The Murray–Darling Basin is the largest and most complex river system in Australia. The Basin Plan is a major reform agenda, agreed by the Australian Government and the governments of New South Wales, Victoria, Queensland, South Australia and the Australian Capital Territory. The Plan is intended to ensure that the shared water resources of the Basin are managed and used sustainably, in the national interest.

The Basin Plan is a complex reform, requiring the commitment and ongoing effort of all Basin governments. Substantial progress has been made in the past 12 months, with the passage of two amendments to the Plan, progress with some water resource plans, and a renewed commitment to compliance. However, there is still a considerable amount of work required to ensure implementation remains on track, including a number of important milestones due by 30 June 2019.

The Murray–Darling Basin (MDBA) has initiated this, the first in a series of annual Report Cards, to provide a regular summary on the status of Basin Plan implementation. We want to encourage Basin governments to continue to work together, and with the wider community, to implement the Basin Plan in full. We ask governments to give particular consideration to the risks highlighted in this Report Card. There are a number of challenges ahead, and success will depend upon the collective efforts of all parties.
About the Report Card

The MDBA is a statutory authority of the Australian Government, established to provide independent, expert advice on the development, implementation and enforcement of the Basin Plan. An important part of the MDBA’s role is to assess and monitor the implementation and effectiveness of the Basin Plan.

This Report Card is the MDBA’s independent assessment of Basin Plan implementation, the first of its kind to be produced by the MDBA. It responds to feedback from the community across the Basin seeking short, timely and accurate updates on progress. The Report Card includes some of the feedback we have been hearing from stakeholders across the Basin in 2018. A Report Card will be produced annually, and focus on implementation challenges over the next 12 months.

The Report Card has considered a number of technical reports and sources of information, and on making the assessment the MDBA has accounted for the project status, delivery timeframes, arrangements for governance and funding, and community involvement and consultation.
**Assessment**

Six key elements of Basin Plan implementation have been assessed. Some elements are on track, some need additional resourcing and immediate actions, and others are at risk of delay. These elements are interconnected, the Basin Plan needs all elements to progress in order to set the groundwork for a healthy and sustainable Basin.

- **Water resource plans**
  - **Status:** Some water resource plans are at risk of delay

- **Northern Basin initiatives**
  - **Status:** Some progress, with significant work to lock-in improvements in state plans

- **Sustainable diversion limit adjustment mechanism**
  - **Status:** Substantial work ahead to establish sound governance, funding and consultation arrangements to deliver agreed projects by 2024

- **Compliance**
  - **Status:** Some progress, but need to maintain momentum on improved measurement, transparency and enforcement

- **Water recovery**
  - **Bridging the gap**
  - **Status:** Good progress, further work remains to complete full recovery target
  - **Efficiency measures**
  - **Status:** High risk of not meeting the initial June 2019 recovery target

- **Environmental water delivery**
  - **Status:** Good progress with further work required to deliver environmental water as needed
Water resource plans are an integral element of implementing the Basin Plan, as they set new rules for how much water can be taken from the system, ensuring the sustainable diversion limits in each area are not exceeded over time. The plans also ensure that state water management rules meet the Basin Plan objectives, and include new arrangements that strengthen water management at a local level.

Water resource plans are developed by Basin state governments, assessed by the MDBA, and accredited by the Australian Government Minister responsible for water. There are 33 plan areas in total, some for surface water, some for groundwater and a few that cover both. The Basin Plan requires all water resource plans to be accredited by 30 June 2019.

MDBA assessment:
Some water resource plans are at risk of delay

- Good progress is occurring with many water resource plans and states are devoting necessary resources to this task.
- At this stage, only one plan has been accredited – the Warrego–Paroo–Nebine for Queensland.
- There are three plans currently with the MDBA for assessment, and a further seven are expected to move into the assessment phase shortly.
- The MDBA’s latest quarterly report indicates that Victoria, Queensland, South Australia and the Australian Capital Territory are on track to deliver their plans.
- New South Wales is behind schedule. It has the bulk of the water resource plans to prepare – 20 in total. There are a number of complex issues associated with preparing the NSW plans, including an independent review to regulate and licence floodplain harvesting in NSW (due in April 2019), along with work on new measures to protect environmental water which all need to be included within the plans.
Priority one (continued)

**Water resource plans**

- Various upcoming government elections may also impact on some of the water resource plan deadlines.

**Stakeholders are saying**

There is concern about timeframes, noting plans need to be right and there must be appropriate stakeholder engagement.

Governments need to communicate the circumstances and process through which time for the completion of plans can be extended.

Plans should address key issues such as floodplain harvesting, protection of environmental water, connectivity between catchments and ensuring long term (10 year) security for all water users.
The Australian Government runs a substantial water recovery program to achieve the sustainable diversion limits set out in the Basin Plan. The program involves a combination of water efficiency projects and purchasing of water licences in the market. These water licences are passed to the Commonwealth Environmental Water Holder, who must use this water to achieve Basin Plan environmental watering objectives. The water recovery program has two broad categories:

- **Bridging the gap** is the program to recover the 2750 GL (gigalitres) target in the Basin Plan. This target was revised downwards this year as a result of two Basin Plan amendments (a reduction of 605 GL under the sustainable diversion limit adjustment mechanism, and a further 70 GL reduction through the Northern Basin Review). These amendments mean that the target for ‘Bridging the gap’ is now 2075 GL. Under the Basin Plan, the Australian Government must meet this target by 30 June 2019.

- The **water efficiency** program was included in the Basin Plan at the request of Basin governments as part of the sustainable diversion limit adjustment mechanism. Under the program, $1.5bn has been set aside to recover 450 GL of water by 2024 to achieve improved environmental outcomes. The program needs to recover at least 62 GL of water to June 2019.

**Bridging the gap program**

- Good progress has been made with water recovery under this program. As of 30 September 2018, the estimated recovery amount is 2117.5 GL. This is actually higher than the 2075 GL target at the Basin-scale. However, the estimate of water recovery in each catchment will change slightly as water resource plans are completed, meaning there will be some minor ‘unders and overs’ to be addressed in some catchments before recovery is completed.

**Priority two**

**Water recovery**

**MDBA assessment:**
- **Bridging the gap**
  Good progress, further work remains to complete full recovery target

- **Efficiency measures**
  High risk of not meeting the initial June 2019 recovery target
Priority two (continued)

Water recovery

- There are three risks to fully meeting the recovery target for this program by 30 June 2019:

  1. **Non-delivery of contracted projects**: of the 2117.5 GL estimated to be recovered, 121 GL involves contracted projects that are not yet complete. It is understood that around 20 GL of these projects are at risk of non-delivery.

  2. **Water recovery estimates**: the current recovery amount is an estimate of the amount of water delivered from the portfolio of entitlements that have been recovered. This estimate is calculated on a set of factors (known as the ‘cap factors’ or ‘planning assumptions’). These factors are currently being updated as part of developing water resource plans. New South Wales has conducted recent public consultation and are expected to finalise their updated factors soon. As the factors are updated for each state and catchment, an improved estimate of the final recovery amount will be available. In some valleys this may mean there has been a small amount of over-recovery.

  3. **Local and downstream (or shared) contributions**: current estimates are 29.5 GL of local water recovery is still required within the Border Rivers (NSW), Condamine–Balonne (Qld), and Namoi valleys (NSW). There is also a small volume of groundwater to be recovered in the Upper Condamine Alluvium (Qld). Under the Basin Plan, states can request a reallocation of the shared reduction amounts by 31 December 2018 – if this does not occur, the default settings in the Plan will apply.

Efficiency measures program

- Under the Basin Plan, the 450 GL efficiency measures program must recover 62 GL of water to June 2019 in order for the full 605 GL supply measure offset to be available from that time. At present less than 2 GL has been contracted for delivery under this program, so there is a high risk that the 62 GL will not be met by mid next year, and a risk that the program objective of recovering 450 GL by 2024 will not be fully met.

- There are concerns from some parties about the ‘socio-economic neutrality test’ that determines whether projects are eligible for funding under this program. A 2018 Ernst and Young report commissioned by Basin governments found that between 209 and 690 GL in efficiency measures could be achieved in a way that is socio-economically neutral or positive.

- The Department of Agriculture and Water Resources has released a consultation paper on additional criteria for on-farm projects, and conducted a series of community and industry consultation sessions and an online survey. The Victorian and New South Wales governments have released their own additional criteria.

- There is a substantial challenge ahead to achieve the full recovery amount of 450 GL by 2024. Ministers will further consider this issue at the next Murray–Darling Basin Ministerial Council meeting.

Stakeholders are saying

There are concerns about the recovery of 450 GL through efficiency measures. Some stakeholders are seeking revised criteria for the program to minimise the impact on the consumptive pool. Other stakeholders believe the full 450 GL needs to be recovered to achieve the best environmental outcomes from the Basin Plan.
Priority three
Sustainable diversion limit adjustment mechanism

The Basin Plan sets sustainable diversion limits, which are limits on how much water can be used in the Murray-Darling Basin, while leaving enough water to sustain natural ecosystems. In 2012, Basin governments asked the MDBA to include a mechanism to adjust limits in the southern Basin on the basis that better ways to run the river system could be found that achieve equivalent environmental outcomes with less water.

The sustainable diversion limit adjustment mechanism involves three elements that work together – namely ‘supply’ and ‘constraints’ projects that improve river management and achieve equivalent environmental outcomes with less water, and ‘efficiency measures’ that recover water for the environment (see Priority two – Water recovery).

In May 2018, the Basin Plan was amended to include the supply and constraints projects put forward by Basin governments. State governments are charged with design and delivery of these projects, the Australian Government will provide project funding for approved business cases, and where necessary the MDBA will provide technical support. In 2024, the MDBA must make a final determination about the level of adjustment of the final supply and efficiency measures under the adjustment mechanism. If there is a shortfall, this would need to be made up through additional water recovery measures.

MDBA assessment:
Substantial work ahead to establish sound governance, funding and consultation arrangements to deliver agreed projects by 2024

- It took significant effort from Basin governments over four years to develop the supply and constraints measure projects which were reflected in the Basin Plan amendment earlier this year. Completing all of these projects by 2024 will be challenging. Many of the projects are complex, will need to address a number of risks, and include interdependencies with other projects. The projects will need to be managed as a package.
- Australian Government funding for the projects is linked to the delivery of ‘efficiency measures’. It is therefore important for Basin states to support the efficiency measures program (see Priority two – Water recovery).
- The Productivity Commission released its draft report about Basin Plan implementation in August 2018. The Commission recommended Basin governments must resolve governance and funding issues for supply measures, and develop an integrated plan for delivering supply projects. The Authority agrees that governance, funding and coordination remain key issues.
**Priority three (continued)**

**Sustainable diversion limit adjustment mechanism**

- Basin governments have discussed governance and funding arrangements for implementing the supply and constraints projects. A new committee to monitor project delivery has been agreed but has not yet convened.

- States are responsible for community consultation for each individual supply and constraints project. In general, stakeholder consultation has been slow to start. New South Wales has made recent progress on stakeholder engagement on their projects, including the Menindee and Lower Darling projects. Community involvement in design and delivery of all projects is vital, and needs to occur early in project design.

- The three southern states – New South Wales, Victoria and South Australia – have committed to implementing the ‘prerequisite policy measures’ that must be in place by 30 June 2019. Successful implementation of these measures is essential to environmental watering outcomes across the southern Basin. While there is more work to fully implement these measures, the three southern states have reported implementation is on track.

- The MDBA held its first annual sustainable diversion limit adjustment mechanism technical workshop on 28 June 2018. The technical workshop shared information on the projects, their assessment, and how the MDBA will be monitoring performance going forward. These workshops are designed to complement the local community consultation that must also occur for each project.

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**Stakeholders are saying**

- Slow progress has been made, and there may not be sufficient time to complete projects.

- Governments need to act cooperatively to lift the level of engagement and the transparency, and provide access for all stakeholders to input to the projects. Effective consultation and engagement of local communities is required.

- There are particular concerns in some sections of the community about key projects, particularly Menindee Lakes and constraints projects.
A range of initiatives are underway in the northern Basin to better manage water for local communities, the environment and future generations. This includes a range of different projects, under what are known as the ‘toolkit measures’ and the ‘Basin commitments package’.

The four-year review conducted by the MDBA into the northern Basin resulted in a 70 GL reduction to the 390 GL water recovery target in the north, on the basis that the New South Wales and Queensland governments adopted a range of ‘toolkit measures’ with assistance from the Australian Government. The Basin Plan was amended in 2018 to reflect this outcome, and at that time the Basin Commitments Package was also announced with bilateral support for further initiatives.

Together, these initiatives are intended to protect water for the environment, improve compliance with water laws, and create opportunities for local communities, including First Nations.

- Good progress has been made on the initial implementation of the toolkit and commitments package projects, particularly on the improved management and protection of water for the environment.

- The Northern Basin Commissioner, Mick Keelty AO APM, has been appointed for a three-year term. He will report directly to the Australian Government Minister responsible for water on progress with the Basin commitments package, including improved compliance and protection of environmental water.

- New South Wales has made substantial progress in the past 12 months, including:
  - amending its current state water sharing plans for the unregulated Barwon–Darling, Macquarie–Bogan and Gwydir valleys to allow for active management of shared flows, to be reflected in relevant water resource plans in 2019
  - developing specific rules to share flows in the Barwon–Darling system, including restoring flows after a dry spell, to be included in water resource plans in 2019

MDBA assessment:
Some progress, with significant work to lock-in improvements in state plans
Priority four (continued)

Northern Basin initiatives

- placing temporary water restrictions during the 'Northern Connectivity Event' from April to June 2018, enabling successful environmental water delivery

• In the past 12 months Queensland has:
  - consulted on options for the protection of environmental water through the Lower Balonne that has been recovered in the Condamine and Balonne catchment upstream of Beardmore Dam
  - arranged for one off temporary trade by events
  - improved store and release mechanisms for environmental water holders to utilise, include water quality guidelines.

• The Australian Government, New South Wales and Queensland governments are developing a formal agreement to set out the package of policies and projects to be implemented under the toolkit measures and commitment package. It is anticipated that governments will finalise this agreement by end December 2018.

• Some of the above actions are urgent as they need to be reflected in water resource plans currently under development (see Priority one – Water resource plans). Other actions such as fish ladders, weir upgrades, and the Gwydir constraints project, will take longer to design and implement in consultation with the community. Stakeholder engagement will be important across all initiatives to ensure their success.

• The draft report by the Productivity Commission into Basin Plan implementation recommended that northern Basin governments should put in place transparent and accountable governance arrangements for implementing the toolkit measures. The MDBA agrees that governance and regular public reporting will be important to communities in the northern Basin.

Stakeholders are saying

The toolkit and commitments package are welcomed. It is important that the role of toolkit measures is recognised, and also transferred into the southern Basin.

Measures for the protection of environmental water are critical, they need to be formalised and embedded in the water resource plans.

Communities are looking for information, and want to be involved in the delivery of the Northern Basin Initiatives.
Priority five
Compliance

Effective compliance arrangements are critical to the success of the Basin Plan. Water users and the wider community need to have trust in the system. This includes confidence that the various water resource plans, rules and laws will provide adequate protection of environmental water while providing water users with certainty over their access arrangements. It also includes confidence that bad behaviour – water theft, illegal diversion structures and meter tampering – will not be tolerated.

In response to concerns over compliance raised in 2017, a number of reviews were undertaken, including one by the [MDBA and an independent panel](#) (for the Australian Government), by Ken Matthews AM (for the NSW government) and by an [independent panel](#) (for the Queensland government). Following the reviews, the focus of all Basin governments has been on improving the effectiveness of water compliance in a range of ways.

**MDBA assessment:**
Some progress, but need to maintain momentum on improved measurement, transparency and enforcement

- In June 2018 the Murray-Darling Basin Ministerial Council agreed to a [Basin Compliance Compact](#). The Compact sets out a range of commitments. The commitments address: transparency and accountability, compliance frameworks, metering and measurement, water resource plans and protection and management of environmental water. The Compact also includes detailed work programs for each Basin state and the MDBA.

- The early deliverables under the Compact include:
  - revised compliance frameworks and a commitment to greater transparency in each agency
  - new state metering policies and implementation plans
  - measures to improve protection of water for the environment.

- The Compact sets an ambitious timeframe for delivery. All governments need to stay focused on delivering and resource accordingly. The first annual report on progress with implementing the compact will be released in December 2018.
Priority five (continued)

Compliance

• Governments have committed to ensuring that new and replacement meters must comply with the national standard for non-urban water meters and, by 2025, to progressively automate the reporting of water use.

• Governments also agreed to establish a national network of compliance practitioners to share experience and knowledge. The network launched in Adelaide in November 2018.

• The reforms and additional investment announced by the New South Wales government last year are beginning to bear fruit. The Natural Resource Access Regulator (NRAR) commenced in April 2018, and has quickly moved to establish a team, including around 40 investigators to work through a substantial backlog of allegations. The first successful prosecution by NRAR was announced in October 2018. New South Wales has also made significant progress on improved metering arrangements, with the release of its new metering framework in December 2018.

• The Queensland government released a response to its audit of metering and compliance, and established the Rural Water Management Program to deliver on its commitments. The program is in the early stage of development, including stakeholder consultation, with specific actions expected to be announced over the next 6–12 months.

• The MDBA has made progress in establishing its compliance program. In addition to releasing a new compliance and enforcement policy, the MDBA has appointed an Independent Assurance Committee to advise on its compliance program and performance. Advice from the committee is released publicly.

• The NSW and Australian governments cooperated in the management of a release of environmental water in northern NSW between April and July 2018. This included the successful pilot of the use of remote sensing to check for anomalies as water flowed down the river system during the embargo period.

Stakeholders are saying

Good progress has been made through various government reviews. In particular, work to improve capability in water metering and compliance, including an on-ground presence, is welcome.

Some concern that efforts made over the last 18 months may not be sustained and that the MDBA must have the powers to step in if states are not prepared to do so.

Greater clarity on water license requirements is needed, including care to ensure regulators do not “over-reach” in compliance activities.
Priority six
Planning and delivery of environmental water

Water for the environment is used to improve the health of our rivers, wetlands and floodplains. This water benefits the fish, animals and plants that depend on healthy rivers to feed, nest and grow.

Water is allocated to environmental water holders across the Basin, who make decisions about when, where and how much water is released for the environment. Environmental water holders are allocated a water entitlement, like all other water entitlement holders, including irrigators, towns and industry. The national body is the Commonwealth Environmental Water Holder, which uses their entitlements across the whole Basin.

The MDBA provides advice and guidance to environmental water holders on when and where to release environmental flows, primarily through the MDBA Basin-wide Environmental Watering Strategy and the Basin Environmental Watering Priorities.

MDBA assessment:
Good progress with further work required to deliver environmental water as needed

- The particularly dry conditions this winter in the Murray River system have highlighted tensions between operating to maximise water availability, managing risk at later season demands and delivery of environmental water when the river is at capacity. This resulted in environmental water holders being unable to deliver water orders that had been planned to meet environmental needs.

- Environmental water holders have been actively managing their entitlement portfolios and watering specific sites. In the southern Basin, around 2600 GL of water for the environment was delivered during 2017–18, and much of this water was reused at multiple sites. Highlights included 236 GL of water for wetlands in Murrumbidgee, 112 GL to the Hattah Lakes, and around 290 GL to the Barmah–Millewa forest.

- With the drought conditions in the Basin, environmental water holders, like all other water entitlement holders, will be allocated less water under state allocation policies. Water holders will need to manage a much smaller portfolio, to achieve the best environmental outcomes.
Priority six (continued)

Planning and delivery of environmental water

- The Southern Connected Basin Environmental Watering Committee continued to meet regularly to coordinate the use of water for the environment in the southern Basin by all environmental water holders. Fifteen of the watering events in the southern Basin were jointly managed by environmental water holders and river operators working together.

- There is close and ongoing engagement between Australian Government and state agencies to develop practical management measures, including a coordinating mechanism to protect the use of environmental water in northern unregulated systems.

- A few northern watering events demonstrate positive signs of collaboration and commitment, including the northern connectivity event – a major flow through the northern Basin in mid-April. This water flowed through from the top end of the northern Basin through the Barwon-Darling and down to Wilcannia before reaching Menindee Lakes.

- There are increasing opportunities for First Nations people to engage in water management, including increased involvement in planning the use of environmental water and the recent announcement of $40m to support Aboriginal communities to invest in cultural water and associated planning activities.

- The projects under the sustainable diversion limit adjustment mechanism (see Priority three – Sustainable diversion limit adjustment mechanism), particularly the ‘constraints’ projects and other projects to enhance environmental water delivery along with prerequisite policy measures, are vital to the future management and use of water for the environment. Progress of these projects is uneven, and some projects need to begin in earnest.

Stakeholders are saying

Basin rivers are our lifeblood. As Aboriginal people, rivers are important to culture and wellbeing.

There is an ongoing need to communicate on the value and outcomes delivered through environmental water. There is also a need to better communicate on key river operations, such as bulk transfers to Lake Victoria, to build community understanding and support for environmental water delivery.

We need information on how environmental water contributes to outcomes for the whole river system, not just end of system outcomes.