatory burden imposed on data providers in the order of 20 per cent or more compared to current regulatory burdens. For example, the group could investigate relaxing or eliminating categories and subcategories of information required from smaller rural water utilities.

Based on the Panel's understanding that there is an opportunity to reduce the burden on data providers, and as the Bureau is already considering options in this regard, the Panel believes that a target in the order of 20 per cent or more compared to the current requirements, is reasonable.

The regulatory reduction target is important to ensure that the work of the group is focused and delivers real benefits for business. The Panel notes that even small changes in regulatory burden can have a large productivity effect on small operations. In addition, the Australian Bureau of Agricultural and Resource Economics and Sciences recently reported that opportunities to increase agricultural productivity will increasingly depend on reducing regulatory burdens now that past competition reforms have largely run their course and increasing exposure to competition is likely to yield minimal productivity gains.⁷⁸

⁷⁸ Gray, EM. Oss-Emer, M. and Sheng, Y., 2014, *Australian agricultural productivity growth: past reforms and future opportunities*, ABARES research report 14.2, p. 1.

The working group should undertake the review in consultation with a cross-section of data providers to ensure that stakeholder concerns are further pinpointed and understood by those who undertake the review.

In addition, the options considered should include a single portal solution enabling data providers to provide data once for many uses. The Panel notes a number of issues that would need to be worked through by the relevant Australian Government agencies to deliver a single portal, including information standards, quality, definitions and timing of reporting, as well as impacts on direct engagement between data providers and agencies using the information. Given these issues, such a solution would likely to take some time for the Australian Government to develop and may create short-term disruption for data providers in pursuit of longer term regulatory efficiency.

Other options for legislative and non-legislative solutions include increasing the use of data-sharing protocols between agencies where feasible.

While the scope of this Review may not include consideration of overlap with State reporting requirements imposed on data providers, the Panel considers that the Australian Government is well placed to provide a leadership role in this area. This should be demonstrated by investigating and addressing reported instances of duplication between the Australian and State governments. In such cases, data-sharing arrangements or standard format approaches could be considered on a case-by-case basis.

The Jurisdictional Reference Group on Water Information, a representative water information practitioner group coordinated by the Bureau, provides a forum for the Australian and State governments to collaborate to streamline reporting burdens. The Panel considers that the continued participation in, and support of, such forums by all governments builds a strong foundation for and complements the further work to be done.

RECOMMENDATION 18

The Panel recommends that an interagency working group led by the Bureau of Meteorology be established to report to the Australian Government on:

- (a) current water information reporting requirements under the Act and associated regulatory burdens for data providers, including an estimate of current costs**
- (b) the benefits of the suite of information products with reference to associated costs borne by data providers**
- (c) options to reduce the regulatory burden imposed on data providers in the order of 20 per cent or more compared to current regulatory burdens.**

The working group should undertake the review in consultation with data providers and report to the Australian Government in the first half of 2015.

Chapter 8: Enforcement

Part 8 of the *Water Act 2007* (Cth) (the Act) contains enforcement mechanisms that support compliance with the provisions of the Act. These mechanisms are intended to ensure desired outcomes by allowing the application of penalties such as injunctions, enforceable undertakings, civil penalties and enforcement notices for contravening a provision of the Act, the *Water Regulations 2008* (Cth) (Water Regulations), the water charge rules or the Water Market Rules.

By providing the capacity to address contraventions of the Act, Part 8 supports the implementation of the objects of the Act.

The provisions of Part 8 allow for the Murray–Darling Basin Authority (MDBA), the Australian Competition and Consumer Commission (ACCC) or the Minister to act as the appropriate enforcement agency, depending on which Part of the Act, regulation, water charge rule or water market rule has been contravened. To date there have been no enforcement actions by the MDBA or the Minister. The ACCC has used the enforcement provisions in five instances. They have accepted two enforceable undertakings from two irrigation infrastructure operators under section 163 and have issued three infringement notices to one of those operators under section 156. Additionally the ACCC has identified a number of cases where an infrastructure operator or irrigation infrastructure operator was probably in breach of the rules under Parts 4 or 4A but the ACCC considered the alleged breach to be minor and/or arising from a genuine misunderstanding of the requirements of the rules rather than a deliberate attempt to avoid legal obligations. Accordingly the ACCC resolved its compliance concerns in these instances administratively rather than by taking formal enforcement action.⁷⁹

The Panel has been advised that the MDBA and the Australian Government have consistently indicated that implementation of the Basin Plan will be undertaken in a cooperative and consultative manner. With regard to compliance matters, this is expressed clearly in clause 6.4 of the *2013 Basin Plan Implementation Agreement*,⁸⁰ which states:

In undertaking its regulatory role to achieve the Plan outcomes, the MDBA will allow for differences in approach between Basin States to give effect to Plan outcomes. The MDBA will focus its efforts on promoting and monitoring compliance in areas where it has a reasonable belief that the underlying issue may impact materially on the achievement of Plan outcomes. If compliance issues arise, the MDBA would seek to resolve them in good faith, in a way that is proportional to the issue being addressed, considers the actions taken toward achieving compliance, and with a view to dealing effectively with the circumstance. The MDBA would only seek to exercise its powers under the Water Act 2007 (Cth) (the Act) as a last resort.

This sentiment is mirrored in the MDBA Compliance Strategy released in April 2014. The strategy establishes an escalating approach to managing non-compliance, with a strong focus on negotiation and mediation, relying on enforcement as a last resort.

The Panel notes recent feedback from industry that the ACCC has modified its approach to take a more educative role in compliance matters under the Act, after an initial period when a number of enforcement actions (noted at paragraph 8.3) were undertaken. For example, the ACCC has provided targeted guidance to operators and assisted small operators to streamline their practices and charging arrangements in accordance with the rules.

⁷⁹ Australian Competition and Consumer Commission, 2014, *Water Monitoring Report 2012–13*, p. 40.

⁸⁰ *The Murray–Darling Basin Plan Implementation Agreement* was made under section 1.12 of the Basin Plan 2012.

Operators are also proactively approaching the ACCC to self-identify breaches and provide comment on specific policy proposals.⁸¹

As Part 8 comprises the enforcement provisions of the Act, it nominally creates a high regulatory impact, which can be mitigated through appropriate use of the provisions.

COAG's *Best practice regulation: a guide for ministerial councils and standard setting bodies* (the COAG Guide) states:

Regulatory measures should contain compliance strategies which ensure the greatest degree of compliance at the lowest cost to all parties. Incentive effects should be made explicit in any regulatory proposals. Measures to encourage compliance may include regulatory clarity, brevity, public education and consultation and the choice of alternative regulatory approaches with compliance in mind.

Having taken these steps to facilitate compliance, regulators also need to consider the feasibility of enforcing regulatory requirements through the detection of non-compliance.

Mandatory regulatory instruments should contain appropriate sanctions to enforce compliance and penalise non-compliance. However, enforcement options should differentiate between the good corporate citizen and the renegade, to ensure that 'last resort' penalties are used most effectively (rarely) but model behaviour is encouraged. Enforcement measures should not have the effect of encouraging otherwise good corporate citizens to subvert compliance measures.⁸²

The Panel notes that the approaches that have been taken by the MDBA and ACCC to the enforcement provisions under Part 8 of the Act adopt the approach set out by the COAG Guide, seeking to ensure that penalties are used as a last resort and that education and consultation are a higher priority.

8.1: ENFORCEMENT

A sensible and cooperative approach to monitoring and compliance activities should be applied by regulators under the Act.

8.1 Enforceable undertakings

One submission sought an amendment either to section 163 of the Act or to the Water Regulations to specify some kinds of written undertakings that enforcement agencies may accept under section 163 of the Act, to provide greater clarity for regulated entities and regulators. Enforceable undertakings are voluntary agreements between the relevant enforcement agency and a person the agency considers to have committed a contravention of the Act, the Water Market Rules, the water charge rules or the Water Regulations made under the Act. Undertakings can be enforced through the courts in cases of non-compliance.

The Act gives the MDBA, the ACCC and the Minister the power to accept enforceable undertakings.

Sections 163(2)(a), (b) and (c) of the Act set out the kinds of undertakings an enforcement agency may accept. The scope of these undertakings is broadly expressed. Section 163(2)(d) enables further and potentially more detailed kinds of undertakings to be specified in the Water Regulations made under the Act.

⁸¹ Australian Competition and Consumer Commission, 2014, *ACCC Water Monitoring Report 2012–13*, p. 44.

⁸² Council of Australian Governments, 2007, *Best Practice Regulation: A Guide for Ministerial Councils and National Standard Setting Bodies*, p. 16.

The characteristics of acceptable undertakings to be specified in the Water Regulations would be determined by the Department of the Environment, as the policy agency, drawing from the experiences of the regulators, the ACCC, MDBA and Bureau of Meteorology. The proposed amendments would clarify the acceptability of specific matters covered in existing undertakings rather than specifying new categories of undertakings, which might result in additional regulation and would not cause any policy changes to the Act. The level of specific detail that would need to be included in such a listing of acceptable undertakings is more usually included in regulations rather than within an Act itself.

An amendment to the Water Regulations along these lines would provide regulated entities, such as irrigation infrastructure operators, with greater certainty as to the types of enforceable undertakings are acceptable under the Act, thereby simplifying their regulatory arrangements.

This approach would also improve the effectiveness of the Act by supporting the ACCC and the MDBA in using proportionate measures to encourage compliance with the water market, water charge and Basin Plan water trading rules.

RECOMMENDATION 19

The Panel recommends that regulations be made to prescribe types of enforceable undertakings, in consultation with stakeholders.

Chapter 9: Murray–Darling Basin Authority

The Murray–Darling Basin Authority (MDBA) was established in 2008, under the provisions of Part 9 of the *Water Act 2007* (Cth) (the Act) and was tasked with developing and implementing the Basin Plan, including developing Basin Plan water trading rules, some aspects of water information collection and dissemination, and certain regulatory and compliance roles. Part 9 of the Act contains the administrative provisions that establish the MDBA, its membership, functions, powers and liabilities. Part 9 also establishes the Basin Community Committee and provides additional functions for the Basin Officials Committee, which is established under the Murray–Darling Basin Agreement (Schedule 1 to the Act). Information on the Murray–Darling Basin Agreement is included in Box 9.1 below.

Following amendment to the Act, the MDBA replaced the former Murray–Darling Basin Commission, taking over the management of River Murray Operations, which is governed under the Murray–Darling Basin Agreement and funded by the joint Basin States (including contributions from Queensland and the Australian Capital Territory for some natural resource management and administrative functions).

Part 10 of the Act sets out the powers of authorised officers of the MDBA to undertake certain special actions, including entering premises and to gather information. These powers can be used if they are necessary to perform the MDBA's functions, to monitor compliance, to search for evidential material and to monitor warrants. There were no issues raised in relation to the Part 10 provisions, which have never been used.

9.1 Governance and functions of the Murray–Darling Basin Authority

The MDBA has a leading role in the delivery of Basin Plan reforms under the Act as well as its functions under the Murray–Darling Basin Agreement, such as River Murray Operations, and The Living Murray Program (see Chapter 6, Box 6.3). The MDBA is a policymaker, standard setter, river operator and regulator and reports to the Commonwealth Minister for its Basin Plan functions, to the Murray–Darling Basin Ministerial Council on its functions under the Murray–Darling Basin Agreement and to The Living Murray governments on The Living Murray Program.

BOX 9.1: MURRAY–DARLING BASIN AGREEMENT

The River Murray System encompasses the waterways and the regulating structures of the River Murray in the southern Basin, passes through New South Wales, Victoria and South Australia. Management and use of the rivers in one jurisdiction can affect riverflows, water availability and water quality elsewhere in the river system. For this reason, the need to manage the system collectively has been recognised for 100 years.

The first agreement was the 1914 River Murray Waters Agreement between the Australian Government, New South Wales, Victoria and South Australia. It allowed the River Murray to be managed and assets to be constructed to provide for water sharing between New South Wales, Victoria and South Australia. It set out the water shares for the River Murray, initiated the construction of jointly owned assets—dams and locks—for water storage, regulation and navigation, and enabled the joint management of the river for irrigation, municipal and industrial uses.

Over the years new joint activities were added to the 1914 agreement, many more river assets were built and it was broadened to address the emerging environmental problems of the Basin. However, the fundamental water shares and joint management arrangements remain in place. Queensland and the Australian Capital Territory joined in 1996 and 1998 respectively. In 2008 the signatory governments agreed to a new version of the Murray–Darling Basin Agreement, which is set out at Schedule 1 to the Act. The Act transferred most of the functions of the then Murray–Darling Basin Commission to the new MDBA and established the Basin Officials Committee to advise the Murray–Darling Basin Ministerial Council and exercise responsibility for high-level decision-making in relation to river operations. The Murray–Darling Basin Ministerial Council sets high-level policy objectives and outcomes for matters of common interest to the contracting governments under the Murray–Darling Basin Agreement.

Today's governance arrangements for the joint activities are set out in the Murray–Darling Basin Agreement. The joint activities now include both River Murray Operations and a number of natural resource management programs that have evolved as a shared response to the need to manage some of the environmental consequences of water use in the Basin.

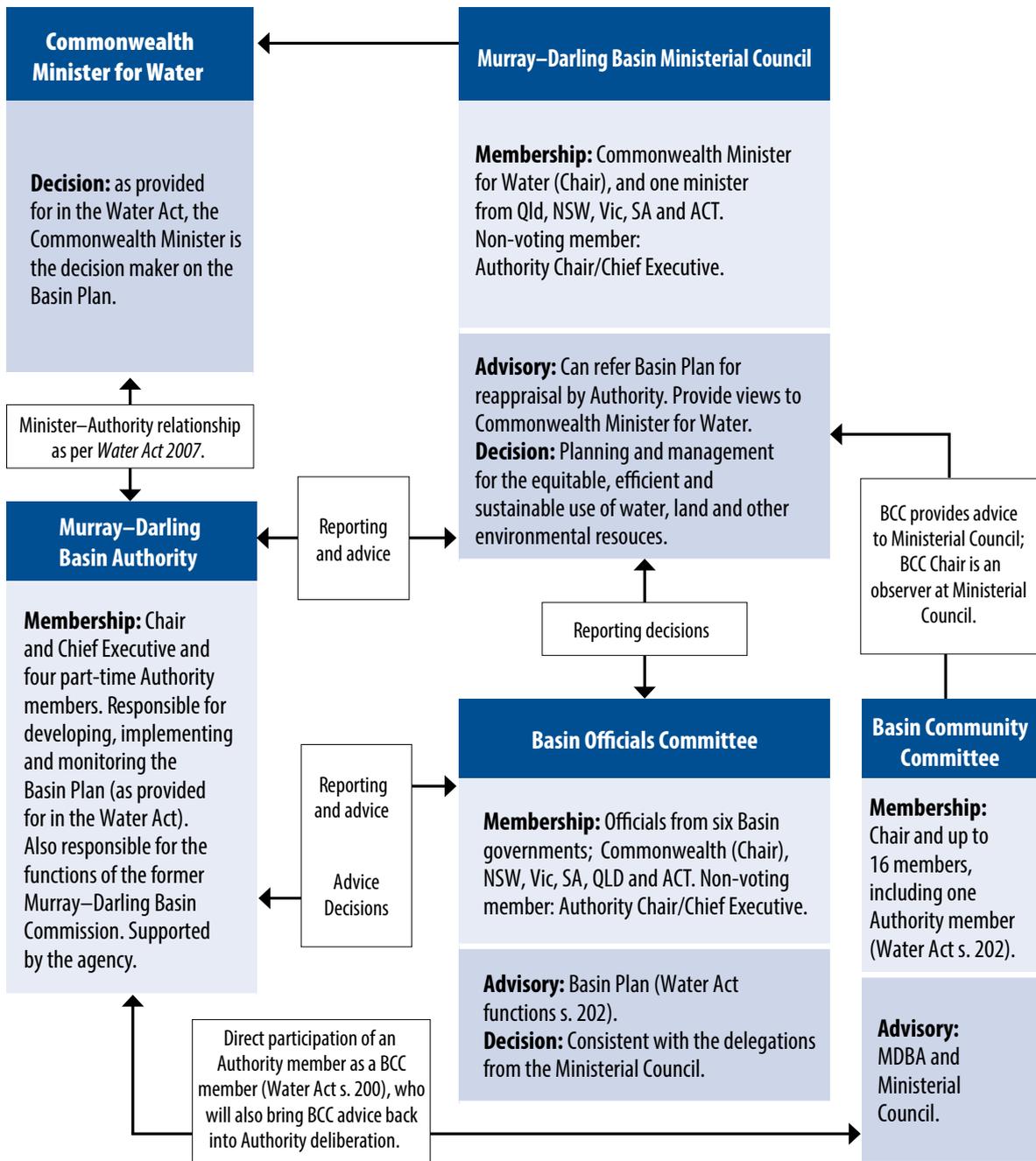
The MDBA manages the joint activities on behalf of the partner governments. River Murray Operations is the largest of the joint activities and accounts for around twothirds of the current joint activities budget.

Submissions and discussions at stakeholder roundtables indicated significant variation in the level of confidence in the MDBA. These differing views have influenced some stakeholder attitudes to the issues raised in the Review and that is of concern. The Panel does not consider the MDBA to be an underperforming agency. As a whole of Basin authority, the MDBA will inevitably elicit a variety of responses from those with whom it has dealings.

The views expressed in industry and some Basin State government submissions were that the MDBA needs to engage more with Basin communities, demonstrate how it takes account of social and economic objectives as part of its decision-making framework, give greater priority to monitoring the social and economic impacts of the Basin Plan as part of its overall monitoring and evaluation program and provide greater transparency. There is also a strong feeling that MDBA should partner with Basin States and other relevant agencies and use those partnerships to harness, rather than duplicate, local knowledge including in the areas of water resource plan accreditation, monitoring and evaluation, and environmental watering.

Submissions from environmental groups generally demonstrated greater confidence in the work and engagement of the MDBA, particularly in regards to Basin-wide issues and approaches. This was confirmed during roundtable discussions, with Indigenous groups also expressing support for the MDBA's engagement with and understanding of Indigenous issues.

FIGURE 9.1 MURRAY–DARLING BASIN AUTHORITY GOVERNANCE AND FUNCTIONS



Source: Murray–Darling Basin Authority

There is also a view that the MDBA's scope of functions is too broad, creating internal conflicts. It was proposed that some of MDBA's functions be transferred to other bodies that currently undertake similar functions (such as all Commonwealth environmental water being managed by the Commonwealth Environmental Water Holder, including The Living Murray portfolio, which is discussed under Chapter 6 of this report).

The Panel acknowledges that the MDBA has an unusual governance structure, broad scope of functions and a heavy and complex implementation workload between now and 2019. If these functions are not implemented well or are not coordinated, there is a high risk that the Basin Plan will not be implemented effectively and efficiently.

Nonetheless, the Panel understands that the MDBA's structure and functions reflect the combination of century old Commonwealth–State cooperative water planning arrangements on the one hand and the new Basin Plan functions on the other. This combination of functions and governance structures brings challenges and complexity but it also has some advantages given the links between each of the functions and the attendant expertise of the MDBA. For example, the joint natural resource management programs are important complementary work to the Basin Plan reforms.

The Panel is of the view that major changes to the MDBA's structure and functions at this point in time would present more risks than benefits, certainly in relation to the timely and successful delivery of the Basin Plan. Instead, the Panel has made some recommendations for more discrete changes that could be implemented more quickly and with limited downside risk for the reforms, including the potential reassignment of the MDBA's Basin Plan water trading rules functions. As discussed in Chapter 6, there are also discussions underway between Commonwealth Environmental Water Holder and MDBA on the portfolio of entitlements held by the MDBA under The Living Murray Program and with governments more broadly on The Living Murray governance and funding arrangements.

The MDBA must provide transparent information on each of its activities and clearly explain how they each relate to the other. The MDBA should consider how it can more clearly differentiate between its functions, including in terms of its budget reporting and whether there is opportunity to report against separate rather than a single budget outcome for its activities. This would assist with building confidence of stakeholders in the funding arrangements for its Basin Plan functions and River Murray Operations functions and that they are not intertwined.

9.1: MURRAY–DARLING BASIN AUTHORITY: TRANSPARENCY OF BASIN PLAN AND RIVER MURRAY OPERATIONS FUNCTIONS

The Murray–Darling Basin Authority should consider how it can more clearly differentiate between its Basin Plan, River Murray Operations and other joint activity functions and associated costs in its financial reporting.

Murray–Darling Basin Authority governance

Several submissions sought changes to the governance arrangements of the MDBA. Note that, where the term the Authority is used, this means the six members that make up the board of the MDBA, not the agency as a whole (which is referred to as the MDBA).

Appointment of Authority members

One submission proposed that nominations for Authority appointments be made by the Basin States with no veto over another Basin State's nomination. The process for nominating members of the Authority occurs under the *2008 Intergovernmental Agreement on Murray–Darling Basin Reform*, and the process can only be changed through agreement between all Basin State governments. Under the current process, all Basin State-nominated members are nominated collectively by all Basin States.

Local engagement officers

One submission proposed that the MDBA should appoint local engagement officers, as the Commonwealth Environmental Water Holder has done. The Panel heard a general sentiment from stakeholders that the MDBA could better demonstrate its commitment to localism. While the Panel believes that this is an operational matter for the MDBA and the Australian Government and does not require an amendment to the Act itself, the Panel does note the positive reaction to the appointment of Commonwealth Environmental Water Holder's local engagement officers and considers that the MDBA may benefit from engaging staff in this capacity or shifting some existing staff to local areas.

Basin Officials Committee

Other submissions proposed that the Basin Officials Committee have increased capacity in decision-making, including seeking amendments to the Act. The Basin Officials Committee was established under the Murray–Darling Basin Agreement and consists of a Chair (appointed by the Australian Government) and five other members, who each represent one Basin State. The Basin Officials Committee's functions include advising the Murray–Darling Basin Ministerial Council on outcomes and objectives of common interest to the Basin States in regards to Basin water resources, to give effect to policies or decisions of the Murray–Darling Basin Ministerial Council and to exercise responsibility for high-level decision-making in relation to river operations. As part of the powers and functions of the Basin Officials Committee, the Panel notes that the Basin Officials Committee already has the capacity to suggest amendments to the Act (via the Murray–Darling Basin Ministerial Council).

Basin Community Committee

The Basin Community Committee is established under the Act, and its functions, as set out in section 202, include advising the Authority on community matters relating to Basin water resources, as well as other matters referred to it by the Authority. The Basin Community Committee represents the diverse interests of the Basin's communities, with its membership required to include water users and a person with expertise in Indigenous matters relevant to Basin water resources. The Panel acknowledges the important role the Basin Community Committee has in advising the Authority on matters of importance to the people of the Basin. The Chair of the Basin Community Committee may attend meetings of the Murray–Darling Basin Ministerial Council as an observer, by invitation. The Panel understands that the Basin Community Committee Chair usually attends Murray–Darling Basin Ministerial Council meetings.

The Panel notes that proposals to strengthen the advisory role of the Basin Community Committee are not sought by the Basin Community Committee itself. As the Basin Community Committee is already able to advise both the Authority and the Murray–Darling Basin Ministerial Council, no further strengthening of their advisory role through the Act is recommended. The Panel notes that the Act already provides for formal consultation by the Authority with the Basin Community Committee on the development and amendment of the Basin Plan. The publication of Basin Community Committee advice to the Authority or the Murray–Darling Basin Ministerial Council is a matter for those bodies to consider.

Transparency of functions under the Murray–Darling Basin Agreement

There were also a number of submissions which proposed amendments to the Act that relate to the functions the MDBA performs under the Murray–Darling Basin Agreement. The Murray–Darling Basin Agreement sets out the tasks that the MDBA undertakes on behalf of the Basin States and primarily relate to River Murray Operations. One proposal was to add a specific reference to the Murray–Darling Basin Agreement in the MDBA's functions at section 172(1)(a) of the Act. This was considered by the Panel but, as the MDBA's functions under

the Murray–Darling Basin Agreement are already included in the Act at section 18E, this change would be duplicative and is not considered necessary.

A further proposed amendment to the MDBA’s reporting provisions under Part 9 was to include a requirement that the MDBA provide regular, clear and transparent financial and performance reporting to the Murray–Darling Basin Ministerial Council as it relates to implementation of the Murray–Darling Basin Agreement. The Panel did not consider this amendment to be necessary, noting that sections 213A and 214 of the Act require the MDBA to provide an annual corporate plan and an annual report to the Murray–Darling Basin Ministerial Council.

The Panel understands that these documents contain all of the financial and performance reporting pertaining to the Murray–Darling Basin Agreement, and any additional requirements would be duplicative. However, the Panel considers that the transparency of the MDBA’s functions performed for joint governments could be enhanced and recommends that the Murray–Darling Basin Ministerial Council consider making the corporate plan public in the future. This would go a long way toward addressing stakeholder concerns about a lack of transparency of the costs associated with River Murray Operations functions, which in some Basin States are cost recovered by governments through water users. Greater transparency on the budget and operations of the MDBA in regards to their functions under the Murray–Darling Basin Agreement would also assist with providing a clearer picture to stakeholders on the respective and separate costs associated with the MDBA’s Australian Government funded Basin Plan functions and the joint government funded River Murray Operations and joint program functions.

9.2: MURRAY–DARLING BASIN AUTHORITY: CORPORATE PLAN

The Murray–Darling Basin Authority and joint governments should make the whole of the Authority’s corporate plan publicly available.

MDBA and Basin Community Committee and Indigenous expertise

A number of submissions suggested strengthening the MDBA’s governance and capacity relating to Indigenous water issues, specifically seeking to include Indigenous water management to the list of fields relevant to the Authority’s membership at section 178(3). The Panel recommends that this amendment be made, noting the ongoing importance of Indigenous issues to the use and management of Basin water resources and the need to ensure that there is the option to incorporate appropriate expertise into the Authority as research on cultural flows is developed.

Additionally, the submissions suggested amendments to the Act to include engagement of Indigenous communities about the use and management of Basin water resources as one of the functions of the MDBA, as well as supporting research and investigations into that use and management. The MDBA has to date worked closely with both Murray Lower Darling Rivers Indigenous Nations and Northern Basin Aboriginal Nations, including the provision of funding, and has a demonstrated commitment to engage with Indigenous communities. The Panel considers it appropriate to amend the Act to include the engagement of Indigenous communities on the use of Basin water resources in the MDBA’s functions, but does not support an amendment to include a research program. The Panel notes that such research would impose an ongoing cost to the MDBA that would need to be balanced against its other functions. The MDBA already is undertaking research into Indigenous use and management of Basin water resources, particularly cultural flows and the Panel encourages the MDBA to continue to consider undertaking such research, as appropriate, in the future.

Similarly, one submission suggested that Basin Community Committee’s membership include at least two individuals with expertise in Indigenous matters relevant to the Basin water resources (section 202(5)(c)). Furthermore, the submission suggested that these individual members must be Indigenous. The Panel notes that the Basin Community Committee already has two representatives with appropriate expertise in Indigenous matters relevant to the Basin’s water resources, one from Northern Basin Aboriginal Nations and one from Murray Lower

Darling Rivers Indigenous Nations, and that the proposed amendment would support current practice. The Panel supports the amendment to increase Basin Community Committee membership to two members with expertise in Indigenous matters, but does not support an amendment that would specify that the individuals are Indigenous. The Panel recognises that the individuals who meet this criterion are likely to be Indigenous.

RECOMMENDATION 20

The Panel recommends that:

- (a) **section 178(3) of the Act be amended to include expertise in Indigenous matters relevant to Basin water resources as a field relevant to the Authority's functions**
- (b) **section 172(1) of the Act, 'Authority's functions' be amended to add 'engage the Indigenous community on the use and management of Basin water resources' as a distinct function of the Authority**
- (c) **section 202(5) of the Act be amended to provide that the Basin Community Committee's membership must include at least two individuals with expertise in Indigenous matters relevant to Basin water resources.**

Murray–Darling Basin Authority charges

Stakeholders have called for an independent review, or oversight, of MDBA River Murray Operations costs, cost–benefit analyses of MDBA functions and costs and transparent processes for determining and recovering costs. Further information on River Murray Operations is included in Box 9.2.

BOX 9.2: RIVER MURRAY OPERATIONS

The MDBA manages River Murray Operations on behalf of the partner governments—performing head office functions such as coordinating asset management, directing river operations and providing technical and modelling support. Each state partner government appoints a state constructing authority to undertake the day-to-day management, maintenance and renewal of physical assets and on-ground operations, under the direction of the MDBA.

River Murray Operations is a significant enterprise responsible for the management and operation of an asset base with a replacement value of almost \$4 billion. These assets underpin the delivery of state water shares and the operation of water markets that are critical to the Basin's irrigated agriculture sector.

River Murray Operations functions include both asset management (renewing and maintaining the suite of River Murray Operations assets) and river operations (operating the assets to deliver water shares and environmental outcomes in the River Murray System).

River Murray Operations assets are the water storage and delivery assets through which water supplies are delivered to agricultural and municipal water users in the Basin. They include dams and storages, locks and weirs, barrages, salinity mitigation schemes, river bank restoration and other management works, and a number of new environmental works. The services provided by these assets include storing, managing, delivering and sharing water, mitigating salinity, enabling navigation and supporting recreation and tourism.

In addition to its River Murray Operations function, the MDBA undertakes hydrologic modelling and runs the hydrometric network, river gauging (a collection of real-time data on river levels, flows, storages and water quality that is essential to the management of the river system); monitors water quality; and accounts for interstate water trade.

The concerns raised by stakeholders, particularly NSW irrigators, around the transparency and efficiency of MDBA River Murray Operations costs appear to relate to the recent change to cost recovery undertaken by the NSW government.

River Murray Operations is funded by contributions from the southern Basin Governments and the Australian Government. The budget is determined by the Murray–Darling Basin Ministerial Council, annually, via the MDBA’s corporate planning process. Through this process, the State Constructing Authorities (in conjunction with the MDBA) identify what activities should be undertaken through the Joint Venture, within the budget determined by the Murray–Darling Basin Ministerial Council.

The New South Wales government has recently taken steps to increase the revenue that the State Water Corporation is to recover from customers to fund a proportion of the New South Wales government’s contribution to River Murray Operations (water storage supply and asset management and river operations activities only).

The Panel notes that the annual budget and associated activities for those operations is determined and authorised by Basin States through the Murray–Darling Basin Ministerial Council each year. The budget is determined by the partner governments depending on the services they want provided and the costs of operating, maintaining and refurbishing the water assets (such as dams, locks and weirs) held by the Joint Venture. The MDBA must then operate within the budget determined by the Murray–Darling Basin Ministerial Council and undertake the activities agreed under the corporate plan.

The Panel understands that the Murray–Darling Basin Ministerial Council has commissioned a review of the cost efficiency of River Murray Operations, which will be completed by December 2014. The Terms of Reference for the cost efficiency review include an assessment of MDBA’s cost management practices to ensure they are in line with water charge determination processes conducted by the ACCC including development of a performance benchmarking and a building blocks model; and identifying scope for improving efficiency.

The budget and activities undertaken by River Murray Operations fall under the Murray–Darling Basin Agreement and are thus outside the scope of the Review. Nonetheless, in light of the concerns raised by stakeholders, the Panel recommends that the results of the cost efficiency review should be made public to boost transparency and confidence of stakeholders.

9.3: MURRAY–DARLING BASIN AUTHORITY: RIVER MURRAY OPERATIONS BUDGET AND COSTS

Information on the River Murray Operations budget and costs (compatible with information provided on assets and operations through water charge determinations made under Part 4 of the Act) should be made publicly available by the Murray–Darling Basin Ministerial Council.

Murray–Darling Basin Authority fees

A number of submissions suggested the repeal of section 212, which allows the MDBA to charge fees for services. Some noted that it was unclear what these fees referred to, and others noted that the MDBA was fully funded for its tasks by government and, therefore, should not need to charge fees.

The Panel notes that the MDBA is able to charge fees for the services provided in performing its functions. The power to charge fees for services under section 212 is not currently limited to regulated water charges as defined by Part 4 of the Act.

Although the section has not been used to date, the Panel notes that it is conceivable that the Murray–Darling Basin Ministerial Council may request the MDBA to recover costs associated with River Murray Operations from water users. Retaining the MDBA’s capacity to charge fees specifically for such services would be consistent with the NWI Pricing Principles.

As such, the Panel recommends that section 212 be amended so that the MDBA’s powers to charge fees for services are limited to regulated water charges, and that these charges should only be imposed in accordance with water charge rules made by the Minister.

The Panel considers that the water charge rules as currently drafted will need to be reviewed to ensure that any regulated water charges imposed by the MDBA are regulated by the ACCC in a manner equivalent to the rules applying to a Part 6 operator of the Water Charge (Infrastructure) Rules, reflecting the nature of the MDBA and the size of its operations.

RECOMMENDATION 21

The Panel recommends that section 212 be amended so that the Murray–Darling Basin Authority’s powers to charge fees for services are restricted to regulated water charges as defined by Part 4 of the Act and that these charges are regulated by rules equivalent to those that apply to an infrastructure operator that is a Part 6 operator as defined by the Water Charge (Infrastructure) Rules.

Murray–Darling Basin Authority administrative changes

The Panel also considered the administrative provisions of the MDBA and proposes a minor change to the timing of the Basin Plan Annual Effectiveness Report to address a current timing anomaly.

Currently section 214(2)(a) requires the Chief Executive of the MDBA to include an analysis of the effectiveness of the Basin Plan in the MDBA Annual Report. The MDBA Annual Report must be provided to the Minister as soon as practicable after June 30 each year. In line with other Australian Government annual reporting requirements, the Annual Report is usually provided to the Australian Government Minister by October, and must be provided by the end of December.

The analysis of the effectiveness of the Basin Plan relies on information provided by Basin States following the end of the water year (30 June). The Basin Plan recognises that this information may take considerable time to process and therefore provides a reporting date to the MDBA of 31 October each year. Section 13.18 of the Basin Plan requires the MDBA to provide the proposed evaluation findings and recommendations arising out of the analysis of effectiveness to Basin States, the Australian Government Department of the Environment, and the Commonwealth Environmental Water Holder for comment before the Report can be published.

Given this, it is not possible for the MDBA to analyse the information, prepare the report on effectiveness and consult on the findings in time to include it in the MDBA Annual Report, which is generally provided to the Minister in October and tabled by December.

The Panel recommends separating the annual report on the effectiveness of the Basin Plan from the MDBA Annual Report and introducing a new provision requiring that the report on the effectiveness of the Basin Plan be prepared by 31 December of the same calendar year.

RECOMMENDATION 22

The Panel recommends that the Act be amended to de-link the requirement for the Murray–Darling Basin Authority to produce an annual effectiveness report on the Basin Plan from the Murray–Darling Basin Authority’s annual report requirements, with the effectiveness report to be submitted to the Minister by 31 December annually for tabling in Parliament.

Authority meeting frequency

The MDBA proposed an amendment to the Act to amend the number of meetings required of the Authority. Currently section 191(2)(c) of the Act specifies that the Authority Chair must convene at least nine meetings each financial year. The MDBA proposed that this be reduced to quarterly meetings as an appropriate minimum requirement into the future, with the Authority able to undertake further meetings on an “as needs” basis. The provision for the Commonwealth Minister to request the Authority meet at any time would not change.

The Panel does not consider it appropriate to make the proposed amendment at this time. It was noted that the MDBA is a complex business with a large budget and that there a considerable number of issues that will need to be dealt with during the initial implementation of the Basin Plan, as well as the need to strengthen confidence in the MDBA’s work.

Chapter 10: Transitional matters and interaction with state laws

Part 11 of the *Water Act 2007* (Cth) (the Act) provides, as a transitional measure, for the continuing operation of relevant Basin State plans for a defined period after the Basin Plan first takes effect, by recognising:

- (a) transitional plans—Basin State plans made before 25 January 2007, when the then Prime Minister, the Hon. John Howard, announced Australian Government intervention in the Basin
- (b) interim plans—Basin State plans that are made on or after 25 January 2007 but prior to the commencement of the Basin Plan. The period of recognition for interim plans is the later of 31 December 2014 or five years after the plan is made.

As the Basin Plan sustainable diversion limits do not commence until 1 July 2019, and recognition of many of the Basin States' transitional and interim water resource plans expires before this time, the Australian Government has extended recognition of the majority of these plans to ensure a seamless transition to Basin Plan compliant water arrangements. The extension of transitional and interim water resource plans does not apply to any Basin Plan water trading rules in Basin State plans extended after the Basin Plan has been made. Transitional arrangements will gradually be phased out as Basin State water resource plans are accredited in the period from 2015 to mid-2019.

Part 11A of the Act deals with the relationship between the Commonwealth water legislation and other State laws. The effect of this part is to define the term 'Commonwealth water legislation' and provide that Commonwealth water legislation can operate concurrently with State laws and that, if needed, a referring State can displace the operation of the Commonwealth water legislation in specified circumstances. The Commonwealth may, by regulation, override a State's displacement clause.

No submissions raised concerns regarding provisions of Parts 11 or 11A.

Chapter 11: Miscellaneous

Part 12 of the *Water Act 2007* (Cth) (the Act) deals with a variety of matters including delegation powers of the Minister, review of the Act, and powers to make regulations.

11.1 Overlapping Commonwealth legislation

As part of the Australian Government's deregulation agenda, section 255AA under Part 12 of the Act was repealed on 17 October 2014 by the *Omnibus Repeal Day (Autumn 2014) Act 2014* (Cth). Section 255AA—which provided for an independent expert study to be undertaken to determine the impacts of proposed subsidence mining operations on Basin floodplains—was considered to duplicate recent legislative changes under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) and the Basin Plan. The Environment Protection and Biodiversity Conservation Act was amended in 2012 to establish the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development and ensure that large coalmining and coal seam gas extraction activities that may have a significant impact on water resources are referred for assessment and approval. The Basin Plan ensures that the interception of water (including by subsidence mining activities) and risks to water resources in the Basin are managed effectively under Basin State water resource plans in accordance with a Basin-wide framework.

The Panel notes that this addresses a concern, raised in one submission, about potential overlap between mining development approvals and water access planning arrangements, which could result in unnecessary regulatory burden on the water user and act as a barrier to market access.

11.2 Review of the Act

Section 253 of the Act prescribes the requirements for the current Review being undertaken by the Panel, including the mandatory terms of reference and consultation processes. To ensure that the Review findings are available to the public, the Minister must ensure that the report of the Review is tabled in each House of the Parliament within 15 sitting days of that House after receipt by the Minister.

The terms of reference for this Review were expanded beyond the mandatory terms of reference; they require the Panel to recommend appropriate future review points for the Act and the Basin Plan. The timing of Basin Plan reviews is considered in Chapter 2 of this report.

Perspectives on future review points for the Act varied; the Panel received a wide range of views during consultation on this matter. Some groups preferred that a date for the next review not be specified in the Act, preferring instead to leave it open to a decision by the Minister at an appropriate time, whereas others advocated for a future review point to be required. Among the groups in favour of a future statutory review of the Act, views on an appropriate date for the review were mixed. Some support was expressed for a review before 2019 to identify and resolve any legislative roadblocks to effective Basin Plan delivery or provide for further incorporation of Indigenous interests. Others preferred a review at a time when it could take stock of outcomes sufficiently after the Basin Plan takes full effect.

The Panel notes that a key principle in the *Australian Government guide to regulation* is that all regulation should be periodically reviewed to test its continuing relevance. This provides an opportunity to consider whether regulation remains relevant, effective and efficient.

Statutory reviews can require significant resources from government to undertake them and non-government bodies to participate in them, so it is critical to ensure that such reviews are undertaken at an optimal time.

Synchronising the review with related milestones and review processes—including the review of the Basin Plan itself—is important. Views were mixed on whether the next review of the Act should precede, be contemporaneous with or follow the Basin Plan review.

In view of the difficulties associated with predicting optimal review times on an ongoing basis, the Panel suggests one further review 10 years from now. This will follow a scheduled five-yearly audit of Basin Plan implementation in 2023, will coincide with the sustainable diversion limit reconciliation in 2024 and may usefully inform the Basin Plan review proposed to be completed in 2026 (as discussed in Chapter 2). The review itself could consider whether any further reviews should be prescribed in the legislation.

To provide flexibility for tailoring to the needs of the review at the time, mandatory terms of reference should not be prescribed.

RECOMMENDATION 23

The Panel recommends that section 253 of the Act be amended:

- (a) **to provide for a review of the Act in 2024 without mandatory terms of reference for that review being specified in the Act**
- (b) **to repeal the mandatory terms of reference specified in that section.**

Appendix A: Expert Panel Members



MR EAMONN MORAN PSM QC

Mr Eamonn Moran was Chief Parliamentary Counsel, Victoria, from 1999 to 2008. From 2008 to 2012 he was Justice of the Peace and Law Draftsman in the Department of Justice, Hong Kong. In 2005, Mr Moran was awarded a Public Service Medal for outstanding service to legislative drafting and public service. He is currently a Commissioner of the Victorian Law Reform Commission, a barrister in private practice and a consultant legislative counsel. He has had extensive experience working with water legislation in Victoria.



DR STEVE MORTON

Dr Steve Morton is an Honorary Fellow with CSIRO in Alice Springs. His career at CSIRO included 17 years as a research scientist, three years as Chief of CSIRO Sustainable Ecosystems, four years as Group Executive for Environment and Energy, and three years as Group Executive for Manufacturing, Materials and Minerals. His research addresses natural resource management and desert ecology. Dr Morton is Chair of the Scientific Advisory Panel to the Lake Eyre Basin Ministerial Forum, Department of the Environment; and Deputy Chair of Territory Natural Resource Management, Darwin.



MR GAVIN MCMAHON

Mr Gavin McMahon is heavily involved in water issues within the SA Riverland District and across the Murray–Darling Basin. He is the Chief Executive Officer of Central Irrigation Trust and a Director of Central Irrigation Pty Ltd, where he is responsible for the delivery of irrigation water to thousands of families, domestic customers and industries. He is also a Director of the National Irrigators Council and currently serves as the Chairperson. Mr McMahon previously spent 23 years with BSES Ltd, a research and development company servicing primary producers and processors in the sugar industry.



MR PETER ANDERSON

Mr Peter Anderson is a national business leader and public policy specialist in national and international affairs. He is also a former legal practitioner and educator to small businesses, as well as a senior adviser to governments. He has experience as a delegate to the International Chamber of Commerce, the OECD and the International Organisation of Employers, and in regional business forums. Mr Anderson recently stepped down from the position of Chief Executive of the Australian Chamber of Commerce and Industry. He is also currently a member of the review panel undertaking the Competition Policy Review.

Appendix B: List of submissions

WRITTEN SUBMISSIONS RECEIVED	
NO.	SUBMITTER NAME
01	New South Wales Farmers' Association
02	Mr Mark Mathews
03	Mr Robert Vincin
04	Dr Dianne Robinson
05	Ms Barbara Darvall
06	Mr Nick Ivanoff
07	Ms Dörte Planert
08	Mr Stephen Wood
09	Ms Robyn Caulfield
10	Dr Richard Mallaby
11	Ms Ingrid Hindell
12	Ms Susanna Cheng
13	Peel Valley Water Users Association
14	Mr James Stranger
15	Dr Linden Gillbank
16	National Water Brokers
17	Western Murray Irrigation Limited
18	Murray Valley Private Diverters
19	Australian Forest Products Association
20	Frontier Economics
21	Riverina and Murray Regional Organisation of Councils
22	Environmental Farmers Network
23	Mr Neville Schrader OAM
24	Goulburn Valley Environment Group
25	Victorian Recreational Fishing Peak Body
26	Friends of the Earth Melbourne
27	Southern Riverina Irrigators
28	Mr Paul Vale
29	Inland Rivers Network
30	Birdlife Southern New South Wales
31	Cumberland Bird Observers Club
32	Ms Katie O'Bryan
33	Queensland Murray–Darling Committee
34	Mr Brian Stevens
35	Queensland Farmers' Federation
36	Environmental Justice Australia
37	Wyong Shire Council
38	Government of Victoria
39	Australian Competition and Consumer Commission

WRITTEN SUBMISSIONS RECEIVED	
NO.	SUBMITTER NAME
40	Mr Peter Jerie
41	National Parks Association of New South Wales
42	Government of South Australia
43	Ms Jane Judd
44	Waterfind
45	Hastings Birdwatchers
46	New South Wales Irrigators' Council
47	Environment Victoria
48	National Irrigators Council
49	Northern Basin Advisory Committee, MDBA
50	Murray Irrigation
51	Cotton Australia
52	Nature Conservation Council
53	Gwydir Valley Irrigators Association
54	Ms Sarah Moles
55	Australian Dairy Farmers
56	Conservation Council South Australia
57	Primary Producers South Australia
58	Minerals Council of Australia
59	Government of Queensland
60	Australian Conservation Foundation
61	Federation of Victorian Traditional Owner Corporations
62	National Native Title Council
63	Government of New South Wales
64	State Water Corporation (New South Wales)
65	Murray–Darling Basin Authority
66	Australian Network of Environmental Defender's Offices
67	National Farmers' Federation
68	Law Society of New South Wales
69	Mr Geoff Wise
70	Australian Petroleum Production & Exploration Association
71	Northern Basin Aboriginal Nations
72	Murray Lower Darling Rivers Indigenous Nations
73	Murray Darling Association

Appendix C: List of attendees at consultations

Australian Bankers' Association

Australian Competition and Consumer Commission

Australian Conservation Foundation

Australian Dairy Farmers

Australian Petroleum Production & Exploration Association

Bureau of Meteorology

Commonwealth Environmental Water Holder

Conservation Council South Australia

Cotton Australia

Environment Victoria

Environmental Farmers Network

Environmental Justice Australia

Federation of Victorian Traditional Owner Corporations

Friends of the Earth Melbourne

Frontier Economics

Goulburn Valley Environment Group

Gwydir Valley Irrigators Association

Horticulture Coalition of South Australia

Inland Rivers Network

Law Society of New South Wales

Minerals Council of Australia

MurrayDarling Association

Murray–Darling Basin Authority

Murray Irrigation Limited

Murray Lower Darling Rivers Indigenous Nations

Murray Valley Private Diverters

National Farmers' Federation

National Irrigators' Council

National Native Title Council

National Parks Association of New South Wales

National Water Brokers

National Water Commission

Nature Conservation Council

New South Wales Farmers' Association

New South Wales Irrigators' Council

Northern Basin Aboriginal Nations

Northern Basin Advisory Committee, Murray–Darling Basin Authority

Origin Energy
Peel Valley Water Users Association
Primary Producers SA
Queensland Murray–Darling Committee
Riverina and Murray Regional Organisation of Councils
Southern Riverina Irrigators
Tamworth Regional Council
Victorian Recreational Fishing Peak Body
Water Corporation of Western Australia
Waterfind
Western Murray Irrigation Limited
New South Wales Department of Premier and Cabinet
New South Wales Office of Environment and Heritage
New South Wales Office of Water
Victoria Department of Environment and Primary Industries
Queensland Department of Natural Resources and Mines
Western Australia Department of Water
South Australia Department of Environment, Water and Natural Resources
Tasmania Department of Primary Industries, Parks, Water and Environment
Australian Capital Territory Environment and Sustainable Development Directorate
Northern Territory Department of Land Resource Management

Appendix D: Glossary of terms

ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
ABS	Australian Bureau of Statistics
Act, the	<i>Water Act 2007</i> (Cth)
ACCC	Australian Competition and Consumer Commission
Basin	The Murray–Darling Basin as defined in the Act
Basin Plan	<i>Basin Plan 2012</i> (Cth)
Basin States	New South Wales, Victoria, Queensland, South Australia, and the Australian Capital Territory (the term Basin States is used in this report to refer to Basin State governments)
Bureau	Bureau of Meteorology
COAG	Council of Australian Governments
Commonwealth Minister	The Commonwealth Minister responsible for administering the Water Act
Commonwealth water legislation	The Act, the Water Regulations and any other instrument made under the Act
CSIRO	Commonwealth Scientific and Industrial Research Organisation
Holdings Special Account	Environmental Water Holdings Special Account
GL	Gigalitre
MDBA	Murray–Darling Basin Authority
ML	Megalitre
NWC	National Water Commission
National Water Initiative	2004 Intergovernmental Agreement on a National Water Initiative
Ramsar Convention on Wetlands	Convention on Wetlands of International Importance, especially as Waterfowl Habitat
States	New South Wales, Victoria, Queensland, Western Australia, South Australia, Tasmania, Australian Capital Territory and Northern Territory
Special Account	Water for the Environment Special Account
Water charge rules	<i>Water Charge (Termination Fees) Rules 2009</i> (Cth), <i>Water Charge (Infrastructure) Rules 2010</i> (Cth), <i>Water Charge (Planning and Management Information) Rules 2010</i> (Cth)
Water Market Rules	<i>Water Market Rules 2009</i> (Cth)
Water Regulations	<i>Water Regulations 2008</i> (Cth)

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