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To Mr Phillip Glyde  
Chief Executive  
Murray-Darling Basin Authority

From Ms Sandy Pitcher  
Chief Executive  
Department of Environment, Water and Natural Resources

### Statement of Assurance for South Australia for 2016-17

In order to maximise transparency and to provide assurance to other parties and the community that the obligations of the Basin Plan are being implemented appropriately and in line with agreed arrangements under the Basin Plan 2012 Implementation Agreement, South Australia has completed a self-assessment of performance against its obligations under the *Basin Plan 2012*. The self-assessment is detailed in sections B, C, D, E, F and G of South Australia's Basin Plan Annual Report for 2016-17.

I certify that to the best of my knowledge, for the 2016-17 water accounting period, the information provided in the Basin Plan Annual Report attached to this statement accurately reflects the extent to which South Australia is compliant with its obligations under the *Basin Plan 2012*.

A handwritten signature in blue ink that reads 'Sandy Pitcher'.

Sandy Pitcher  
**CHIEF EXECUTIVE**

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## The South Australia 2016-17 annual report to satisfy annual reporting obligations for:

- Basin Plan Schedule 12 responses (except Matter 9 – use of environmental water)
- National Partnerships Agreement assurance of milestone achievement
- Basin Plan Implementation Agreement self-assessment of compliance with implementation tasks

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## Reporting context

This template provides a single Commonwealth information collection point that covers Basin State 2016-17 annual reporting obligations in relation to the Murray-Darling Basin Plan for:

- Basin Plan Schedule 12
- the Basin Plan Implementation Agreement compliance requirements
- the milestone assessments of the National Partnership Agreement (NPA) on Implementing Water Reform in the Murray-Darling Basin

Reporting for Schedule 12 Matter 9 (the identification and use of environmental water) is reported separately.

The Department of Agriculture and Water Resources will use the information provided in this template as well as multiple other sources to meet NPA reporting requirements. Reporting against NPA milestone 6c is not required as information will be gathered from within the Department. Where milestones have not been met, or not fully met, Basin states should indicate whether they intend to meet the milestone in the future and if not, provide the rationale. Where applicable, describe any intended actions and planned timeframe for the milestone to be met. The Department will seek collaborating information from the MDBA and Commonwealth Environmental Water Office where necessary.

## A. Local Knowledge and Stakeholder Engagement

Reporting Matter	Supporting evidence to be provided by Basin States	Response (response/milestone achievement/compliance status)
<b>The extent to which local knowledge and solutions inform the implementation of the Basin Plan</b>		
<p><b>A1</b> The outcome of engagement on the implementation of the Basin Plan</p> <p><i>Applicable to Schedule 12, Matter 6, Indicator 6.1 and NPA 8e</i></p>	<p>Provide a descriptive statement. Where possible include:</p> <ul style="list-style-type: none"> <li>• How local knowledge and solutions were used</li> <li>• How involving communities made a difference to Basin Plan implementation</li> <li>• How decisions changed as a result of community involvement</li> <li>• How environmental watering in regulated catchments has occurred having regard to the views of local communities and persons materially affected by the management of environmental water</li> <li>• Local knowledge might include knowledge drawn from Traditional Owners and other Aboriginal people and groups</li> <li>• When reporting on Aboriginal participation and influence, remember processes of involvement may be as important as outcomes.</li> </ul> <p>In 2016/17 reporting, we would expect use of local knowledge to feature in development of Water Resource Plans and the management of environmental water.</p> <p>Examples or case studies are not mandatory, but may be a useful way to describe how local knowledge and solutions inform implementation of the Basin Plan.</p>	<p>The South Australian Government engages the wider community to inform Basin Plan implementation in a range of areas including annual environmental watering, development of long-term environmental watering plans, major projects and water resource planning. For 2016-17 reporting, South Australia has provided examples of engagement to inform water resource planning below and in environmental watering sections <b>B3</b> and <b>B4</b>.</p> <p>Local community and Aboriginal Cultural knowledge and solutions are used to inform water resource planning at all levels including Natural Resource Management plans, Water Allocation Plans and specific wetland and floodplain management plans.</p> <p><b>Case Study – Changes to Aboriginal Engagement in Water Resource Planning</b></p> <p>Two all-nations workshops were held in December 2016 (Warraparinga) and May 2017 (Camp Coorong) which provided an opportunity for South Australian Murray-Darling Basin (SA MDB) Aboriginal nations to come together and share ideas and information on water management and use. The Warraparinga workshop gave the Department of Environment Water and Natural Resources (DEWNR) a clear directive to change from the River Country plan to a separate nation-based country plan approach. This provides better opportunities to create partnerships with individual nations that recognise their individual needs and priorities.</p> <p>The Camp Coorong workshop highlighted the need to further build capacity of nations to engage in water planning and in management plans for specific sites within their Country including planning and operation. The outcomes of these workshops have guided South Australia's approach to engaging Aboriginal nations in the development of Water Resource Plans (WRPs), but more importantly, in water planning in general.</p> <p>Throughout 2016-17, DEWNR has progressed Aboriginal engagement in the development of Water Resource Plans, by:</p> <ul style="list-style-type: none"> <li>• holding all nations workshops to provide uniformity in the engagement approach and build the capacity of nations that have little experience of engaging in water planning</li> <li>• engaging with nations individually on water planning</li> <li>• establishing the South Australian Murray Lower Darling Rivers – Indigenous Nations (SA MLDRIN)/DEWNR Working Group to provide oversight and lead the approach to Aboriginal engagement in the development of WRPs</li> <li>• developing capacity of nations and their representative organisations to engage in the development of WRPs and in water planning in general.</li> </ul> <p>Engagement with individual nations has utilised established engagement mechanisms where they exist, but has also established specific Basin Plan engagement workshops and projects with those nations that are in the early days of engaging in water planning. The projects included:</p> <ul style="list-style-type: none"> <li>• a water workshop with a new native title claim group to begin to build their</li> </ul>

Reporting Matter	Supporting evidence to be provided by Basin States	Response (response/milestone achievement/compliance status)
		<p>engagement with DEWNR and regional Natural Resources Management</p> <ul style="list-style-type: none"> <li>• Aboriginal Waterways Assessment projects with aboriginal nations to assess waterways from a cultural perspective</li> <li>• Country based planning approach to provide an opportunity for Aboriginal-owned planning</li> <li>• building extensive Aboriginal engagement in the review and amendment of the Peake Roby Sherlock and Mallee Water Allocation Plans</li> <li>• establishing a research project with Ngarrindjeri to develop the Yunarrumi cultural risk assessment process to build into and augment existing WRP risk assessment protocols.</li> </ul> <p>DEWNR has further facilitated the engagement of Ngarrindjeri, Peramangk and First Peoples Water Coordinators within nation organisations to build the nations' capacity to engage in water planning.</p>
<p><b>A2</b> Processes used to identify stakeholders and other relevant groups and individuals from local communities and peak bodies</p> <p><i>Applicable to Schedule 12, Matter 6, Indicator 6.2 and NPA 8e</i></p>	<p>Provide a descriptive statement. Where possible include:</p> <ul style="list-style-type: none"> <li>• Processes used to identify stakeholders and other relevant groups and individuals</li> </ul>	<p>DEWNR identifies stakeholders and other relevant groups and individuals from local communities and peak bodies using the DEWNR Community Engagement Framework. The framework is based on the South Australian Department of the Premier and Cabinet's guide, <a href="#">Better Together: Principles of Engagement</a> and the values of the International Association of Public Participation (IAP2).</p> <p>Key areas for community involvement include water resource planning, environmental water management and major projects. Engaging the South Australian community is generally undertaken in collaboration with or through the relevant Natural Resource Management boards.</p> <p>An example of effective stakeholder identification in 2016-17 is the stakeholder engagement undertaken for the development of South Australia's SA Murray-Darling Basin Water Resource Plans. In addition to broader public consultation, key stakeholder groups are engaged that cover the spectrum of affected communities and interested stakeholders including:</p> <ul style="list-style-type: none"> <li>• River Murray Advisory Committee <ul style="list-style-type: none"> <li>• Coorong Lower Lakes Murray Mouth (CLLMM) Community Advisory Panel</li> <li>• Local Action Planning groups</li> <li>• NRM groups</li> <li>• Landcare groups</li> <li>• Government organisations (Local Councils, SA Water, other relevant agencies)</li> <li>• Industry groups (peak bodies, trusts, grower groups etc)</li> <li>• Ngarrindjeri Regional Authority</li> <li>• Mannum Aboriginal Community Association Incorporated</li> <li>• First Peoples of the River Murray and Mallee Region</li> <li>• Tourism and Recreation groups (Regional Development Associations, tourism, boating, recreation and fishing)</li> </ul> </li> </ul>

Reporting Matter	Supporting evidence to be provided by Basin States	Response (response/milestone achievement/compliance status)
		<ul style="list-style-type: none"> <li>• Scientific community (eg CLLMM Scientific Advisory Group)</li> <li>• Relevant community reference groups.</li> </ul>
<p><b>A3</b> How stakeholders and other relevant groups and individuals were engaged</p> <p><i>Applicable to Schedule 12, Matter 6, Indicator 6.3 and NPA 8e</i></p>	<p>Provide a descriptive statement. Where possible include:</p> <ul style="list-style-type: none"> <li>• The range of audiences engaged</li> <li>• The range of opportunities (types of engagement)</li> </ul> <p>Relate these to the Basin Plan obligations to have regard to local views (for e.g., in relation to Chapter 8 (environmental watering); and Chapter 10 (water resource planning))</p>	<p>South Australia engages a range of stakeholders in relevant Basin Plan activities using a range of approaches dependent on the activity and audience.</p> <p>In 2016-17 DEWNR implemented the River Murray Engagement Plan which formalises communication around Basin Plan implementation and programs associated with Basin Plan outcomes (e.g. irrigation efficiency projects and environmental projects).</p> <p>In addition, a Water Resource Plan Engagement Plan has been implemented to specifically engage the community and key stakeholders throughout the development of South Australia's three Water Resource Plans. In 2016-17 the key focus was the SA Murray Region Water Resource Plan. Engagement also commenced on the SA River Murray Water Resource Plan.</p> <p>DEWNR engagement occurs through both online and offline formats, designed to meet specific engagement requirements.</p> <p>The use of short video communications was used to help convey messages and concepts in simple and engaging ways. Examples include a short animation produced explaining Salinity Management in the River Murray (<a href="https://www.youtube.com/watch?v=gi6r2lpGoBY">https://www.youtube.com/watch?v=gi6r2lpGoBY</a>) and a video explaining how the Basin Plan benefits all water users (<a href="https://www.youtube.com/watch?v=VTmc5e6Nvys">https://www.youtube.com/watch?v=VTmc5e6Nvys</a>).</p> <p>During the consultation for South Australia's Water Resource Plans, a number of different methods were used including the <a href="#">Your SAy page</a> of the DEWNR website, directly advising stakeholders by email, providing presentations at regular stakeholder group meetings, providing electronic factsheets which could be printed for further distribution as well as providing contact email and phone numbers for personal feedback.</p> <p>For the SA Murray Region Water Resource Plan, direct mailouts were utilised to inform those in the region of proposed changes to water management to meet Basin Plan requirements. A short video (<a href="https://www.youtube.com/watch?v=7r8cKMDagG4">https://www.youtube.com/watch?v=7r8cKMDagG4</a>) was also prepared to inform the community of the development of Water Resource Plans and how they relate to existing South Australian water management tools.</p> <p>Presenting at stakeholder meetings provided the opportunity to hear views on the development of the SA Murray Region Water Resource Plan and feedback was recorded after each meeting.</p> <p>Face-to-face workshops continue to be an integral part of the collaboration with Aboriginal nations as the nation-based Country plans are developed as part of Water Resource Planning (as outlined in <b>A1</b>). For the SA Murray Region Water Resource Plan, tours and workshops were held with Aboriginal groups with an interest in this location to gather information to provide text for the Peake Roby Sherlock and Mallee Water Allocation Plans around Aboriginal objectives.</p> <p>Use of social media was enhanced in 2016-17 with the launch of the River Murray SA Facebook profile. The profile allows DEWNR to talk directly with audiences about issues that are relevant to them and gain useful feedback on Basin Plan initiatives.</p> <p>Other examples of valuable offline engagement with stakeholders include conducting tours of environmental watering assets and gathering regular on-ground observations. Regular site tours of the Chowilla regulator for groups of around 40 community members are conducted in conjunction with the Renmark to Border Local Action Planning Association.</p>

Reporting Matter	Supporting evidence to be provided by Basin States	Response (response/milestone achievement/compliance status)
		Further information on engagement related to environmental watering is outlined in sections B3 and B4.

## B. Environmental Watering

Reporting Matter	Supporting evidence to be provided by Basin States	Response (milestone achievement/compliance status)
<b>The implementation of the environmental management framework (Part 4 of Chapter 8)</b>		
<p><b>B1</b> Long-term watering plans were prepared, with the required content, published, reviewed and updated as obligated under Part 4 of Chapter 8, Divisions 3.</p> <p><i>Applicable to Schedule 12, Matter 10, Indicator 10.1; NPA 8f and BPIA 18.1</i></p>	<p>What progress has the Basin State made in preparing long-term watering plans for each surface water resource plan area as agreed?</p> <p><i>[Background: Each Basin State will prepare long-term watering plans aligning with the Plan's surface water resource plan areas.</i></p> <p>The level of detail in a long-term watering plan will vary according to local conditions, levels of development and regulation, the influence on other water resources, and statutory and other arrangements prevailing in the surface water resource plan area.</p> <p>A long-term watering plan may provide that an existing or other specified instrument or text comprises or is part of a Basin State's plan.</p> <p>The plans will be developed by dates agreed between the MDBA and each Basin State.</p> <p>The MDBA and each Basin State will separately agree on what further material would be required for each of the State's long-term watering plans. As part of this, the MDBA and each Basin State will also agree on the standards required for this material.]</p>	<p>The long-term watering plan was completed for the South Australian River Murray water resource plan area by November 2015, consistent with the requirements of Chapter 8. It has been endorsed by the South Australian Minister for Water and the River Murray and is publicly available on the DEWNR website:</p> <p><a href="http://www.environment.sa.gov.au/managing-natural-resources/river-murray/restoring-river-health/environmental-water/environmental-water-planning">http://www.environment.sa.gov.au/managing-natural-resources/river-murray/restoring-river-health/environmental-water/environmental-water-planning</a></p> <p>Development of the long-term watering plan for the Eastern Mount Lofty Ranges has been completed consistent with the requirements of Chapter 8 and has been provided to the MDBA.</p> <p>Development of the long-term watering plan for the SA Murray region water resource plan area commenced in 2016 and is being prepared consistent with the requirements of Chapter 8.</p>
<p><b>B2</b> Annual priorities were prepared, with the required content, published, reviewed and updated as obligated under Part 4 of Chapter 8, Divisions 4</p> <p><i>Applicable to Schedule 12, Matter 10, Indicator 10.1; NPA 8c and BPIA 19.1</i></p>	<p>Were annual environmental watering priorities (AEWP) or other relevant instruments submitted as agreed with the MDBA, for the purposes of identifying the Basin annual environmental watering priorities for the water resource plan areas?</p> <p><i>[Background: The level of detail for annual environmental watering priorities will vary according to local conditions, levels of development and regulation, influence on other water resources and statutory and other arrangements in</i></p>	<p>Annual watering priorities for each of the three South Australian Murray-Darling Basin water resource plan areas have been completed consistent with the requirements of Chapter 8 and were submitted by the 31 May due date. The priorities are publicly available on the DEWNR website.</p> <p><a href="http://www.environment.sa.gov.au/managing-natural-resources/river-murray/restoring-river-health/environmental-water/environmental-water-planning">http://www.environment.sa.gov.au/managing-natural-resources/river-murray/restoring-river-health/environmental-water/environmental-water-planning</a></p>

	<p>the water resource plan area.</p> <p>The principle of fit for purpose management will inform the development and assessment of annual environmental watering priorities by Basin States and the MDBA respectively.]</p>	
<p><b>B3</b> Watering strategies, plans and priorities are prepared consistently with Part 4 of Chapter 8, in relation to coordinating, consulting and cooperating with other Reporters and the matters to which regard must be had (Chapter 8, Part 4)</p> <p><i>Applicable to Schedule 12, Matter 10, Indicator 10.2; NPA 8c, 8d and 8f and BPIA 20.1</i></p>	<p>Describe how coordination, consultation and cooperation occurred, including with other governments, was undertaken in preparing watering strategies, plans and priorities.</p> <p>Describe how coordination, consultation and cooperation made a difference.</p> <p>Also describe how regard was had for particular matters as obligated in Part 4 of Chapter 8.</p>	<p>The annual watering plan and priorities were developed in close cooperation with Local Action Planning Committees, government stakeholders, environmental water holders, environmental asset managers and key community, aboriginal and scientific groups.</p> <p>Stakeholder groups either attended workshops or were provided with an overview of the process and invited to provide input at each step via presentations at their regular meetings. Emails and phone calls from stakeholders were addressed and new proposals considered for inclusion in the priorities. Consultation enabled the identification of important sites and watering priorities for key stakeholders and also the gathering of on-ground observations.</p> <p>The priorities were provided to the relevant environmental water holders and water managers (e.g. MDBA, upstream states) for planning purposes and used to inform cooperative watering with upstream sites.</p> <p>The MDBA coordinated the use of The Living Murray water and facilitated coordination between all environmental water holders.</p> <p>The Commonwealth Environmental Water Office developed a delivery options plan and watering schedules for its water.</p> <p>South Australia participated in cross-jurisdictional planning groups and advisory committees to help plan and deliver environmental water.</p> <p>Coordination at the State and Basin level has allowed the outcomes of environmental watering to be maximised. For example, coordinated planning allowed return flows from upstream watering to be re-used at downstream sites.</p> <p>Cooperation with other states resulted in greater coordination and the ability to consider relevant environmental needs throughout the River Murray system.</p>
<p><b>B4</b> How Environmental watering principles were applied consistent with Chapter 8, Part 4, Division 6.</p> <p><i>Applicable to Schedule 12, Matter 10, Indicator 10.3; NPA 8a, 8b and 8d and BPIA 20.2</i></p>	<p>Provide at least one case study that demonstrates how environmental watering principles were applied and identify the relevant principles.</p> <p>Provide reasons for any environmental watering that was not in accordance with annual watering priorities (please provide answer in the <i>statement of reasons</i> table at bottom of this document).</p> <p>Confirmation that the characteristics of licensed entitlements held for environmental use have not been enhanced or diminished relative to like entitlements held for other purposes.</p> <p>Where feasible and agreed by the relevant basin state, confirm that measures have been implemented to facilitate the use of environmental water through water shepherding and return flow provisions.</p>	<p>In 2016-17, South Australia managed the delivery of planned and held environmental water consistent with the Basin Plan. This included developing and submitting the annual environmental watering priorities by 31 May 2017, and applying the principles set out at Division 6 of Chapter 8 of the Basin Plan in undertaking environmental watering in accordance with the Basin annual environmental watering priorities.</p> <p>Case studies of how environmental watering principles were applied in managing environmental water are outlined below.</p> <p><b>Principle 3: Maximising environmental benefits</b></p> <p>South Australia worked cooperatively with the upstream states, the MDBA and the Commonwealth Environmental Water Holder to enable multi-site environmental water delivery by participating in the development and implementation of a multi-site environmental watering strategy.</p> <p>During 2016-17, South Australia received and managed environmental water to maximise multiple benefits by:</p> <ul style="list-style-type: none"> <li>• using local knowledge to identify wetlands in need of environmental water</li> <li>• consulting with traditional owners (Aboriginal groups) regarding their priority sites for</li> </ul>

		<p>environmental water</p> <ul style="list-style-type: none"> <li>• developing watering proposals that considered the interests of stakeholder groups</li> <li>• using scientific and community advisory groups to provide advice and adaptively manage environmental water delivery as flow conditions changed during the year</li> <li>• seeking environmental water to mimic the natural timing for higher flows</li> <li>• re-using the return flow from upstream events for ecological outcomes in the channel and Coorong, Lower Lakes and Murray Mouth (CLLMM).</li> </ul> <p>For example, during 2016-17, South Australia received an unregulated flow that peaked at 94,500 megalitres per day on 30 November 2016. South Australia worked cooperatively with the upstream states, the MDBA and the Commonwealth Environmental Water Holder in the planning and delivery of environmental water on the back of the unregulated flow to maximise environmental benefits. Environmental water was delivered via return flows from the upstream states, and through releases from Lake Victoria to slow the recession of the high flows. This allowed continued elevated barrage releases through to the end of summer, and provided continuous base flows for the remainder of the year. Without the environmental water, it is likely that the barrage releases would have been significantly reduced to fishways only and both salinity and habitat quality in the Coorong would have deteriorated. The continuous flows to the Coorong has led to improvements in macroinvertebrate distribution and abundances and fish movement upstream from the marine environment to the Lakes and River system.</p> <p><b>Principle 7: Working effectively with local communities</b></p> <p>The South Australian Government undertook regular consultation with local communities on proposed environmental water planning and delivery through stakeholder groups with interests in environmental watering and with landholders who may be affected by watering actions. Some examples of stakeholder groups involved include:</p> <ul style="list-style-type: none"> <li>• South Australian Murray-Darling Basin Natural Resources Management Board</li> <li>• River Murray Advisory Committee</li> <li>• Local Action Planning / Landcare groups</li> <li>• Community Advisory Panel and Scientific Advisory Group for the Coorong, Lower Lakes and Murray Mouth</li> <li>• Nature Foundation SA</li> <li>• Renmark Irrigation Trust</li> <li>• Ngarrindjeri Regional Authority, including the Mannum Aboriginal Community Association Incorporated</li> <li>• First Peoples of the River Murray and Mallee Region.</li> </ul> <p>For example, there was regular consultation with the Community Advisory Panel (CAP) and Ngarrindjeri Regional Authority (NRA) on the proposed environmental water planning and delivery for the Lower Lakes, Coorong and Murray Mouth site. In particular, the CAP and NRA provided important input into the objectives of the delivery of environmental water in late summer. These</p>
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		<p>community groups also helped provide important feedback from the wider community.</p> <p><b>Principle 8: Adaptive management</b></p> <p>Environmental water planning and delivery for 2016-17 considered different management options under a range of different flow scenarios. Real time multi-agency advisory committees (e.g. Chowilla Operations Group, Barrage Operations Advisory Group) provided weekly advice during the delivery of environmental water so that its use could be adaptively managed if conditions changed.</p> <p>An example of adaptive management can be illustrated by the change in the flow scenario. Early in the water year, preparations were made for a dry season. When it began heavily raining across the Basin catchments and river flows increased to record high levels, DEWNR had to adapt to the new flow scenario.</p> <p>Wetlands were inundated naturally so pumping was no longer required and all wetland structures were opened to refill and flush the wetlands. The operation of the Chowilla regulator was adjusted to complement the naturally occurring high flows. Flows on the recession of the high flow were managed to extend benefits to the Coorong. This involved delivery from various sources including Lake Victoria.</p> <p>South Australian Government officials also participated in a range of groups and committees involved in informing decision making about the real time management of environmental water in response to changing climatic and river conditions. These included the Operations Advisory Group and Barrage Operations Advisory Group, the MDBA Southern Connected Basin Environmental Water Committee, the Water Liaison Working Group and the Environmental Water Working Group.</p> <p><b>Characteristics of entitlements</b></p> <p>South Australia confirms that the characteristics of licensed entitlements held in South Australia for environmental use conform with existing agreements and have not been enhanced or diminished relative to like entitlements held for other purposes.</p>
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## C. Water Quality and Salinity Management

Reporting Matter	Supporting evidence to be provided by Basin States	Response (milestone achievement/compliance status)
<b>Implementation of the water quality and salinity management plan, including the extent to which regard is had to the targets in Chapter 9 when making flow management decisions.</b>		
<p><b>C1</b> Regard had to the targets in s9.14 when managing water flows</p> <p><i>Applicable to Schedule 12, Matter 14, Indicator 14.1 and BPIA 21.1</i></p>	<p>Provide a summary of how your State 'had regard' to water quality targets when managing water flows, including a statement that procedures and tools were in place, and how these were used in the reporting year. Provide a case study where possible.</p>	<p>Flow management decisions are made on a daily basis by DEWNR River Murray Operations Group consistent with the objectives of the South Australian River Murray Annual Operating Plan and the Annual Environmental Watering Plan. Decisions are made using a range of hydrological data, modelling and other water quality information gathered regularly.</p> <p>Oversight of decisions is provided by a defined governance structure. A multi-agency River Murray Operations Working Group meets monthly to review status and provide guidance to the River Murray Operations Group on issues that arise throughout the year. Any proposed actions that may have an impact on salinity and water quality are considered by the multi-agency group and any actions that are likely to have negative impacts are elevated to the Director, River Murray Operations for consideration. If a decision cannot be resolved the action is elevated to DEWNR senior officials through the internal Murray-Darling Basin Coordinating Committee (MDBCC).</p> <p>Regular monthly reporting on River Murray operations and flow and water quality outcomes is provided to the MDBCC. All plans (including the South Australian River Murray Annual Operating Plan and the Annual Environmental Watering Plan) and significant policy and operational decisions relating to the River Murray that may have an impact on water quality standards are assessed and approved by MDBCC before implementation.</p> <p>River Murray operations outside those defined in the South Australian River Murray Annual Operating Plan and the Annual Environmental Watering Plan are managed through River Murray Action Request Forms. River Murray Action Request Forms require the proponent to identify the potential impacts of flow management decisions as they relate to water quality for actions that arise throughout the year.</p> <p>In 2016-17, 13 River Murray Action Request Forms (covering 63 actions) relating to flow management and wetland management were received for consideration and assessed for impacts on River Murray water quality or other users. Where potential implications for water quality are identified, proponents are required to identify potential mitigation strategies and monitor outcomes.</p> <p>The following plans, guidelines and tools were used to ensure that regard is had to the targets in s9.14 when managing water flows in South Australia:</p> <ul style="list-style-type: none"> <li>○ South Australian River Murray Annual Operating Plan</li> <li>○ Short Term Barrage Operating Plan</li> <li>○ Annual Environmental Watering Plan</li> <li>○ Water/Wastewater Incident Notification and Communication Protocol</li> <li>○ Salt Disposal Plans</li> <li>○ Wetland Management Plans</li> <li>○ River Murray Action Request Forms</li> </ul>

		<ul style="list-style-type: none"> <li>○ Guidelines for Having Regard to Targets for Managing Water Flows</li> <li>○ Modelling and Decision Templates.</li> </ul> <p>Salinity outcomes in South Australia are also dependent on river operation decisions made by the Murray-Darling Basin Authority (MDBA).</p> <p><b>Case Study</b></p> <p>In late 2016 there was a significant high flow event with a peak of 95 gigalitres per day at the South Australian border. As the high flow event to South Australia receded rapidly in December 2016, there was a spike in salinity levels.</p> <p>Salinity levels at Basin Plan target reporting locations of Morgan and Murray Bridge both increased but were below the nominated values of 800 EC and 830 EC respectively. The salinity level at Morgan peaked at 730 EC and Murray Bridge 640 EC.</p> <p>The spike in salinity was attributed to water levels in the Lock 3 weir pool dropping below normal pool level as the flows rapidly diminished. The lower than normal pool levels combined with the mobilisation of salt from the higher flows caused a large increase in salinity levels at Lock 3. The source of the salt was predominately from large connected waterbodies such as Lake Bonney which have much higher salinity levels than the main channel.</p> <p>During the rapid recession at Lock 3, the crane used to replace stop logs broke down and debris got stuck on the weir. The delay in the reinstatement of the stop logs is likely to have contributed to the lower than normal pool levels and the increased salinity levels.</p> <p>In light of the observations in 2016-17, opportunities to mobilise and discharge salt from weir pools with connected water bodies of higher salinities while 'having regard' to Basin Plan Targets are being investigated. Any discharge of salt will need to be actively managed to ensure that river flows are sufficient to dilute salinities in the River Murray and will be subject to the approval of the Minister's delegate and SA Water.</p>
<p><b>C2</b> Regard had to the targets in s9.14 when making decisions about the use of environmental water</p> <p><i>Applicable to Schedule 12, Matter 14, Indicator 14.2 and BPIA 21.1</i></p>	<p>Provide a summary of how your State 'had regard' to the targets in s9.14 when making decisions about the use of environmental water. Include a statement that procedures and tools were in place, and how these were used in the reporting year.</p> <p>Provide a case study where possible.</p>	<p>To ensure that regard is had to the targets for managing water flow when planning and delivering environmental water, South Australia uses an adapted 'The Living Murray' template that considers the risks associated with not watering and watering wetlands. The template assists working groups in their decision making processes relating to development, planning and use of environmental water and to make an assessment against the targets listed under s 9.14.</p> <p>Environmental water managers are also involved in the River Murray Operations Working Group which meets monthly to review status and provide guidance to the DEWNR River Murray Operations Group on issues that arise throughout the year. Decisions to use environmental water are dependent on the real-time river conditions at the time, the likely risks and available contingency measures.</p> <p>During watering events, specific monitoring of water quality occurs in real-time at the major wetland sites. Smaller sites are monitored through the in-stream monitoring network.</p> <p>South Australia also participates in the MDBA operations-led advisory group for environmental watering (Southern Connected Basin Environmental Watering Committee) and the information provided about water quality from that group is also used in real-time operational decisions.</p> <p>Environmental watering actions that arose throughout the year outside of the agreed South Australian River Murray Annual Operating Plan and the planned Annual Environmental Watering priorities were assessed and recorded using a River Murray Action Request Form. In 2016-17, 60 requests relating to wetland management were submitted.</p>

		<p>The following plans and tools were used to ensure that regard is had to the targets in s9.14 when making decisions about the use of environmental water in South Australia:</p> <ul style="list-style-type: none"> <li>○ South Australian River Murray Annual Operating Plan</li> <li>○ Annual Environmental Watering Plan</li> <li>○ Water/Wastewater Incident Notification and Communication Protocol</li> <li>○ Short Term Barrage Operating Plan</li> <li>○ Wetland Management Plans</li> <li>○ River Murray Action Request Forms</li> <li>○ Guidelines for Having Regard to Targets for Managing Water Flows</li> <li>○ Modelling and Decision Templates</li> </ul> <p><b>Case Study</b></p> <p>A major blackwater event occurred during late spring and summer where dissolved oxygen levels were low throughout most of the southern basin. Given the scale of the event it was difficult to significantly improve dissolved oxygen using environmental water releases.</p> <p>The operation of the Chowilla regulator prior to the arrival of the black water contributed to improved dissolved oxygen levels in important Murray Cod habitat in the Chowilla anabranch. Following the Chowilla operation, dissolved oxygen levels in the Chowilla anabranch remained slightly higher than the adjacent River Murray and anabranch habitat upstream. This appears to have contributed to a greater persistence or survival of Murray Cod in Chowilla compared to similar habitat upstream. The small improvement in dissolved oxygen that resulted from increased water delivery and Chowilla operation may have provided significant local and regional benefits to Murray Cod.</p>
<p><b>Application of salinity targets for the purposes of long-term salinity planning and management (Refers compliance status with section s9.19 of the Basin Plan).</b></p>		
<p><b>C3</b> Apply salinity targets in the Murray–Darling Basin Agreement for salinity planning and management.</p> <p><i>Applicable to Schedule 12, Matter 14 and BPIA 23.1</i></p>	<p>The MDBA, the BOC, and Basin States are to undertake any long-term salinity planning and management functions in accordance with the targets in Appendix 1 of Schedule B of the Murray-Darling Basin Agreement (including the Basin Salinity Management Strategy Operational Protocols).</p> <p>Please indicate how this is done.</p>	<p>South Australia will address this reporting requirement through the provision of Basin Salinity Management 2030 reporting under Schedule B of the Murray-Darling Basin Agreement.</p>
<p><b>Water quality and salinity trigger points</b></p>		
<p><b>C4</b> Determine whether the trigger is reached.</p> <p><i>Applicable to BPIA 26.1</i></p>	<p>The Guideline for the triggers and processes for changing water sharing Tiers provides guidance on how the MDBA and Basin States should communicate if the triggers are reached.</p> <p>Please indicate if a trigger was reached and if so, what action was taken.</p>	<p>No triggers were reached in water year 2016-17.</p>

## D. Water Trading

Reporting Matter	Supporting evidence to be provided by Basin States	Response (milestone achievement/compliance status)
<b>The implementation of water trading rules.</b>		
<p><b>D1</b> Compliance with the Basin Plan water trading rules</p> <p><i>Applicable to Schedule 12, Matter 16, Indicator 16.1 and BPIA 29.1-31.1</i></p>	<p>Provide website links to the publication of information regarding an Approval Authority's interest in a trade (s12.38(2)).</p> <p>Provide documentation to support compliance with s12.37 (notice of disclosure).</p> <p>Describe how you have notified affected parties with the decision to restrict a trade and reasons for the restriction consistent with 12.39.</p> <p>How has your State undertaken best endeavours to ensure water announcements have been made generally available?</p> <p>Provide documentation that supports a compliance with s12.50 (water announcements to be made generally available).</p>	<p>South Australia is compliant with the requirements of sections 12.37, 12.38, 12.39 and 12.50.</p> <p><b>s 12.37 and 12.38 Notice and disclosure of an interest in a trade</b></p> <p>The trade and approval authority functions in South Australia have been administratively separated. The Approval Authority, the Minister for Sustainability, Environment and Conservation has no relevant interest in trade. Delegates of the Minister are officers in DEWNR and they are not permitted to approve a trade if they have a personal interest in that trade.</p> <p>Trade by the Minister for Water and the River Murray is publicly disclosed on Water Connect: <a href="https://www.waterconnect.sa.gov.au/Systems/WTR/Pages/Default.aspx">https://www.waterconnect.sa.gov.au/Systems/WTR/Pages/Default.aspx</a></p> <p><b>s 12.39 Notice of reasons for restricting trade</b></p> <p>DEWNR gives notice to each party involved in a trade when it decides to restrict the trade of a water access right. The notice of disclosure to each party includes detail on the decision to restrict the trade and the reasons for the decisions. Where the South Australia Approval Authority restricts a trade of a water access right for any reason, notice of the decision and the reasons for the decision are given to both parties to the trade as soon as practicable but in any case within 30 days after the decision.</p> <p>The reasons for refusing a trade comply with both the Basin Plan water trading rules and the state water allocation plans and include, among other things, that inter-valley trade limits have been reached; a mistake on the application form or not enough water available on a holder's account.</p> <p><b>s 12.50 Water Announcements to be made generally available</b></p> <p>The Department of Environment Water and Natural Resources made a number of water announcements during 2016-17 which all were made generally available. All announcements are:</p> <ul style="list-style-type: none"> <li>released as a Media Release to radio, television, print, electronic and social media</li> <li>uploaded on the Minister's and the Department of Environment Water and Natural Resources websites: <a href="http://www.environment.sa.gov.au">www.environment.sa.gov.au</a></li> <li>reported in the weekly "River Murray Flow Report" and monthly "Water Resources Update" which is emailed to approximately 1000 recipients.</li> </ul> <p>The 2017-18 water allocation announcement was also published in the SA Government Gazette on 15 March 2017: <a href="http://www.governmentgazette.sa.gov.au/">http://www.governmentgazette.sa.gov.au/</a></p> <p>Copies of announcements can be found on the Department of Environment Water and Natural Resources website: <a href="http://www.environment.sa.gov.au/managing-natural-resources/river-murray/water-allocation-and-carryover/water-allocations-and-announcements">http://www.environment.sa.gov.au/managing-natural-resources/river-murray/water-allocation-and-carryover/water-allocations-and-announcements</a></p>

		<p>Announcements included on the website:</p> <ul style="list-style-type: none"> <li>• 15 March 2017, Water allocations for 2017-18 to open at one hundred per cent (including a private carryover announcement)</li> <li>• Relevant editions of the River Murray Flow Report and Water Resources Update e.g. 20 January 2017.</li> </ul> <p>The South Australian River Murray Private Carryover Policy is available on the Department of Environment Water and Natural Resources website: <a href="http://www.environment.sa.gov.au/managing-natural-resources/river-murray/water-allocation-and-trade/private-carryover">http://www.environment.sa.gov.au/managing-natural-resources/river-murray/water-allocation-and-trade/private-carryover</a></p>
<p><b>D2</b> Trade processing times</p> <p><i>Applicable to Schedule 12, Matter 16, Indicator 16.2; NPA 6d and BPIA 29.1-31.1</i></p>	<p>Report on interstate and intrastate trade processing times (as per the COAG service and reporting standards for trade processing times).</p> <p>Can you provide confirmation that applications for entitlement and allocation trades to which the Commonwealth was a party were processed consistent with the agreed service standards.</p>	<p>South Australia is compliant with the Council of Australian Government (COAG) service and reporting standards for trade processing times. Trading information for the South Australian River Murray is updated on or before the 7<sup>th</sup> day of every month and published on Water Connect <a href="https://www.waterconnect.sa.gov.au/Systems/WTR/Pages/Default.aspx">https://www.waterconnect.sa.gov.au/Systems/WTR/Pages/Default.aspx</a></p> <p>South Australia can confirm that applications for entitlement and allocation trades to which the Commonwealth was a party were also processed consistent with the agreed service standards.</p>
<p><b>Restrictions on trade and their application (Refers compliance status with sections s12.02-12.27 of the Basin Plan).</b></p>		
<p><b>D3</b> Ensure trades are consistent with the water trading rules</p> <p><i>Applicable to Schedule 12, Matter 16; NPA 6a, 6b and 6e and BPIA 29.1</i></p>	<p>Describe how the Basin State exercised its best endeavours to ensure that Basin States trading rules are consistent with the Basin Plan water trading rules.</p> <p>If your State has implemented any new restrictions on trade, have you notified the MDBA of the restriction and notified if consistent with s12.19.</p> <p>You must also report on any surface water entitlements which are not consistent with clauses 28 to 32 of the NWI.</p>	<p>South Australia's water trading activity is consistent with the Basin Plan water trading rules.</p> <p>South Australia's water trading rules are provided in water allocation plans and these have been reviewed for consistency with the Basin Plan water trading rules. Where required, some amendments to trading rules have been made, for example, an amendment to the South Australian River Murray Private Carryover Policy to ensure consistency.</p> <p>South Australia can confirm that surface water trade within a regulated system, between regulated systems or within an unregulated system is free of any restriction on changing the location at which water can be taken, and is not subject to any volumetric limit, except for defined allowable restrictions. South Australia has not implemented any new restrictions on trade.</p> <p>Surface water entitlements in South Australia are consistent with clauses 28 to 32 of the NWI.</p>
<p><b>Information and reporting requirements</b></p>		
<p><b>D4</b> Provide information on water access rights and water trade rules.</p> <p><i>Applicable to Schedule 12, Matter 16 and BPIA 31.1</i></p>	<p>Has the Basin State made any changes to the water access rights displayed on the MDBA's Water Market products page? If so what documentation has been provided to the MDBA with the updated information as required under s12.43?</p> <p>Has the Basin State implemented any new trade rules that regulate the trade of tradable water access rights? If so have they provided these rules to the MDBA as required under s12.46?</p>	<p>South Australia has not made any changes to the water access rights displayed on the MDBA's Water Market products page, however the state is committed to providing such information if and when such changes occur.</p> <p>South Australia has not implemented any new trade rules that regulate the trade of tradable water access rights.</p>

<p><b>D5 Report trade prices</b></p> <p><i>Applicable to Schedule 12, Matter 16 and BPIA 31.2</i></p>	<p>Has the Basin State sold water in the previous year? If so, did they notify the approval or registration authority of the price agreed for the trade?</p>	<p>The Minister for Water and the River Murray has traded water allocations and entitlements during 2016-17 and reports the price (including \$0) in connection with relevant trade applications submitted to the approval or registration authority.</p> <p>Trade by the Minister for Water and the River Murray is publicly disclosed on Water Connect including information relating to the agreed price of trade:</p> <p><a href="https://www.waterconnect.sa.gov.au/Systems/WTR/Pages/Default.aspx">https://www.waterconnect.sa.gov.au/Systems/WTR/Pages/Default.aspx</a></p>
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## E. Northern Basin Review

Reporting Matter	Supporting evidence to be provided by Basin States	Response (milestone achievement/compliance status)
<b>Reviews of the Plan</b>		
<p><b>E1</b> Provide advice and assessments of the MDBA's studies for, and review of, the work underpinning the SDLs in the Northern Basin.</p> <p><i>Applicable to BPIA 13.1</i></p>	<p>The MDBA will undertake the review of the work underpinning SDLs for the Northern Basin, in collaboration with New South Wales and Queensland, who will participate in the review and advise on associated studies, processes and final recommendations.</p> <p>Relevant States should provide evidence of their involvement in the review, including their participation in relevant advisory groups.</p>	<p>Not applicable to South Australia</p>

## F. SDL Adjustment & Constraints Management

Reporting Matter	Supporting evidence to be provided by Basin States	Response (milestone achievement/compliance status)
<b>Constraints Management Strategy</b>		
<p><b>F1</b> Review and provide advice on measures recommended in the Constraints Management Strategy.</p> <p><i>Applicable to NPA 7 and BPIA 14.1</i></p>	<p>The Basin States will review the recommendations of the Constraints Management Strategy having regard to benefits and costs, available funding, third party impacts and community views.</p> <p>Basin States will advise the MDBA of their proposed responses to the relevant Constraints Management Strategy recommendations.</p>	<p>South Australia progressed the Constraints Management Strategy as a member of the Constraints Measures Working Group with representatives from the Murray-Darling Basin Authority and Commonwealth, Victorian and New South Wales governments. The Working Group was established by the Basin Officials Committee in December 2016 to progress agreed constraints measures to maximise potential supply contributions, pursue enhanced environmental outcomes and effectively engage communities in an integrated manner.</p> <p>The Working Group reviewed and prioritised hydrological modelling and flow inundation mapping and prepared policy principles on mitigation, negotiation and asset management to guide states in the next phase of constraints measures planning and implementation.</p>
<p><b>F2:</b> Develop constraint management proposals.</p> <p><i>Applicable to NPA 7 and BPIA 14.2</i></p>	<p>Basin States may develop proposals to address constraints, having regard to the Constraints Management Strategy.</p>	<p>South Australia worked with other jurisdictions to assess constraints measures business cases which address physical constraints to environmental water delivery for the Murray, Goulburn and Murrumbidgee Rivers.</p> <p>Basin Ministers endorsed further planning and implementation of constraints measures in June 2016.</p>
<b>Preparation of proposed measures for SDL adjustment</b>		
<p><b>F3</b> Prepare and assess proposals for supply measures.</p> <p><i>Applicable to BPIA 15.1</i></p>	<p>Proponents will prepare proposals in accordance with assessment guideline and informed by the method for calculation of supply contribution. Sustainable diversion limit assessment advisory committee (SDLAAC) and Basin officials committee (BOC) will assess the proposals.</p>	<p>South Australia has continued to progress its six proposed South Australian Sustainable Diversion Limit (SDL) adjustment supply measures through the phased assessment process of the SDL adjustment mechanism, overseen by the SDLAAC and BOC.</p> <p>The assessment of four of the South Australian proposed SDL adjustment proposals, including the Riverine Recovery Project, Chowilla The Living Murray works, South East Flows Restoration Project and the South Australian Riverland Floodplain Integrated Infrastructure Program has progressed through all three phases and is complete.</p> <p>The remaining two South Australian proposals, Eastern Mount Lofty Ranges Flows for the Future and the South Australian River Murray Constraints Management Strategy have been endorsed by SDLAAC and BOC to progress to Phase 3. Phase 3 documentation is currently in development for review by SDLAAC.</p>
<p><b>F4</b> Prepare and assess proposals for efficiency measures</p> <p><i>Applicable to BPIA 15.2</i></p>	<p>Basin States may develop and implement proposals for efficiency measures for inclusion in the BOC package of measures prior to 30 June 2016. Basin States may also develop and implement proposals for additional efficiency measures after 30 June 2016.</p>	<p>South Australia participates in regular teleconferences held with the Commonwealth, Victoria and New South Wales to discuss and provide advice on the efficiency measures program, including the Commonwealth On-Farm Further Irrigation Efficiency (COFFIE) program.</p> <p>A pilot program for COFFIE has commenced in South Australia.</p> <p>South Australia will continue to investigate opportunities to develop proposals for additional efficiency measures.</p>

**Reallocation of reduction requests**

**F5** Request MDBA to propose re-allocation of shared reduction amount.

Basin States can request the MDBA to propose a re-allocation of the shared reduction amount within affected SDL resource units in that Basin State.

South Australia requested a reallocation of shared reduction amounts under the Basin Plan on 21 June 2016.

*Applicable to BPIA 16.1*

## G. Critical Human Water Needs

Reporting Matter	Supporting evidence to be provided by Basin States	Response (milestone achievement/compliance status)
<b><i>Risk management approach for inter-annual planning for critical human water needs arrangements</i></b>		
<p><b>G1</b> Consider the water available for critical human water needs before allocating water to other uses.</p> <p><i>Applicable to BPIA 27.1</i></p>	<p>The MDBA will provide New South Wales, Victoria and South Australia with Water Resource Assessments, from which the States make decisions about allocations. Assessments will be provided at least monthly, and more frequently if conditions warrant.</p>	<p>South Australia received at least monthly water resource availability assessments from the MDBA during 2016-17.</p> <p>Despite the early constraint to water resources availability, South Australia received its full entitlement flow of 1,850 gigalitres in 2016-17 and had sufficient water resources to have its critical human water needs supplied.</p> <p>A River Murray Water Allocation Framework was developed and published on the DEWNR website.</p> <p><a href="http://www.environment.sa.gov.au/managing-natural-resources/river-murray/water-allocation-and-carryover/water-allocations-and-announcements">http://www.environment.sa.gov.au/managing-natural-resources/river-murray/water-allocation-and-carryover/water-allocations-and-announcements</a></p>
<p><b>G2</b> Make decisions on allocations.</p> <p><i>Applicable to BPIA 27.2</i></p>	<p>During periods of Tier 3 water sharing arrangements, the MDBA will provide the Ministerial Council with Water Resource Assessments, from which New South Wales, Victoria and South Australia make decisions about allocations when determining if water can be made available for uses other than critical human water. Assessments will be provided at least monthly, and more frequently if conditions warrant.</p> <p>A Basin State must have regard to advice from the Authority regarding the volume of water to be made available to it in a particular year, when making decisions about whether water is made available for uses other than meeting critical human water needs (s11.08(3)).</p>	<p>No periods of Tier 2 or 3 water sharing arrangements occurred in 2016-17.</p> <p>South Australia had regard to advice provided by the MDBA in their water availability assessments when making water allocation decisions.</p>
<b><i>Commencement and cessation of Tier 3 water sharing arrangements</i></b>		
<p><b>G3</b> Determine whether the trigger is reached and Tier 3 applies.</p> <p><i>Applicable to BPIA 28.1</i></p>	<p>The MDBA, through the preparation of the Water Resource Assessment will determine if the appropriate conditions apply. If New South Wales, Victoria or South Australia considers the triggers have been reached, its BOC member should advise the Executive Director, River Management Division, MDBA. The Guideline for triggers and processes for changing water sharing Tiers provides more information on how the MDBA will communicate a change in water sharing arrangements to the Basin States, CEWH and the Department.</p> <p>Please indicate if a trigger was reached and what action was taken to implement water sharing arrangements.</p>	<p>No triggers were reached in the water year 2016-17.</p>

## H. Water Resource Plans

Reporting Matter	Supporting evidence to be provided by Basin States	Response (milestone achievement/compliance status)
<b>Reporting requirements</b>		
<p><b>H1</b> Develop water quality management plans as part of their water resource plans that identify measures to achieve objectives.</p> <p><i>Applicable to BPIA 22.1</i></p>	<p>Please provide a statement of progress where water quality management plans have not yet been developed.</p> <p>The Handbook for Practitioners for Chapter 10, Water Resource Plan Requirements provides guidance regarding the development and accreditation of water resource plans.</p>	<p>Water Quality Management Plans for South Australia's three water resource plan areas are currently under development as part of the state's Water Resource Plan development program process (see section <b>H2</b>).</p> <p>A final draft Water Quality Management Plan for the South Australian Murray Region has been provided for comment to the MDBA, along with an initial draft Water Quality Management Plan for the Eastern Mount Lofty Ranges.</p> <p>The South Australian River Murray Water Quality Management Plan will be developed later in 2017.</p>
<b>Develop of water resource plans for accreditation</b>		
<p><b>H2</b> Develop water resource plans for accreditation</p> <p><i>Applicable to BPIA 24.1</i></p>	<p>Please provide a statement of progress where water resource plans have not yet been developed.</p>	<p>South Australia is developing three water resource plans:</p> <ul style="list-style-type: none"> <li>• South Australian Murray Region</li> <li>• Eastern Mount Lofty Ranges</li> <li>• South Australian River Murray.</li> </ul> <p>South Australia has adopted a three step process for developing its water resource plans:</p> <ul style="list-style-type: none"> <li>• Development program (includes a risk assessment and a detailed gap analysis)</li> <li>• Draft water resource plan for MDBA feedback</li> <li>• Water resource plan – final draft for accreditation.</li> </ul> <p><b>Progress on water resource plans</b></p> <p><i>South Australian River Murray</i></p> <p>The development program and risk assessment were completed in June 2017. Drafting of the water resource plan will commence late 2017. In June 2017, the MDBA was also provided with a first draft of the Planning Assumptions for discussion, in confidence and without prejudice.</p> <p><i>South Australian Murray Region</i></p> <p>The draft Water Resource Plan was provided to the MDBA in November 2016 and the MDBA has provided detailed feedback. The Water Resource Plan is currently being finalised in response to the MDBA feedback.</p> <p><i>Eastern Mount Lofty Ranges</i></p> <p>The development program was submitted to the MDBA for comment in May 2016. Surface water and groundwater modelling tasks have been completed as well as the first draft components of the Water Resource Plan.</p>

<b>Development of an integrated hydrologic model across the Basin</b>		
<p><b>H3</b> Adopt eWater source</p> <p><i>Applicable to BPIA 25.1</i></p>	<p>Please provide a statement of progress where eWater source has not yet been adopted.</p> <p>The MDBA standard for water resource plan accreditation is eWater Source for water resource planning and operations, having regard to the modelling practices of Basin States and the nature of water resource plan areas and operational readiness of the model as it relates to a water resource plan area.</p>	<p>All new hydrological models are now developed using the eWater source platform. Existing models are retained where they remain appropriate and fit for purpose.</p> <p>The MDBA's Source model of the River Murray (SMM) is regularly used to inform operations of the Lower Lakes and barrages based on updated forecasts from the MDBA for flow to South Australia. This version does not include baseline diversion limit (BDL) or sustainable diversion limit (SDL) conditions.</p> <p>It may not be possible to use Source for WRP models as it is expected the BDL scenario will not have been replicated appropriately in SMM and the timeframes for water resource plan development and accreditation mean there is little capacity to address the issues in time.</p>

## Statement of reasons why watering not undertaken in accordance with Basin Environmental Watering Priorities (BAEWP) for 2016-17 (Refer Matter 10 – Indicator 10.3 and BP IA Task 20.2)

Section 8.44 of the Basin Plan (2012) requires that: If a person undertakes environmental watering other than in accordance with the Basin annual environmental watering priorities accessible on MDBA's website, that a person must give to the Authority a statement of reasons why environmental watering has not been undertaken in accordance with the Basin annual environmental watering priorities (8.44(1)). The person must give the statement to the Authority as soon as practicable, but in any event within four months after the end of the water accounting period in which the environmental watering was undertaken (8.44(2)). The Authority may publish on its website the statement of reasons given.

	Basin annual environmental watering (BAEWP) priorities for 2016–17	Jurisdictions to consider reporting	Please tick (x), where BAEWP not followed	Statement of reasons why BAEWP not followed
<b>River flows and connectivity</b>				
1	Overarching: to provide longitudinal connectivity and variable flow patterns for water quality and ecological benefit — particularly for native fish.	NSW, Vic, Qld, SA, ACT, CEWH, TLM		BAEWP followed
2	Maintain waterholes in the Lower Balonne Floodplain to provide critical refuge for water-dependent species.	Qld, NSW, CEWH		Not applicable to South Australia
3	Protect aquatic habitat conditions in the Coorong and support native fish movement by optimising flows into the Coorong and through the Murray Mouth. <b>November 2016 addendum:</b> Protect aquatic habitat conditions in the Coorong and support native fish movement by optimising flows into the Coorong and through the Murray Mouth. In particular, promote <i>Ruppia</i> recruitment by elevating water levels in the Coorong from October to December by building on the unregulated flows.	SA, CEWH, TLM		BAEWP followed

	Basin annual environmental watering (BAEWP) priorities for 2016–17	Jurisdictions to consider reporting	Please tick (x), where BAEWP not followed	Statement of reasons why BAEP not followed
	with environmental water.			
<b>Native vegetation</b>				
4	Overarching: to water discrete locations that include threatened vegetation or support other threatened species and communities, including vegetation that is critical waterbird foraging or breeding habitat.	NSW, Vic, Qld, SA, ACT, CEWH, TLM		BAEWP followed
5	Improve the condition of wetland vegetation communities in the mid-Murrumbidgee wetlands that provide critical habitat for threatened species and communities.	NSW, CEWH		Not applicable to South Australia
6	Improve the health and complexity of waterbird rookery habitat in the northern Narran Lakes system.	NSW, QLD CEWH		Not applicable to South Australia
7	<b>November 2016 addendum:</b> Prevent further critical deterioration of Moira grass in Barmah–Millewa Forest, subject to resolving natural resource management issues.	NSW, Vic, CEWH, TLM		Not applicable to South Australia
8	<b>November 2016 addendum:</b> Maintain inundation of floodplain areas for sufficient duration to: freshen groundwater; reduce soil salinity; improve health of mature trees; and promote recruitment of long-lived floodplain vegetation, including seed set and germination.	NSW, Vic, Qld, SA, ACT, CEWH, TLM		BAEWP followed

	Basin annual environmental watering (BAEWP) priorities for 2016–17	Jurisdictions to consider reporting	Please tick (x), where BAEWP not followed	Statement of reasons why BAEP not followed
<b>Waterbirds</b>				
9	Overarching: to prevent further decline in habitat that supports waterbird breeding across the basin and thereby to help stabilise waterbird populations, albeit at lower levels than are sought over the long term.	NSW, Vic, ACT, SA, Qld, CEWH, TLM		BAEWP followed
10	<b>November 2016 addendum:</b> Capitalise on opportunities to support waterbird breeding. Sites in the Lachlan, Macquarie and Murray catchments now show potential for successful waterbird breeding in the coming months. At these sites, environmental water should be used to sustain the duration and depth of inundation so that the waterbirds can reproduce successfully.	NSW, Vic, ACT, SA, Qld, CEWH, TLM		BAEWP followed
<b>Native fish</b>				
11	Overarching: to protect drought refuge habitats, to maintain in-stream habitats, and to ensure existing populations of threatened species remain viable.	NSW, Vic, ACT, SA, Qld, CEWH, TLM		BAEWP followed
12	Contribute to the long-term recovery of silver perch by improving existing populations and enhancing conditions for recruitment and dispersal to and from suitable habitat.	NSW, Vic, ACT, SA, Qld, CEWH, TLM		BAEWP followed

	Basin annual environmental watering (BAEWP) priorities for 2016–17	Jurisdictions to consider reporting	Please tick (x), where BAEWP not followed	Statement of reasons why BAEP not followed
13	Support viable populations of threatened native fish by protecting drought refuges and maintaining in-stream habitats and essential functions.	NSW, Vic, ACT, SA, Qld, CEWH, TLM		BAEWP followed
14	Maximise opportunities for range expansion and the establishment of new populations of silver perch and other threatened fish, as conditions allow.	NSW, Vic, ACT, SA, Qld, CEWH, TLM		BAEWP followed
15	<p><b>November 2016 addendum:</b> Contribute to the long-term recovery of threatened fish species, including silver perch, through range expansion and establishment of new populations. Environmental water can benefit silver perch recruitment by dampening sharp and extended drops in River Murray levels downstream of Yarrawonga during late spring and summer. Provision of water for small in-channel rises in Victorian tributaries and the Murray in summer and autumn will support dispersal of young silver perch.</p>	NSW, Vic, ACT, SA, Qld, CEWH, TLM		BAEWP followed