

# Information collection template for water year 2020–21 – Basin State

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## The Enter reporter's name 2020–21 report to satisfy annual reporting obligations for Basin Plan Schedule 12 and the Basin Plan Implementation Agreement

### Reporting context

The matters listed in Schedule 12 of the Basin Plan relate to the objectives and outcomes against which the effectiveness of the Basin Plan will be evaluated (see section 13.05). The matters are also matters on which the MDBA, the Basin States, the Commonwealth Environmental Water Holder, and the Australian Government Department of Agriculture, Water and the Environment are required to report. Schedule 12 includes Category A matters which are subject to 5 yearly reporting and Category B matters (see Table 1) which are subject to annual reporting.

This template covers Basin State 2020-21 reporting obligations in relation to Matters 6, 10, 13, 14, and 16 and the Basin Plan Implementation Agreement (BPIA). Please refer to the notes for an explanation of why some Matters are not included in this template. The reporting period is the water year, 1 July to 30 June. The Basin Plan set the reporting day as 31 October in the calendar year that reporting periods ends. Complementary to this, the parties to the Basin Plan Implementation Agreement (BPIA) have agreed to provide by 31 October each year, annual Statements of Assurance that includes reporting of non-compliance. The statements of assurance will be signed by the relevant Secretary, Chief Executive, Director-General or, in the case of the CEWH, the CEWH itself.

Table 1. Schedule 12, Category B matters, annual reporting

| #  | Schedule 12 Annual Matters   | Reporter |              |      |  |
|----|--|----------|--------------|------|--|
|    |  | MDBA     | Basin States | CEWH | Department of Agriculture, Water and the Environment |
| 4  | The effectiveness of the management of risks to Basin water resources.   | MDBA     | Basin States |      |  |
| 5  | The transition to long term average sustainable diversion limits.  |          |              |      | Department of Agriculture, Water and the Environment |
| 6  | The extent to which local knowledge and solutions inform the implementation of the Basin Plan.   | MDBA     | Basin States | CEWH |  |
| 9  | The identification of environmental water and the monitoring of its use.   | MDBA     | Basin States | CEWH |  |
| 10 | The implementation of the environmental management framework (Part 4 of Chapter 8).  | MDBA     | Basin States | CEWH |  |
| 13 | The implementation, where necessary, of the emergency response process for critical human water needs.   | MDBA     | Basin States |      | Department of Agriculture, Water and the Environment |
| 14 | The 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. | MDBA     | Basin States | CEWH |  |
| 16 | The implementation of water trading rules.   | MDBA     | Basin States |      |  |
| 19 | Compliance with water resource plans.  |          | Basin States |      |  |
| 20 | The prioritisation of critical human water needs.  |          | Basin States |      |  |
| 21 | The accountability and transparency of arrangements for water sharing.   |          | Basin States |      |  |

#### Notes:

- Reporting for Matter 5 is reported separately by the Department of Agriculture, Water and the Environment.
- Reporting for Matter 4 by Basin States is reported through Matter 10, and through the process of water resource plan accreditation.
- Reporting for Matter 9 is reported separately by Basin States, Commonwealth Environmental Water Holder and the MDBA, through Water Act s71 reporting, and through the Matter 9.3 reporting template.
- Reporting for Matter 19 (Compliance with water resource plans) is reported separately by Basin States.
- No reporting by Basin States is required for Matter 20, as confirmation that this Basin Plan requirement has been met will be via the process of water resource plan accreditation.
- No reporting by Basin States is required for Matter 21, as the MDBA publishes the accreditation status of water resource plans each three months, and accredited water resource plans, on its website.
- Reporting against some BPIA tasks have been removed from the template as the tasks are complete or are reported elsewhere, or by agreement with reporters.
- Schedule 12 reporting requirements in this template have been informed by the Basin Plan Schedule 12 Reporting Guidelines developed in 2015. The Basin Plan Schedule 12 Reporting Guidelines include reporting indicators which are nested under relevant Schedule 12 matters.
- New guidance can be updated annually to help reporters meet reporting obligations and ensure the reporting requirements are up to date. Updated reporting guidance is currently endorsed by the Basin Officials Committee Alternates.

The Basin Plan Schedule 12 Guidelines and this information collection template are inconsistent. This template sets out the current reporting requirements. The Basin Plan Schedule 12 Guidelines will be updated and made consistent with the information collection template, when the Guidelines are updated in 2021-22.

## Matter 6: The extent to which local knowledge and solutions inform the implementation of the Basin Plan

| Reporting Matter   | Reporting Requirement (Supporting evidence to be provided by Basin States)  | Response   |
|--|---|--|
| <p><b>Matter 6</b></p> <p>The extent to which local knowledge and solutions inform the implementation of the Basin Plan.</p> <p>Applicable to:<br/>Basin Plan Chapters 6, 8 &amp; 10</p> | <p><b>Reporting requirement:</b></p> <p>Provide a summary of how local knowledge and solutions informed implementation of the Basin Plan. This may include:</p> <ul style="list-style-type: none"> <li>• how local knowledge and solutions were used by the reporter</li> <li>• how involving communities made a difference to Basin Plan implementation</li> <li>• how decisions changed as a result of community involvement.</li> </ul> <p>This may include engagement activities related to water resource planning, First Nations participation in environmental watering, and the SDL Adjustment Mechanism.</p> <p><b>Note:</b> case studies are not required, but may be a useful way to describe how local knowledge and solutions inform implementation of the Basin Plan.</p> | <p>The EPSDD works with established groups and bodies that facilitate ongoing collaboration and input of local knowledge into water resources policy and planning, including:</p> <ul style="list-style-type: none"> <li>• the ACT and Region Catchment Management Coordination Group, an interjurisdictional coordination body committed to strengthening governance and catchment management in the ACT and surrounding regions. They are working to include a Ngunnawal Traditional Custodian representative on the group</li> <li>• the Dhawura Ngunnawal Caring for Country Committee – the EPSDD meets monthly with a representative of the Committee to further Ngunnawal participation and interests in water management in the ACT. In 2020/21 the Committee facilitated the updating of the ACT’s Water Resource Plan to better represent Ngunnawal perspectives, and provided input on the ACT’s water efficiency measure investigations (see below).</li> </ul> <p>In December 2020, the EPSDD and Icon Water facilitated an Aboriginal Waterways Assessment with members of the Ngunnawal community to help Traditional Custodians assess the cultural health of their Country. Information from this and future waterway assessments will be used increasingly to inform water resource planning, policy and program delivery.</p> <p>Community groups across the ACT continue to contribute to monitoring and caring for ACT waterways. Activities in 2020/21 include:</p> <ul style="list-style-type: none"> <li>• Volunteers collected data for the Catchment Health Indicator Program (CHIP) report, which is based on 1872 water quality surveys, 184 water bug surveys and 219 riparian assessments collected by more than 200 Waterwatch volunteers.</li> <li>• Community-led initiatives funded through the ACT Environment Grants Program worked to restore riparian habitats.</li> <li>• The Upper Murrumbidgee Demonstration Reach partnership continued to facilitate community involvement in activities to promote fish habitat and river health in the upper Murrumbidgee River.</li> </ul> <p>Further activities that increase the community’s participation in managing and improving waterways in the ACT can be found in the <a href="#">ACT Water Strategy Report Card 2021</a> available on the ACT Government’s ‘ACT Water Strategy’ web page.</p> <p>Local knowledge and solutions were sought by the EPSDD as it investigated the feasibility of implementing water efficiency measures as a means to ‘bridge the gap’ and respond to the SDLAM. The Territory’s due diligence investigation in 2020/21 engaged stakeholders internal and external to government that focused on SDL compliance, socio-economic impact, and implementation risks. This work included engaging with local experts and stakeholders to determine investigation parameters and inputs, test investigation outcomes (including associated assumptions), and identify and manage implementation risks. Some key examples include:</p> <ul style="list-style-type: none"> <li>• commissioning locally based specialists (from eWater) familiar with the ACT’s water system and hydrological modelling environment to inform and complete SDL compliance work</li> <li>• consulting local representatives from the ACT’s plumbing peak body (Master Plumbers ACT) to test industry capacity and discuss implementation pathways</li> <li>• consulting with local experts from the ACT’s water utility (Icon Water) to inform socio-economic modelling (including key model inputs and water customer profiles) and investigations into implementation risks.</li> <li>• engaging the EPSDD’s Dhawura Ngunnawal Caring for Country Committee to seek support for the intent of the water efficiency investigations and to identify impacts and opportunities.</li> </ul> <p>The EPSDD will continue to seek local knowledge and solutions to inform implementation of the Basin Plan. In October 2021, the Water Policy team recruited its first Ngunnawal Water Policy Officer to support further engagement with, and inclusion of, Ngunnawal interests in water management. The EPSDD is also developing a Cultural Resource Plan and a Cultural Flows Plan, which will help inform the next review of the ACT’s environmental flow guidelines in 2024.</p> |

## Matter 10: The implementation of the environmental management framework (Part 4 of Chapter 8)

| Reporting Matter  | Reporting Requirement (Supporting evidence to be provided by Basin States)  | Response   |
|---|---|--|
| <p><b>Indicator 10.1</b><br/>Basin-wide environmental watering strategy, long-term watering plans and annual priorities were prepared, with the required content, published, reviewed and updated as obligated under Part 4 of Chapter 8, Divisions 2-5<br/>Applicable to:<br/>Basin Plan Chapter 8, Part 4<br/><b>BPIA Task 18.1, 19.1</b></p>           | <p><b>Context:</b> Under Part 4 of Chapter 8, Division 2 Basin states are obligated to prepare, review and update long-term watering plans. Under Part 4 of Chapter, Division 3 Basin states are obligated to identify annual watering priorities and provide the annual watering priorities to the MDBA.</p> <p><b>Reporting requirement:</b><br/>Confirm that long-term watering plans and annual watering priorities were prepared, with the required content, published, reviewed and updated as obligated under Part 4 of Chapter 8, Divisions 2-4<br/><br/>If unable to confirm, please provide a statement of reasons.</p>   | <p>Met <input checked="" type="checkbox"/><br/>Partially met <input type="checkbox"/><br/>Not met <input type="checkbox"/><br/>Where obligations have not been met with or partially met, provide a statement of reasons.</p> <p>The ACT's Environmental Flow Guideline (2019) set out the operating rules for the management of environmental water within the ACT. There is no held environmental water within the ACT.<br/>The Guideline was developed to be consistent with the MDBA Basin-wide Environmental Watering Strategy and is relevant for meeting the purpose of the Long-Term Environmental Watering Plan and Annual Environmental Watering Priorities. The next five-yearly review of the Guideline is due in 2024.<br/>The Environmental Flow Guideline is a notifiable instrument (DI2019-190) and publicly available on the ACT's legislation register.<br/>The ACT Water Resource Plan sets out the policies, strategies and guidelines for meeting the requirements of the Basin Plan, including requirements under Chapter 8. The WRP was accredited by the Commonwealth Water Minister on 25 June 2020.</p>   |
| <p><b>Indicator 10.2</b><br/>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)<br/>Applicable to:<br/>Basin Plan Chapter 8, Part 4<br/><b>BPIA Task 20.1</b></p> | <p><b>Context:</b> Part 4 of Chapter 8 places obligations on Basin States that relate to consultation, and other matters (including the Basin-wide watering strategy, consistency with international agreements, identification of possible cooperative arrangements) to which Basin States must have regard to when preparing long-term watering plans and annual watering priorities.</p> <p><b>Reporting requirement:</b><br/>Confirm that 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.<br/><br/>If unable to confirm, provide a statement of reasons.</p> | <p>Met <input checked="" type="checkbox"/><br/>Partially met <input type="checkbox"/><br/>Not met <input type="checkbox"/><br/>Where obligations have not been met with or partially met, provide a statement of reasons.</p> <p>Environmental water is managed based on a set of rules set out in the ACT's Environmental Flow Guideline (2019). The Guideline, including the process for developing the Guideline, meet the requirements under Chapter 8, Part 4.<br/>The ACT's Environmental Flow Guideline was revised in 2019 following a review of the ecological objectives and the effectiveness of the environmental flow rules for meeting those objectives. The review process, initiated in mid-2017, involved extensive consultation with experts through the Environmental Flows Technical Advisory Group, ACT Government Steering Committee, and MDBA staff. Public submissions were also invited. The next five-yearly review of the Guideline is due in 2024.<br/>The ACT Water Resource Plan sets out the policies, strategies and guidelines for meeting the requirements of the Basin Plan, including requirements under Chapter 8. The WRP was accredited by the Commonwealth Water Minister on 25 June 2020.</p>   |
| <p><b>Indicator 10.3</b><br/>Environmental watering accordance with Basin annual watering priorities<br/>Applicable to:<br/>Basin Plan s8.44<br/><b>BPIA Task 20.2</b></p>  | <p><b>Context:</b> s8.44 of the Basin Plan requires reporting where annual watering priorities are not followed. This includes providing the MDBA a statement of reasons why environmental watering has not been undertaken in accordance with the priorities.</p> <p><b>Reporting requirement:</b><br/>Confirm that environmental watering was in accordance with Basin annual watering priorities.<br/><br/>Where environmental watering was not in accordance with Basin annual watering priorities, provide a statement of reasons in accordance with s8.44 of the Basin Plan and Principle 1 of Division 6.</p>  | <p>Met <input checked="" type="checkbox"/><br/>Partially met <input type="checkbox"/><br/>Not met <input type="checkbox"/><br/>Where environmental watering was not in accordance with Basin annual watering priorities, provide a statement of reasons</p> <p>Environmental water is managed based on a set of rules set out in the ACT's Environmental Flow Guideline (2019). Operation of the Guideline contributes to the outcomes set out in the Basin-wide Environmental Watering Strategy and the Basin annual watering priorities. There is no held environmental water within the ACT.<br/>Environmental flow releases from storages are managed by Icon Water under licence WU67 in line with the <i>Water Resources Act 2007</i> (ACT). Icon Water advises that compliance with the licence's targets for environmental flows was achieved in 2020/21 (refer Licence WU67 Environmental Flows Annual Compliance Report July 2020 to June 2021). The ACT Environmental Protection Authority annually reviews Icon Water's performance in the management of environmental water releases consistent with the Environmental Flow Guideline; this review is pending finalisation and will be published in due course.<br/>The ACT Water Resource Plan sets out the policies, strategies and guidelines for meeting the requirements of the Basin Plan, including requirements under Chapter 8. The WRP was accredited by the Commonwealth Water Minister on 25 June 2020.</p> |

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| <p><b>Indicator 10.4</b></p> <p>Demonstration of how the Basin Plan and/or the Environmental Watering Plan has influenced environmental watering outcomes.</p> <p>Applicable to:<br/>Basin Plan Chapter 8</p> | <p><b>Optional reporting requirement:</b></p> <p>Provide one or more case studies that demonstrate how the Basin Plan and/or the Environmental Watering Plan (Chapter 8) has influenced environmental watering outcomes. If appropriate, the case study may reference:</p> <p>a) the outcomes achieved</p> <p>b) how environmental watering principles were applied and identify the relevant principles</p> <p>c) environmental watering coordination and consultation process related to the Basin Plan</p> <p><b>d) opportunities or options to improve the Basin Plan and/or the Environmental Watering Plan (Chapter 8).</b></p> | <p>d) See Attachment A – Case study on flows in the upper Murrumbidgee River related to challenges for achieving the environmental outcomes and opportunities or options to improve the Basin Plan and/or the Environmental Watering Plan.</p> |
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### Matter 13: The implementation, where necessary, of the emergency response process for critical human water needs.

| Reporting Matter  | Reporting Requirement (Supporting evidence to be provided by Basin States)   | Response  |
|---|--|---|
| <p><b>Matter 13</b></p> <p>Applicable to:<br/>Basin Plan s11.05, s11.08(3)<br/>BPIA Task 26.1, 27.1, 27.2, 28.1</p> | <p><b>13a</b></p> <p><b>Context:</b> Under s11.05 of the Basin Plan BOC members have a role in advising the MDBA if a salinity and water quality trigger is reached</p> <p><b>Reporting requirement:</b></p> <p>Indicate if a water quality trigger (as per s11.05 of the Basin Plan) was reached and if so, what action was taken.</p>  | <p>Yes <input type="checkbox"/></p> <p>Not applicable <input checked="" type="checkbox"/></p> <p>Please indicate if a water quality trigger was reached, and what action was taken</p> <p>A water quality trigger was not reached for the ACT.</p>  |
|   | <p><b>13b</b></p> <p><b>Context:</b></p> <p>(i) 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>(ii) 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>(iii) 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>(iv) 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, MDBA. The Guideline for triggers and processes for changing water sharing Tiers provides more information on how the MDBA will communicate a change</p> | <p>Have the agreed agreements for Tier 2 and Tier 3 water sharing have been implemented.</p> <p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>Not applicable <input checked="" type="checkbox"/></p> <p>If yes provide evidence of process and action/s taken in response to a Tier 2 or 3 event. This may include links to information on websites.</p> <p>If no, provide a statement of reasons.</p> |

|  |  |  |
|--|--|--|
|  | <p><i>in water sharing arrangements to the Basin States, CEWH and the Department.</i></p> <p><b>Reporting requirement:</b></p> <p>Indicate if a trigger was reached and what action was taken to implement water sharing arrangements.</p> |  |
|--|--|--|

## Matter 14: The 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

| Reporting Matter  | Reporting Requirement (Supporting evidence to be provided by Basin States)  | Response  |
|---|---|---|
| <p><b>Indicator 14.1</b></p> <p>Regard had to the targets in s9.14 when managing water flows</p> <p><b>Indicator 14.2</b></p> <p>Regard had to the targets in s9.14 when making decisions about the use of environmental water</p> <p>Applicable to:</p> <p>Basin Plan s9.14</p> <p><b>BPIA Task 21.1</b></p> | <p><b>Context:</b> <i>Basin Plan s9.14 recognises that flow management, in some circumstances, can assist with the management of water quality issues, such as salinity, hypoxic blackwater events and blue green algae outbreaks. The intent of s9.14 is that 'having regard' to these risks and opportunities becomes part of business as usual when making decisions about flow management or the use of environmental water. Other actions that can also address water quality issues include coordination and communication about blue green algae outbreaks or hypoxic blackwater events.</i></p> <p><b>Reporting requirement:</b></p> <p>Describe how water quality issues were considered, when making decisions about flow management or the use of environmental water, and/or other actions; did this make a difference to these water quality issues and are there any learnings to inform adaptive management.</p> | <p>Water quality is managed through a range of regulations, policies and guidelines in the ACT, including:</p> <ul style="list-style-type: none"> <li>The ACT's <i>Environmental Protection Regulations 2005</i> sets out a range of water quality objectives and criteria related to the protection of each designated environmental and use value as prescribed in the ACT's Territory Plan. A set of secondary or loading water quality criteria is also identified in the Regulations in respect to the urban lakes, the Murrumbidgee River and Burrinjuck Reservoir.</li> <li>The ACT Guidelines for Recreational Water Quality 2014 establish a framework for monitoring and managing blue green algal blooms and high levels of faecal coliforms in Canberra's lakes and river sites where primary contact recreational activities are permitted. In 2012, the National Capital Authority released their revised Lake Burley Griffin Water Quality Management Plan, containing recommended water quality guides in relation to protection of lake ecosystems, aesthetic values, recreational waters and irrigation water supply that specifically targets the waters of Lake Burley Griffin.</li> <li>The ACT Water Strategy (Striking the Balance) 2014 identifies strategies and actions that support the ACT achieving water quality outcomes.</li> <li>The ACT's Environmental Flow Guideline protects base flows and abstraction in unregulated rivers and requires environmental watering releases from the water supply dams. These flows ensure that streams are generally meeting the appropriate water quality targets. Review of the Guideline's effectiveness for supporting the water quality targets will be conducted in 2024.</li> <li>The ACT Aquatic and Riparian Conservation Strategy 2018 provides guidance on the conservation of aquatic and riparian areas and component species to maintain and improve the natural integrity of the rivers and riparian zones in the ACT within a regional context.</li> </ul> <p>Salinity issues are a low risk in the ACT due to the relatively low salinity levels in waterways. Flow and salinity were monitored in 2020/21 as part of the ACT's commitment to implementing the objectives of BSM2030. Monitoring found there was an increase in salt load and/or concentrations recorded across all sites compared to the target levels. This reflects a broad mobilisation of salts across the landscape into the ACT and within the ACT due to the above average annual rainfall and increased flows over the target time period. Detailed reporting is provided within the ACT's Basin Salinity Management 2020-21 Annual Status Report provided to the MDBA in October 2021. The ACT will continue with monitoring of salinity and other water quality parameters in 2021-22.</p> |

## Matter 16: The implementation of water trading rules

| Reporting Matter   | Reporting Requirement (Supporting evidence to be provided by Basin States)  | Response   |
|--|---|--|
| <p><b>Matter 16</b></p> <p>The implementation of water trading rules.</p> <p>Applicable to:</p> <p>Basin Plan s12.37, s12.38, s12.39, s12.43, s12.46, s12.48 s12.50</p> <p><b>BPIA Task 29.1, 30.1, 31.1, 31.2</b></p> | <p><b>16a</b></p> <p><b>Context:</b> <i>Basin Plan s12.38 requires an approval authority to disclose if it has been party to a trade and publish information about the trade on its website.</i></p> <p><b>Reporting requirement:</b></p> <p>Provide website links to the publication of information regarding an approval authority's interest in a trade (s12.38 (2)).</p> <p><b>16b</b></p> <p><b>Context:</b> <i>Basin Plan s12.37 requires an approval authority to disclose interest before a trade occurs.</i></p> | <p>16a - The Environmental Protection Authority (EPA) is the Approval Authority for water trade and take within the ACT under the <i>Water Resources Act 2007</i>. The EPA is not authorised to be party to a water trade.</p> <p>16b) Not applicable – refer to 16a</p> <p>16c) Inter-jurisdictional trading arrangements between the ACT and NSW have not yet been established. However, the ACT Government is working with NSW to progress a Basin Plan compliant water transfer-trading framework. No restrictions on trade were imposed.</p> <p>16d) Not applicable. Water management arrangements within the ACT do not require water announcements.</p> <p>16e) Not applicable. The ACT is not required to display water access rights as water trading has not been established between the ACT and NSW.</p> <p>16f) The ACT has not implemented any new trade rules.</p> <p>16g) The ACT has not sold water in 2020-21.</p> |

**Reporting requirement:**  
Provide documentation to support compliance with s12.37 (notice of disclosure)

**16c**  
**Context:** *If an approval authority decides to restrict a trade proposed trade, it must give notice of the decision and the reason for the decision to each party (Basin Plan s 12.39)*

**Reporting requirement:**  
Describe how affected parties were notified with the decision to restrict a trade and reasons for the restriction consistent with s12.39.

**16d**  
**Context:** *A person that makes water announcements must ensure that it is made in a manner that is generally available (Basin Plan s 12.50).*

**Reporting requirement:**  
Provide documentation that supports a compliance with s12.50 (water announcements to be made generally available).

**16e**  
**Reporting requirement:** 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?

**16f**  
**Reporting requirement:** 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?

**16g**  
**Reporting requirement:** Has the Basin State sold water in the previous year? If so, did they notify the approval or registration authority of the price agree for the trade as required under s12.48?

## Attachment A: Basin Environmental Watering Priorities (BAEWP) for reference in reporting why watering not undertaken in accordance with priorities, under Basin Plans 8.44

### N/A for ACT

The table below provides a reference for exception-based reporting under BPs 8.44. The table lists Basin annual environmental watering priorities for 2020-2021 and the relevant jurisdiction.

The priorities are set out as rolling, multi-year priority frameworks that cover each resource availability scenario. Basin annual environmental watering priorities are listed within these frameworks for each resource availability scenario. If conditions change across catchments within the year, the annual priorities also change. This allows environmental water managers to change strategy in response to changes in conditions in specific catchments. Further details of the priorities are located in the report 'Basin environmental watering priorities – Overview and technical summaries – June 2019' <https://www.mdba.gov.au/publications/mdba-reports/basin-annual-environmental-watering-priorities>

|       | FLOW: Rolling, multi-year priority  | FLOW: Basin annual environmental watering priorities 2020-2021   | Relevant jurisdiction             |
|-------|---|--|-----------------------------------|
| 1 (a) | FLOW: Support lateral and longitudinal connectivity along river system. (VERY DRY)                  | <p>Coordinate environmental watering across sites to increase longitudinal connectivity in connected catchments.</p> <p>Mitigate irreversible environmental impacts associated with extended drought.</p> <p>Prevent dry spell durations exceeding refuge tolerances.</p>  | Vic, NSW, SA, CEWH, TLM, Qld, ACT |
| 1 (b) | FLOW: Support lateral and longitudinal connectivity along river system. (DRY)                       | <p>Maintain natural cycles of wetting and drying.</p> <p>Where possible, maintain base low volumes at 60% of natural levels.</p> <p>Provide replenishment flows to maintain habitat condition and regulate water quality, carbon and nutrients. Use works infrastructure to connect floodplain-wetland ecosystems and manage associated risks.</p>   | Vic, NSW, SA, CEWH, TLM, Qld, ACT |
| 1 (c) | FLOW: Support lateral and longitudinal connectivity along river system. (MODERATE)                  | <p>Coordinate regulated releases with tributary flows (regulated and unregulated) to increase longitudinal connectivity in the Barwon–Darling and Murray rivers. Coordinate regulated releases with timing of tributary flow events to increase flow variability and the frequency of in-channel pulses and bankfull flow events.</p> <p>Extend the duration and magnitude of natural events to promote the movement of biota nutrients, sediments and salt.</p>   | Vic, NSW, SA, CEWH, TLM, Qld, ACT |
| 1 (d) | FLOW: Support lateral and longitudinal connectivity along river system. (WET)                       | <p>Manage water in harmony with natural cues to maximise connectivity and flow variability to reinstate key elements of the flow regime. Provide flow regimes that allow opportunities for high ecological productivity.</p> <p>Supplement unregulated flow events to promote hydraulic diversity and facilitate natural geomorphic processes and groundwater replenishment.</p>   | Vic, NSW, SA, CEWH, TLM, Qld, ACT |
| 1 (e) | FLOW: Support lateral and longitudinal connectivity along river system. (VERY WET)                  | <p>Maximise ecological responses by adaptively managing the recession of high-flow events.</p> <p>Maximise the export of sediments, pollutants and salt.</p> <p>Mitigate water quality impacts associated with natural flood events.</p>   | Vic, NSW, SA, CEWH, TLM, Qld, ACT |
|       | FLOW: Rolling, multi-year priority  | FLOW: Basin annual environmental watering priorities 2020-2021   | Relevant jurisdiction             |
| 2 (a) | FLOW: Support freshwater connectivity through the Lower Lakes, Coorong and Murray Mouth. (VERY DRY) | <p>Where possible, mitigate adverse environmental impacts associated with extended dry and drought conditions through the following priorities. Assist the maintenance of Lower Lake levels above sea level (0.4m AHD).</p> <p>Support the maintenance of suitable estuarine conditions around the barrages by managing balance between lake levels and barrage outflows (supporting by additional freshwater inflows where possible).</p> <p>Manage water quality in the Lower Lakes with additional freshwater inflows, having regard to the Basin Plan salinity targets.</p> <p>Where possible, provide flows to Coorong to avoid water quality exceeding tolerances of listed or threatened species.</p> | SA, CEWH, TLM                     |
| 2 (b) | FLOW: Support freshwater connectivity through the Lower Lakes, Coorong and Murray Mouth. (DRY)      | <p>Manage the levels of the Lower Lakes to ensure discharge to the Coorong and Murray Mouth.</p> <p>Coordinate the management of environmental water with barrage operation to apportion environmental water between sites above and below the barrages. Improve water quality in the Lower Lakes with additional freshwater inflows, having regard to the Basin Plan salinity targets.</p> <p>Assist the maintenance of Lower Lake levels above 0.4m AHD.</p> <p>Manage estuarine conditions around the barrages and in the Coorong's North Lagoon. Facilitate migratory fish movement via barrage fishways.</p>  | SA, CEWH, TLM                     |
| 2 (c) | FLOW: Support freshwater connectivity through the Lower Lakes, Coorong and Murray Mouth. (MODERATE) | <p>Manage the levels of the Lower Lakes to ensure discharge to the Coorong and Murray Mouth.</p> <p>Coordinate the management of environmental water with barrage operation to increase the resilience of end-of-basin ecosystems. Supplement barrage flow events to enhance salt export and maintain estuarine water quality in the Coorong's North Lagoon.</p> <p>Provide seasonal water level variability within the Lower Lakes, and cues for migratory fish movement via flows through the barrages.</p>  | SA, CEWH, TLM                     |

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| 2 (d) | FLOW: Support freshwater connectivity through the Lower Lakes, Coorong and Murray Mouth. (WET)   | <p>Manage the levels of the Lower Lakes to ensure discharge to the Coorong and Murray Mouth.</p> <p>Supplement unregulated barrage flow events to export salt from the Murray–Darling Basin and scour sediments from the Murray Mouth. Assist the maintenance and variability of Lower Lake levels to maximise ecological productivity.</p> <p>Provide seasonal flow variability within the Lower Lakes, and cues for migratory fish movement via flows through the barrages.</p> <p>Where possible, coordinate additional barrage flows to provide a suitable salinity gradient between the North and South lagoons.</p>  | SA, CEWH, TLM                     |
| 2 (e) | FLOW: Support freshwater connectivity through the Lower Lakes, Coorong and Murray Mouth. (VERY WET)  | <p>Manage the levels of the Lower Lakes to ensure discharge to the Coorong and Murray Mouth.</p> <p>Increase barrage flow volumes to maximise salt export and the scouring of sediment from the Murray Mouth and provision of cues for migratory fish movement. Harmonise barrage releases to provide conditions conducive to high ecological productivity in the Coorong.</p>   | SA, CEWH, TLM                     |
|       | VEGETATION: Rolling, multi-year priority   | VEGETATION: Basin annual environmental watering priorities 2020-2021   | Relevant jurisdiction             |
| 3 (a) | VEGETATION: Allow opportunities for growth of non-woody wetland vegetation. (VERY DRY)   | <p>Where possible limit any loss or decline in the current extent and periods of growth for non-woody wetland vegetation.</p> <p>The necessity of this priority is more critical the longer the preceding dry spell.</p> <p>Basin significant sites: sites Non-woody wetland vegetation that form extensive stands within wetlands and low-lying floodplains – including Common reed and cumbungi in the Great Cumbung Swamp and Macquarie Marshes, water couch on the floodplains of the Macquarie and Gwydir rivers and marsh club-rush sedge lands in the Gwydir (MDBA BWS 2019).</p>   | Qld, NSW, Vic, SA, CEWH, TLM      |
| 3 (b) | VEGETATION: Allow opportunities for growth of non-woody wetland vegetation. (DRY)  | <p>Where possible limit any loss or decline in the current extent and periods of growth for non-woody wetland vegetation.</p> <p>The necessity of this priority is more critical the longer the preceding dry spell.</p> <p>Basin significant sites: sites Non-woody wetland vegetation that form extensive stands within wetlands and low-lying floodplains – including Common reed and cumbungi in the Great Cumbung Swamp and Macquarie Marshes, water couch on the floodplains of the Macquarie and Gwydir rivers and marsh club-rush sedge lands in the Gwydir (MDBA BWS 2019).</p>   | Qld, NSW, Vic, SA, CEWH, TLM      |
| 3 (c) | VEGETATION: Allow opportunities for growth of non-woody wetland vegetation. (MODERATE)   | <p>Maintain the current extent and periods of growth of non-woody wetland vegetation in line with optimal depth, duration and timing.</p> <p>Where possible provide opportunities for nonwoody vegetation to create a seed bank in the soil. The necessity of this priority is more critical the longer the preceding dry spell.</p> <p>Basin significant sites: sites Non-woody wetland vegetation that form extensive stands within wetlands and low-lying floodplains – including Common reed and cumbungi in the Great Cumbung Swamp and Macquarie Marshes, water couch on the floodplains of the Macquarie and Gwydir rivers and marsh club-rush sedge lands in the Gwydir (MDBA BWS 2019).</p>   | Qld, NSW, Vic, SA, CEWH, TLM      |
| 3 (d) | VEGETATION: Allow opportunities for growth of non-woody wetland vegetation. (WET)  | <p>Maintain the current extent and periods of increased growth of nonwoody wetland vegetation in line with optimal, depth, duration and timing.</p> <p>Provide opportunities for non-woody vegetation to create a seed bank in the soil.</p> <p>The necessity of this priority is more critical the longer the preceding dry spell.</p> <p>If periods of growth occurred in the previous year, consolidate the growth of new and existing plants.</p> <p>Basin significant sites: sites Non-woody wetland vegetation that form extensive stands within wetlands and low-lying floodplains – including Common reed and cumbungi in the Great Cumbung Swamp and Macquarie Marshes, water couch on the floodplains of the Macquarie and Gwydir rivers and marsh club-rush sedge lands in the Gwydir (MDBA BWS 2019).</p>                                      | Qld, NSW, Vic, SA, CEWH, TLM      |
| 3 (e) | VEGETATION: Allow opportunities for growth of non-woody wetland vegetation. (VERY WET)   | <p>Maintain and improve (where possible) the current extent and periods of increased growth of nonwoody wetland vegetation in line with optimal, depth, duration and timing.</p> <p>Ensure there are opportunities for nonwoody vegetation to create a seed bank in the soil.</p> <p>The necessity of this priority is more critical the longer the preceding dry spell.</p> <p>If periods of growth occurred in the previous year, consolidate the growth of new and existing plants.</p> <p>Basin significant sites: sites Non-woody wetland vegetation that form extensive stands within wetlands and low-lying floodplains – including Common reed and cumbungi in the Great Cumbung Swamp and Macquarie Marshes, water couch on the floodplains of the Macquarie and Gwydir rivers and marsh club-rush sedge lands in the Gwydir (MDBA BWS 2019).</p> | Qld, NSW, Vic, SA, CEWH, TLM      |
|       | VEGETATION: Rolling, multi-year priority   | VEGETATION: Basin annual environmental watering priorities 2020-2021   | Relevant jurisdiction             |
| 4 (a) | VEGETATION: Allow opportunities for growth of non-woody riparian vegetation that closely fringes or occurs within main river corridors. (VERY DRY) | <p>Where possible limit any loss or decline in the current extent and periods of growth for non-woody riparian vegetation.</p> <p>The necessity of this priority is more critical the longer the preceding dry spell.</p> <p>Basin significant sites: The MDBA may identify locations and regions based on monitoring, state annual environmental watering priorities, state long-term watering plans, vegetation monitoring outcomes and the Basin-wide environmental watering strategy, to name a few. Areas of non-woody vegetation that closely fringes main river corridors or occur within the main river corridors include (MDBA BWS 2019): Paroo River, Warrego – Warrego, Langlo, Ward and Nive Rivers, Nebine – Nebine Creek, Condamine-</p>   | Qld, NSW, Vic, ACT, SA, CEWH, TLM |



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|       |   | <p>Balonne – Condamine, Balonne, Birrie, Bokhara, Culgoa, Maranoa, Merivale and Narran Rivers, Moonie – Moonie River, Border Rivers – Barwon, Dumaresq, Macintyre rivers and Macintyre Brook, Gwydir – Gwydir River, Namoi – Namoi River, Macquarie-Castlereagh – Bogan, Castlereagh, Macquarie and Talbragar rivers, Barwon-Darling – Darling River, Lachlan – Lachlan River and Willandra Creek, Murrumbidgee – Murrumbidgee River, Billabong and Yanco creeks, Lower Darling – Darling River, Great Darling Anabranh and Talywalka Anabranh, Ovens – Ovens River, Goulburn-Broken – Broken Creek and Broken and Goulburn rivers, Campaspe – Campaspe River, Loddon – Loddon River, Murray – Murray, Edward, Kiewa, Mitta Mitta, Niemur and Wakool rivers and Tuppall Creek, Wimmera-Avoca – Avoca, Avon, Richardson and Wimmera rivers.</p>   |  |
| 4 (b) | <p>VEGETATION: Allow opportunities for growth of non-woody riparian vegetation that closely fringes or occurs within main river corridors. (DRY)</p>      | <p>Where possible limit any loss or decline in the current extent and periods of growth for non-woody riparian vegetation.</p> <p>The necessity of this priority is more critical the longer the preceding dry spell.</p> <p>Maintain the current extent and periods of growth of non-woody riparian vegetation in line with optimal depth, duration and timing. Where possible provide opportunities for nonwoody vegetation to create a seed bank in the soil. The necessity of this priority is more critical the longer the preceding dry spell.</p> <p>Basin significant sites: The MDBA may identify locations and regions based on monitoring, state annual environmental watering priorities, state long-term watering plans, vegetation monitoring outcomes and the Basin-wide environmental watering strategy, to name a few. Areas of non-woody vegetation that closely fringes main river corridors or occur within the main river corridors include (MDBA BWS 2019): Paroo River, Warrego – Warrego, Langlo, Ward and Nive Rivers, Nebine – Nebine Creek, Condamine-Balonne – Condamine, Balonne, Birrie, Bokhara, Culgoa, Maranoa, Merivale and Narran Rivers, Moonie – Moonie River, Border Rivers – Barwon, Dumaresq, Macintyre rivers and Macintyre Brook, Gwydir – Gwydir River, Namoi – Namoi River, Macquarie-Castlereagh – Bogan, Castlereagh, Macquarie and Talbragar rivers, Barwon-Darling – Darling River, Lachlan – Lachlan River and Willandra Creek, Murrumbidgee – Murrumbidgee River, Billabong and Yanco creeks, Lower Darling – Darling River, Great Darling Anabranh and Talywalka Anabranh, Ovens – Ovens River, Goulburn-Broken – Broken Creek and Broken and Goulburn rivers, Campaspe – Campaspe River, Loddon – Loddon River, Murray – Murray, Edward, Kiewa, Mitta Mitta, Niemur and Wakool rivers and Tuppall Creek, Wimmera-Avoca – Avoca, Avon, Richardson and Wimmera rivers.</p> | <p>Qld, NSW, Vic, ACT, SA, CEWH, TLM</p> |
| 4 (c) | <p>VEGETATION: Allow opportunities for growth of non-woody riparian vegetation that closely fringes or occurs within main river corridors.(MODERATE)</p>  | <p>Maintain the current extent and periods of growth of non-woody riparian vegetation in line with optimal depth, duration and timing.</p> <p>Where possible provide opportunities for nonwoody vegetation to create a seed bank in the soil.</p> <p>The necessity of this priority is more critical the longer the preceding dry spell.</p> <p>Basin significant sites: The MDBA may identify locations and regions based on monitoring, state annual environmental watering priorities, state long-term watering plans, vegetation monitoring outcomes and the Basin-wide environmental watering strategy, to name a few. Areas of non-woody vegetation that closely fringes main river corridors or occur within the main river corridors include (MDBA BWS 2019): Paroo River, Warrego – Warrego, Langlo, Ward and Nive Rivers, Nebine – Nebine Creek, Condamine-Balonne – Condamine, Balonne, Birrie, Bokhara, Culgoa, Maranoa, Merivale and Narran Rivers, Moonie – Moonie River, Border Rivers – Barwon, Dumaresq, Macintyre rivers and Macintyre Brook, Gwydir – Gwydir River, Namoi – Namoi River, Macquarie-Castlereagh – Bogan, Castlereagh, Macquarie and Talbragar rivers, Barwon-Darling – Darling River, Lachlan – Lachlan River and Willandra Creek, Murrumbidgee – Murrumbidgee River, Billabong and Yanco creeks, Lower Darling – Darling River, Great Darling Anabranh and Talywalka Anabranh, Ovens – Ovens River, Goulburn-Broken – Broken Creek and Broken and Goulburn rivers, Campaspe – Campaspe River, Loddon – Loddon River, Murray – Murray, Edward, Kiewa, Mitta Mitta, Niemur and Wakool rivers and Tuppall Creek, Wimmera-Avoca – Avoca, Avon, Richardson and Wimmera rivers.</p>   | <p>Qld, NSW, Vic, ACT, SA, CEWH, TLM</p> |
| 4 (d) | <p>VEGETATION: Allow opportunities for growth of non-woody riparian vegetation that closely fringes or occurs within main river corridors. (WET)</p>      | <p>Maintain the current extent and periods of increased growth of nonwoody riparian vegetation in line with optimal, depth, duration and timing. Where possible provide opportunities for nonwoody vegetation to create a seed bank in the soil.</p> <p>The necessity of this priority is more critical the longer the preceding dry spell.</p> <p>If periods of growth occurred in the previous year, consolidate the growth of new and existing plants.</p> <p>Basin significant sites: The MDBA may identify locations and regions based on monitoring, state annual environmental watering priorities, state long-term watering plans, vegetation monitoring outcomes and the Basin-wide environmental watering strategy, to name a few. Areas of non-woody vegetation that closely fringes main river corridors or occur within the main river corridors include (MDBA BWS 2019): Paroo River, Warrego – Warrego, Langlo, Ward and Nive Rivers, Nebine – Nebine Creek, Condamine-Balonne – Condamine, Balonne, Birrie, Bokhara, Culgoa, Maranoa, Merivale and Narran Rivers, Moonie – Moonie River, Border Rivers – Barwon, Dumaresq, Macintyre rivers and Macintyre Brook, Gwydir – Gwydir River, Namoi – Namoi River, Macquarie-Castlereagh – Bogan, Castlereagh, Macquarie and Talbragar rivers, Barwon-Darling – Darling River, Lachlan – Lachlan River and Willandra Creek, Murrumbidgee – Murrumbidgee River, Billabong and Yanco creeks, Lower Darling – Darling River, Great Darling Anabranh and Talywalka Anabranh, Ovens – Ovens River, Goulburn-Broken – Broken Creek and Broken and Goulburn rivers, Campaspe – Campaspe River, Loddon – Loddon River, Murray – Murray, Edward, Kiewa, Mitta Mitta, Niemur and Wakool rivers and Tuppall Creek, Wimmera-Avoca – Avoca, Avon, Richardson and Wimmera rivers.</p>  | <p>Qld, NSW, Vic, ACT, SA, CEWH, TLM</p> |
| 4 (e) | <p>VEGETATION: Allow opportunities for growth of non-woody riparian vegetation that closely fringes or occurs within main river corridors. (VERY WET)</p> | <p>Maintain and improve (where possible) the current extent and periods of increased growth of non-woody riparian vegetation in line with optimal, depth, duration and timing.</p> <p>Where possible provide opportunities for nonwoody vegetation to create a seed bank in the soil.</p> <p>The necessity of this priority is more critical the longer the preceding dry spell.</p> <p>If periods of growth occurred in the previous year, consolidate the growth of new and existing plants.</p> <p>Basin significant sites: The MDBA may identify locations and regions based on monitoring, state annual environmental watering priorities, state long-term watering plans, vegetation monitoring outcomes and the Basin-wide environmental watering strategy, to name a few. Areas of non-woody vegetation that closely fringes main river corridors or occur within the main river corridors include (MDBA BWS 2019): Paroo River, Warrego – Warrego, Langlo, Ward and Nive Rivers, Nebine – Nebine Creek, Condamine-Balonne – Condamine, Balonne, Birrie, Bokhara, Culgoa, Maranoa, Merivale and Narran Rivers, Moonie – Moonie River, Border Rivers – Barwon, Dumaresq, Macintyre rivers and Macintyre Brook, Gwydir – Gwydir River, Namoi – Namoi River, Macquarie-Castlereagh – Bogan, Castlereagh, Macquarie and Talbragar rivers, Barwon-Darling – Darling River, Lachlan – Lachlan River and Willandra Creek, Murrumbidgee – Murrumbidgee River, Billabong and Yanco creeks, Lower Darling – Darling River, Great Darling Anabranh</p>  | <p>Qld, NSW, Vic, ACT, SA, CEWH, TLM</p> |

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|       |   | and Talywalka Anabranh, Ovens – Ovens River, Goulburn-Broken – Broken Creek and Broken and Goulburn rivers, Campaspe – Campaspe River, Loddon – Loddon River, Murray – Murray, Edward, Kiewa, Mitta Mitta, Niemur and Wakool rivers and Tuppall Creek, Wimmera-Avoca – Avoca, Avon, Richardson and Wimmera rivers.   |                                   |
|       | VEGETATION: Rolling, multi-year priority  | VEGETATION: Basin annual environmental watering priorities 2020-2021   | Relevant jurisdiction             |
| 5 (a) | VEGETATION: Maintain the extent, improve the condition and promote recruitment of forests and woodlands. (VERY DRY) | Identify critical river red gum, black box and coolibah communities to maintain condition or where saplings require water to survive. Where possible, manage or deliver water to these areas.<br><br>This priority is dependent on the target species and is more critical the longer the preceding dry spell.<br><br>Basin significant sites: The MDBA may identify locations/regions based on state annual environmental watering priorities, state long-term environmental watering plans, vegetation monitoring outcomes, Basin-wide environmental watering strategy, to name a few.   | Vic, NSW, SA, CEWH, TLM, Qld, ACT |
| 5 (b) | VEGETATION: Maintain the extent, improve the condition and promote recruitment of forests and woodlands. (DRY)      | Identify important river red gum, black box and coolibah communities to maintain condition or where saplings require water to survive. Where possible, manage or deliver water to these areas.<br><br>This priority is dependent on the target species and the condition of new recruits and is more critical the longer the preceding dry spell.<br><br>Basin significant sites: The MDBA may identify locations/regions based on state annual environmental watering priorities, state long-term environmental watering plans, vegetation monitoring outcomes, Basin-wide environmental watering strategy, to name a few.  | Vic, NSW, SA, CEWH, TLM, Qld, ACT |
| 5 (c) | VEGETATION: Maintain the extent, improve the condition and promote recruitment of forests and woodlands. (MODERATE) | Promote growth and improve condition of desirable river red gum, black box or coolibah recruitment, where possible, to ensure their survival.<br><br>Target low-lying river red gum, black box and coolibah communities adjacent to rivers where water can be delivered to promote growth and improve condition.<br><br>Basin significant sites: The MDBA may identify locations/regions based on state annual environmental watering priorities, state long-term environmental watering plans, vegetation monitoring outcomes, Basin-wide environmental watering strategy, to name a few.   | Vic, NSW, SA, CEWH, TLM, Qld, ACT |
| 5 (d) | VEGETATION: Maintain the extent, improve the condition and promote recruitment of forests and woodlands. (WET)      | Inundate in line with optimal duration, timing and depth to support desirable recruitment and improve condition of river red gum, black box and coolibah communities<br><br>Basin significant sites: The MDBA may identify locations/regions based on state annual environmental watering priorities, state long-term environmental watering plans, vegetation monitoring outcomes, Basin-wide environmental watering strategy, to name a few.   | Vic, NSW, SA, CEWH, TLM, Qld, ACT |
| 5 (e) | VEGETATION: Maintain the extent, improve the condition and promote recruitment of forests and woodlands. (VERY WET) | Support inundation in line with optimal duration, timing and depth, as required, to promote desirable recruitment and improve condition of river red gum, black box and coolibah communities.<br><br>Basin significant sites: The MDBA may identify locations/regions based on state annual environmental watering priorities, state long-term environmental watering plans, vegetation monitoring outcomes, Basin-wide environmental watering strategy, to name a few.  | Vic, NSW, SA, CEWH, TLM, Qld, ACT |
|       | VEGETATION: Rolling, multi-year priority  | VEGETATION: Basin annual environmental watering priorities 2020-2021   | Relevant jurisdiction             |
| 6 (a) | VEGETATION: Maintain the extent and improve the condition of lignum shrublands. (VERY DRY)                          | Where possible, limit any loss or decline in condition of lignum shrublands.<br><br>This priority is more critical the longer the preceding dry spell.<br><br>Where lignum shrublands have been inundated in recent years, they are likely to be in a reasonable condition to withstand a dry period.<br><br>Basin significant sites: Environmental water managers and planners should prioritise lignum shrublands located within the regions listed in the Basin-wide environmental watering strategy, which are: the Lower Lachlan; Lower Murrumbidgee; Lower Darling; Lower Condamine–Balonne (including Narran Lakes); Lower Gwydir; Macquarie Marshes; lower Border Rivers; and the River Murray from the junction of Wakool River to downstream of Lock 3 (including Chowilla and Hattah Lakes). The MDBA may identify locations/regions based on state annual environmental watering priorities, state long-term environmental watering plans, vegetation monitoring outcomes and the Basin-wide environmental watering strategy, to name a few. | Vic, NSW, SA, CEWH, TLM, Qld      |
| 6 (b) | VEGETATION: Maintain the extent and improve the condition of lignum shrublands. (DRY)                               | Where possible, limit any loss or decline in condition of lignum shrublands.<br><br>This priority is more critical the longer the preceding dry spell.<br><br>Where lignum shrublands have been inundated in recent years, they are likely to be in a reasonable condition to withstand a dry period.<br><br>Basin significant sites: Environmental water managers and planners should prioritise lignum shrublands located within the regions listed in the Basin-wide environmental watering strategy, which are: the Lower Lachlan; Lower Murrumbidgee; Lower Darling; Lower Condamine–Balonne (including Narran Lakes); Lower Gwydir; Macquarie Marshes; lower Border Rivers; and the River Murray from the junction of Wakool River to downstream of Lock 3 (including Chowilla and Hattah Lakes). The MDBA may identify locations/regions based on state annual environmental watering priorities, state long-term environmental watering plans, vegetation monitoring outcomes and the Basin-wide environmental watering strategy, to name a few. | Vic, NSW, SA, CEWH, TLM, Qld      |
| 6 (c) | VEGETATION: Maintain the extent and improve the condition of lignum shrublands. (MODERATE)                          | Maintain the condition of lignum shrublands by providing inundation in line with the optimal duration, timing and depth. The necessity of this priority is more critical the longer the preceding dry spell.<br><br>Where lignum shrublands have been inundated in previous years, they are likely to be in a reasonable condition to withstand a dry period.  | Vic, NSW, SA, CEWH, TLM, Qld      |

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|       |  | Basin significant sites: Environmental water managers and planners should prioritise lignum shrublands located within the regions listed in the Basin-wide environmental watering strategy, which are: the Lower Lachlan; Lower Murrumbidgee; Lower Darling; Lower Condamine–Balonne (including Narran Lakes); Lower Gwydir; Macquarie Marshes; lower Border Rivers; and the River Murray from the junction of Wakool River to downstream of Lock 3 (including Chowilla and Hattah Lakes). The MDBA may identify locations/regions based on state annual environmental watering priorities, state long-term environmental watering plans, vegetation monitoring outcomes and the Basin-wide environmental watering strategy, to name a few.   |                              |
| 6 (d) | VEGETATION: Maintain the extent and improve the condition of lignum shrublands. (WET)                              | <p>Improve the condition of lignum shrublands by providing inundation in line with the optimal duration, timing and depth.</p> <p>Where lignum shrublands have been inundated in previous years, they are likely to be in a reasonable condition to withstand a dry period.</p> <p>The necessity of this priority is more critical the longer the preceding dry spell.</p> <p>Basin significant sites: Environmental water managers and planners should prioritise lignum shrublands located within the regions listed in the Basin-wide environmental watering strategy, which are: the Lower Lachlan; Lower Murrumbidgee; Lower Darling; Lower Condamine–Balonne (including Narran Lakes); Lower Gwydir; Macquarie Marshes; lower Border Rivers; and the River Murray from the junction of Wakool River to downstream of Lock 3 (including Chowilla and Hattah Lakes). The MDBA may identify locations/regions based on state annual environmental watering priorities, state long-term environmental watering plans, vegetation monitoring outcomes and the Basin-wide environmental watering strategy, to name a few.</p> | Vic, NSW, SA, CEWH, TLM, Qld |
| 6 (e) | VEGETATION: Maintain the extent and improve the condition of lignum shrublands. (VERY WET)                         | <p>Improve the condition of lignum shrublands by providing inundation in line with the optimal duration, timing and depth.</p> <p>Where lignum shrublands have been inundated in previous years, they are likely to be in a reasonable condition to withstand a dry period.</p> <p>The necessity of this priority is more critical the longer the preceding dry spell.</p> <p>Basin significant sites: Environmental water managers and planners should prioritise lignum shrublands located within the regions listed in the Basin-wide environmental watering strategy, which are: the Lower Lachlan; Lower Murrumbidgee; Lower Darling; Lower Condamine–Balonne (including Narran Lakes); Lower Gwydir; Macquarie Marshes; lower Border Rivers; and the River Murray from the junction of Wakool River to downstream of Lock 3 (including Chowilla and Hattah Lakes). The MDBA may identify locations/regions based on state annual environmental watering priorities, state long-term environmental watering plans, vegetation monitoring outcomes and the Basin-wide environmental watering strategy, to name a few.</p> | Vic, NSW, SA, CEWH, TLM, Qld |
|       | VEGETATION: Rolling, multi-year priority   | VEGETATION: Basin annual environmental watering priorities 2020-2021  | Relevant jurisdiction        |
| 7 (a) | VEGETATION: Expand the extent and improve the condition of Moira grass in Barmah–Millewa Forest. (VERY DRY)        | <p>Where possible, limit any loss of Moira grass extent through the operation of forest regulators.</p> <p>The necessity of this action will become more critical the longer the preceding dry spell.</p>   | NSW, Vic, CEWH, TLM          |
| 7 (b) | VEGETATION: Expand the extent and improve the condition of Moira grass in Barmah–Millewa Forest. (DRY)             | <p>Maintain the condition and extent of Moira grass through the operation of forest regulators.</p> <p>Where possible, aim to improve condition of Moira grass. This action will be more likely in a Dry RAS following Moderate to Very Wet RAS years.</p>  | NSW, Vic, CEWH, TLM          |
| 7 (c) | VEGETATION: Expand the extent and improve the condition of Moira grass in Barmah–Millewa Forest. (MODERATE)        | <p>Improve the condition and maintain the extent of Moira grass by providing an opportunity for growth of existing plants.</p> <p>Where possible, aim to increase Moira grass extent by optimising the duration and depth of inundation.</p>  | NSW, Vic, CEWH, TLM          |
| 7 (d) | VEGETATION: Expand the extent and improve the condition of Moira grass in Barmah–Millewa Forest. (WET)             | <p>Improve the condition and extent of Moira grass by providing inundation in line with optimal duration and timing. If a flowering event occurred in the previous water year, promote seed germination if/where possible.</p> <p>If seed germination occurred in the previous water year, support the consolidation of growth of new plants.</p>   | NSW, Vic, CEWH, TLM          |
| 7 (e) | VEGETATION: Expand the extent and improve the condition of Moira grass in Barmah–Millewa Forest. (VERY WET)        | <p>Improve the condition and extent of Moira grass by providing inundation in line with optimal duration and timing. If a flowering event occurred in the previous water year, promote seed germination if/where possible.</p> <p>If seed germination occurred in the previous water year, support the consolidation of growth of new plants.</p>   | NSW, Vic, CEWH, TLM          |
|       | VEGETATION: Rolling, multi-year priority   | VEGETATION: Basin annual environmental watering priorities 2020-2021  | Relevant jurisdiction        |
| 8 (a) | VEGETATION: Expand the extent and improve resilience of <i>ruppia tuberosa</i> in the southern Coorong. (VERY DRY) | <p>Where possible, limit loss of ruppia extent through the delivery of freshwater through barrages.</p> <p>Where possible, improve water quality to maintain ruppia habitat conditions and mitigate risks to population health.</p> <p>The necessity of this action will become more critical the longer the preceding dry spell.</p>   | SA, CEWH, TLM                |
| 8 (b) | VEGETATION: Expand the extent and improve resilience of <i>ruppia tuberosa</i> in the southern Coorong. (DRY)      | <p>Maintain the extent of ruppia through the delivery of freshwater through barrages.</p> <p>Where possible, improve water quality to maintain ruppia habitat conditions and mitigate risks to population health.</p> <p>The necessity of this action will become more critical the longer the flows across the barrages are at lower volumes.</p>  | SA, CEWH, TLM                |

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| 8 (c) | VEGETATION: Expand the extent and improve resilience of <i>ruppia tuberosa</i> in the southern Coorong. (MODERATE) | Maintain the extent of ruppia by providing opportunities for growth and support the completion of the plant's life cycle.<br>Where possible, promote ruppia sexual and asexual reproduction by providing inundation in line with optimal duration, timing and depth of flooding.<br>Where possible, improve habitat conditions and salinity gradient in the Coorong to maintain ruppia condition and mitigate risks to population health. This includes considering options to manage the flow regime within the end-of-basin system to reduce the chance of filamentous algae outbreaks in the southern Coorong.   | SA, CEWH, TLM           |
| 8 (d) | VEGETATION: Expand the extent and improve resilience of <i>ruppia tuberosa</i> in the southern Coorong. (WET)      | Improve the extent and support the reproduction of ruppia by providing inundation in line with optimal duration, timing and depth of flooding. This includes:<br>increasing inundation of mudflats over early spring<br>reaching peak inundation over late spring/early summer months<br>easing drawdown of water during mid-late summer.<br>Where possible, operate barrages to enhance optimal ruppia inundation, including slowing the rate at which water levels drop over late spring and early summer.<br>Improve habitat conditions and salinity gradient in the Coorong to maintain ruppia condition and mitigate risks to population health. This includes considering options to manage the flow regime within the end-of-basin system to reduce the chance of filamentous algae outbreaks in the southern Coorong.   | SA, CEWH, TLM           |
| 8 (e) | VEGETATION: Expand the extent and improve resilience of <i>ruppia tuberosa</i> in the southern Coorong. (VERY WET) | Improve the extent and support the reproduction of ruppia by providing inundation in line with optimal duration, timing and depth of flooding.<br>Where possible, operate barrages to enhance optimal ruppia inundation, including slowing the rate at which water levels drop over late spring and early summer.<br>Where possible, improve habitat conditions and salinity gradient in the Coorong to maintain ruppia condition and mitigate risks to population health. This includes considering options to manage the flow regime within the end-of-basin system to reduce the chance of filamentous algae outbreaks in the southern Coorong.  | SA, CEWH, TLM           |
|       | WATERBIRDS: Rolling, multi-year priority   | WATERBIRDS: Basin annual environmental watering priorities 2020-2021  | Relevant jurisdiction   |
| 9 (a) | WATERBIRDS: Maintain the diversity and improve the abundance of the Basin's waterbird population. (VERY DRY)       | Avoid loss of foraging and roosting habitat at refuge locations.<br>Basin significant sites: Corop wetlands; Fivebough Swamp; Lowbidgee Floodplain; Pyap Lagoon; River Murray & Euston Lakes; Upper Darling River. Lower Lakes, Coorong and Murray Mouth. Core marsh areas can also act as drought refuges.   | Vic, NSW, SA, CEWH, TLM |
| 9 (b) | WATERBIRDS: Maintain the diversity and improve the abundance of the Basin's waterbird population. (DRY)            | Maintain foraging and roosting habitat at refuges as these maintain species richness and abundance in dry years.<br>Support breeding where naturally triggered.<br>Allow for appropriate drying periods in temporary wetlands to enhance productivity and breeding success in future years.<br>Basin significant sites: Barmah-Millewa; Booligal wetlands; Lower Lakes, Coorong & Murray Mouth; Corop wetlands (refuge); Fivebough Swamp (refuge); Great Cumbung Swamp; Gunbower-Koondrook-Perricoota; Gwydir wetlands; Hattah Lakes; Kerang wetlands; Lake Brewster; Lowbidgee Floodplain (refuge); Macquarie Marshes; Narran Lakes; Pyap Lagoon (refuge); River Murray & Euston Lakes (refuge); Upper Darling River (refuge).   | Vic, NSW SA, CEWH, TLM  |
| 9 (c) | WATERBIRDS: Maintain the diversity and improve the abundance of the Basin's waterbird population. (MODERATE)       | Create mosaic of wetland habitats suitable for functional feeding groups, since a diversity of habitats, including mud flats, inundated vegetation and deeper water, will result in abundant and diverse wetlands.<br>Maintain waterbird breeding habitat in 'event ready' condition by providing environmental water to maintain the distribution, structure and health of native riparian, floodplain and wetland vegetation.<br>Respond to natural biological processes to support small breeding events from nest building through to post-fledging care either by extending the duration of flooding or creating artificial inundation to maintain adequate and stable water depths in colony sites (90-120 days for most species).<br>Ensure a slow draw down of water levels following a breeding event, to limit nest abandonment, avoid incursion by pests such as foxes and pigs and allow more foraging opportunities after eggs have hatched.<br>Manage over-wintering sites and nearby foraging habitats to support survival of juveniles and sub-adults.<br>Basin significant sites: Barmah-Millewa; Booligal wetlands; Lower Lakes, Coorong & Murray Mouth; Corop wetlands; Great Cumbung Swamp; Gunbower-Koondrook-Perricoota; Gwydir wetlands; Hattah Lakes; Kerang wetlands; Lake Brewster; Lowbidgee Floodplain; Macquarie Marshes; Narran Lakes; Pyap Lagoon. | Vic, NSW SA, CEWH, TLM  |
| 9 (d) | WATERBIRDS: Maintain the diversity and improve the abundance of the Basin's waterbird population. (WET)            | Create mosaic of wetland habitats suitable for functional feeding groups, since a diversity of habitats, including mud flats, inundated vegetation and deeper water, will result in abundant and diverse wetlands.<br>Support large breeding events from nest building to post-fledging care by extending the duration of flooding and maintaining adequate and stable water depths in colony sites (90-120 days for most species).<br>Ensure a slow draw down of water levels following a breeding event, to limit nest abandonment, avoid incursion by pests such as foxes and pigs and allow more foraging opportunities after eggs have hatched.  | Vic, NSW SA, CEWH, TLM  |

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|        |  | <p>Extend breeding site inundation until juvenile survival is apparent.</p> <p>Provide environmental water in the year following large breeding events to support the survival of juveniles.</p> <p>Manage over-wintering sites and nearby foraging habitats to support survival of juveniles and sub-adults.</p> <p>Basin significant sites: Barmah–Millewa; Booligal wetlands; Lower Lakes, Coorong &amp; Murray Mouth; Corop wetlands; Darling Anabranch; Fivebough Swamp; Great Cumbung Swamp; Gunbower-Koondrook-Perricoota; Gwydir wetlands; Hattah Lakes; Kerang wetlands; Lake Brewster; Lake Buloke; Lindsay-Walpolla-Chowilla; Lowbidgee Floodplain; Macquarie Marshes; Narran Lakes; Pyap Lagoon; River Murray &amp; Euston Lakes.</p>   |                              |
| 9 (e)  | WATERBIRDS: Maintain the diversity and improve the abundance of the Basin's waterbird population.(VERY WET )   | <p>Support large breeding events from nest building to post-fledging care by extending the duration of flooding and maintaining adequate and stable water depths in colony sites (90-120 days for most species).</p> <p>Ensure a slow draw down of water levels following a breeding event, to limit nest abandonment, avoid incursion by pests such as foxes and pigs and allow more foraging opportunities after eggs have hatched.</p> <p>Extend breeding site inundation until juvenile survival is apparent.</p> <p>Provide environmental water in the year following large breeding events to support the survival of juveniles.</p> <p>Manage over-wintering sites and nearby foraging habitats to support survival of juveniles and sub-adults.</p> <p>Basin significant sites: Barmah–Millewa; Booligal wetlands; Lower Lakes, Coorong &amp; Murray Mouth; Corop wetlands; Darling Anabranch; Fivebough Swamp; Great Cumbung Swamp; Gunbower–Koondrook–Perricoota; Gwydir wetlands; Hattah Lakes; Kerang wetlands; Lake Brewster; Lake Buloke; Lindsay–Walpolla–Chowilla; Lowbidgee Floodplain; Macquarie Marshes; Narran Lakes; Pyap Lagoon; River Murray &amp; Euston Lakes.</p> | Vic, NSW SA, CEWH, TLM       |
|        | WATERBIRDS: Rolling, multi-year priority   | WATERBIRDS: Basin annual environmental watering priorities 2020-2021  | Relevant jurisdiction        |
| 10 (a) | WATERBIRDS: Maintain the abundance of key shorebird species in the Lower Lakes and Coorong. (VERY DRY)   | <p>Avoid loss of foraging and roosting habitat at key refuge locations.</p> <p>Where possible, manage algal blooms and water quality at key foraging sites.</p>   | SA, CEWH, TLM                |
| 10 (b) | WATERBIRDS: Maintain the abundance of key migratory shorebird species in the Lower Lakes and Coorong. (DRY)  | <p>Maintain foraging and roosting habitat at refuge locations.</p> <p>Support breeding of resident shorebirds where naturally triggered (i.e. maintain isolation from predators). Manage algal blooms and water quality at key foraging sites.</p>  | SA, CEWH, TLM                |
| 10 (c) | WATERBIRDS: Maintain the abundance of key shorebird species in the Lower Lakes and Coorong. (MODERATE)   | <p>Build productivity of foraging habitat for summer.</p> <p>Support breeding of resident shorebirds and waterbird species where naturally triggered (i.e. maintain isolation from predators).</p> <p>Manage algal blooms and water quality at key foraging sites.</p> <p>Provide functional mudflat habitat to sustain shorebird foraging during November-March each year.</p> <p>Create water levels that are suitable for a variety of shorebird and waterbirds species, with most shorebirds preferring to forage at or near shorelines where mudflats are covered with only a few centimetres of water.</p>  | SA, CEWH, TLM                |
| 10 (d) | WATERBIRDS: Maintain the abundance of key shorebird species in the Lower Lakes and Coorong (WET)   | <p>Build productivity of foraging habitat for summer.</p> <p>Actively maximise shorebird access to foraging habitat during summer.</p> <p>Support breeding of resident shorebirds and waterbird species where naturally triggered (i.e. maintain isolation from predators).</p> <p>Create mosaic of wetland habitats suitable for shorebirds.</p> <p>Create water levels that are suitable for a variety of shorebird species, with most shorebirds preferring to forage at or near shorelines where mudflats are covered with only a few centimetres of water.</p>   | SA, CEWH, TLM                |
| 10 (e) | WATERBIRDS: Maintain the abundance of key shorebird species in the Lower Lakes and Coorong. (VERY WET)   | <p>Where possible, actively maximise shorebird access to foraging habitat during summer.</p> <p>Provide functional mudflat habitat to sustain shorebird foraging during November to March each year.</p> <p>Support breeding of resident shorebirds and waterbird species where naturally triggered (i.e. maintain isolation from predators).</p> <p>Create a mosaic of wetland habitats suitable for shorebirds and waterbirds.</p> <p>Create water levels that are suitable for a variety of shorebird species, with most shorebirds preferring to forage at or near shorelines where mudflats are covered with only a few centimetres of water.</p>  | SA, CEWH, TLM                |
|        | NATIVE FISH: Rolling, multi-year priority  | NATIVE FISH: Basin annual environmental watering priorities 2020-2021   | Relevant jurisdiction        |
| 11 (a) | NATIVE FISH: Support Basin-scale population recovery of native fish by reinstating flows that promote key ecological processes across local, regional and system scales in the southern connected Basin. (All SCENARIOS) | Support system-scale migrations of golden perch, silver perch and lamprey.  | NSW, Vic, SA, CEWH, TLM, ACT |

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|        |   | <p>When freshes occur in the spawning period, maintain the integrity of flow through the system to allow eggs and larvae to drift uninterrupted.</p> <p>Provide opportunities for young golden perch and silver perch to disperse following episodic system-scale recruitment events.</p> <p>Increase flow connections between major rivers and their tributaries and anabranches to promote movement and dispersal.</p> <p>Provide flows that protect ecologically important populations of native fish.</p> |                                   |
|        | <b>NATIVE FISH: Rolling, multi-year priority</b>  | <b>NATIVE FISH: Basin annual environmental watering priorities 2020-2021</b>  | <b>Relevant jurisdiction</b>      |
| 11 (b) | NATIVE FISH: Support Basin-scale population recovery of native fish by reinstating flows that promote key ecological processes across local, regional and system scales in the southern connected Basin. (VERY DRY) | <p>Provide base flows, low flows and small freshes.</p> <p>Maintain refuge waterholes to support key populations of native fish.</p> <p>Provide flows through barrage fishways when possible.</p>   | NSW, Vic, SA, CEWH, TLM, ACT      |
| 11(c)  | NATIVE FISH: Support Basin-scale population recovery of native fish by reinstating flows that promote key ecological processes across local, regional and system scales in the southern connected Basin. (DRY)      | <p>Provide base flows, low flows and small freshes; and medium freshes with peak.</p> <p>Provide flows through barrage fishways all year round.</p> <p>Provide flows through barrages in winter and spring.</p>   | NSW, Vic, SA, CEWH, TLM, ACT      |
| 11 (d) | NATIVE FISH: Support Basin-scale population recovery of native fish by reinstating flows that promote key ecological processes across local, regional and system scales in the southern connected Basin. (MODERATE) | <p>Provide medium freshes with peak; large freshes; and hydrological connectivity between systems.</p> <p>Provide flows through barrage through winter to summer.</p>   | NSW, Vic, SA, CEWH, TLM, ACT      |
| 11 (e) | NATIVE FISH: Support Basin-scale population recovery of native fish by reinstating flows that promote key ecological processes across local, regional and system scales in the southern connected Basin. (WET)      | <p>Provide medium freshes with peak; large freshes; and hydrological connectivity between systems.</p> <p>Provide flows through barrage fishways all year round.</p>  | NSW, Vic, SA, CEWH, TLM, ACT      |
| 11 (f) | NATIVE FISH: Support Basin-scale population recovery of native fish by reinstating flows that promote key ecological processes across local, regional and system scales in the southern connected Basin. (VERY WET) | <p>Provide overbank flows (expected rather than targeted); and hydrological connection between systems.</p> <p>Provide flows through barrages year round.</p>   | NSW, Vic, SA, CEWH, TLM, ACT      |
|        | <b>NATIVE FISH: Rolling, multi-year priority</b>  | <b>NATIVE FISH: Basin annual environmental watering priorities 2020-2021</b>  | <b>Relevant jurisdiction</b>      |
| 12 (a) | NATIVE FISH: Improve flow regimes and connectivity in northern Basin rivers to support native fish populations across local, regional and system scales. (ALL SCENARIOS)  | <p>Support system-scale migrations of golden perch, silver perch.</p> <p>When freshes occur in the spawning period, maintain the integrity of flow through the system to allow eggs and larvae to drift uninterrupted.</p> <p>Provide opportunities for young golden perch and silver perch to disperse following episodic system-scale recruitment events.</p> <p>Increase flow connections between major rivers and their tributaries and anabranches to promote movement and dispersal.</p>                | NSW, QLD, CEWH                    |
|        | <b>NATIVE FISH: Rolling, multi-year priority</b>  | <b>NATIVE FISH: Basin annual environmental watering priorities 2020-2021</b>  | <b>Relevant jurisdiction</b>      |
| 12 (b) | NATIVE FISH: Improve flow regimes and connectivity in northern Basin rivers to support native fish populations across local, regional and system scales. (VERY DRY)   | <p>Maintain refuge waterholes to support key populations of native fish.</p> <p>Provide base flows which support hydrological connectivity within systems and minimise cease-to-flow events.</p>  | NSW, QLD, CEWH                    |
| 12 (c) | NATIVE FISH: Improve flow regimes and connectivity in northern Basin rivers to support native fish populations across local, regional and system scales. (DRY)  | <p>Provide flows that maintain existing populations.</p> <p>Provide base flows, low flows and small freshes which support hydrological connectivity within and between systems and to replenish refuge waterholes.</p>  | NSW, QLD, CEWH                    |
| 12 (d) | NATIVE FISH: Improve flow regimes and connectivity in northern Basin rivers to support native fish populations across local, regional and system scales. (MODERATE)   | <p>Provide flows that support connectivity among populations and chances for fish to disperse.</p> <p>Provide small freshes and medium freshes, and support hydrological connectivity within and between systems and to replenish refuge waterholes.</p>  | NSW, QLD, CEWH                    |
| 12 (e) | NATIVE FISH: Improve flow regimes and connectivity in northern Basin rivers to support native fish populations across local, regional and system scales. (WET)  | <p>Provide flows that assist in the broad-scale dispersal of fish across all life history stages into new habitats.</p> <p>Provide medium and large freshes and support hydrological connectivity within systems, between systems, and along the length of the Barwon-Darling and into the Menindee Lakes.</p>  | NSW, QLD, CEWH                    |
| 12 (f) | NATIVE FISH: Improve flow regimes and connectivity in northern Basin rivers to support native fish populations across local, regional and system scales. (VERY WET)   | <p>Provide flows that assist in the broad-scale dispersal of fish across all life history stages into new habitats.</p> <p>Protect overbank flows and support hydrological connection within and between systems, especially into the Menindee Lakes (to support the needs of the lower Darling).</p>   | NSW, QLD, CEWH                    |
|        | <b>NATIVE FISH: Rolling, multi-year priority</b>  | <b>NATIVE FISH: Basin annual environmental watering priorities 2020-2021</b>  | <b>Relevant jurisdiction</b>      |
| 13 (a) | NATIVE FISH: Support viable populations of threatened native fish, maximise opportunities for range expansion and establish new populations. (ALL SCENARIOS)  | <p>When freshes occur in the spawning period, maintain the integrity of flow through the system to allow eggs and larvae to drift uninterrupted.</p> <p>Provide opportunities for young fish to disperse following recruitment events.</p> <p>Increase lateral connections between rivers and wetlands to maintain populations of small-bodied threatened native fish.</p> <p>Provide flows that protect ecological processes that are important to maintain populations of threatened native fish.</p>       | Vic, NSW, SA, CEWH, TLM, Qld, ACT |

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|        |  | *Establishing and maintaining surrogate populations will also be necessary under very dry conditions.  |                                   |
|        | <b>NATIVE FISH: Rolling, multi-year priority</b>   | <b>NATIVE FISH: Basin annual environmental watering priorities 2020-2021</b>   | <b>Relevant jurisdiction</b>      |
| 13 (b) | NATIVE FISH: Support viable populations of threatened native fish, maximise opportunities for range expansion and establish new populations (VERY DRY) | Provide flows and / or secure water supplies to protect critical populations of threatened small-bodied fish.<br><br>Maintain refuge waterholes to support key populations of threatened native fish.<br><br>Provide base flows which support hydrological connectivity within systems and minimise cease-to-flow events.                            | Vic, NSW, SA, CEWH, TLM, Qld, ACT |
| 13 (c) | NATIVE FISH: Support viable populations of threatened native fish, maximise opportunities for range expansion and establish new populations (DRY)      | Provide and / or secure water supplies that protect existing populations of threatened small-bodied fish.<br><br>Maintain refuge waterholes to support key populations of threatened native fish.<br><br>Provide base flows, low flows and small freshes which support hydrological connectivity within and between systems.                         | Vic, NSW, SA, CEWH, TLM, Qld, ACT |
| 13 (d) | NATIVE FISH: Support viable populations of threatened native fish, maximise opportunities for range expansion and establish new populations (MODERATE) | Provide flows that expand existing populations of threatened small-bodied fish; and prepare new re-introduction sites.<br><br>Provide lateral connectivity to targeted wetland and floodplain habitats for threatened native fish.<br><br>Provide medium freshes with peak; large freshes; and hydrological connectivity within and between systems. | Vic, NSW, SA, CEWH, TLM, Qld, ACT |
| 13 (e) | NATIVE FISH: Support viable populations of threatened native fish, maximise opportunities for range expansion and establish new populations (WET)      | Provide flows that expand existing populations of threatened small-bodied fish; and create new re-introduction sites.<br><br>Provide lateral connectivity to targeted wetland and floodplain habitats for threatened native fish.<br><br>Provide medium freshes with peak; large freshes; and hydrological connectivity within and between systems.  | Vic, NSW, SA, CEWH, TLM, Qld, ACT |
| 13 (f) | NATIVE FISH: Support viable populations of threatened native fish, maximise opportunities for range expansion and establish new populations (VERY WET) | Provide flows that assist in the dispersal of threatened small-bodied fish into new habitats.<br><br>Provide overbank flows (expected rather than targeted); and hydrological connection within and between systems.   | Vic, NSW, SA, CEWH, TLM, Qld, ACT |