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The ACT Government's 2019–20 annual report to satisfy annual reporting obligations for:

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

Reporting context

This template provides a information collection point that covers Basin State 2019-20 annual reporting obligations in relation to the Murray-Darling Basin Plan for:

- Basin Plan Schedule 12
- the Basin Plan Implementation Agreement (BPIA) compliance requirements

Note that: reporting for Schedule 12 Matter 9 (the identification and use of environmental water) is reported separately by Basin States, CEWH and the Authority; and reporting for Schedule 12 Matter 5 (the transition to long-term average sustainable diversion limits) is reported separately by the Department.

Matter 6: Local Knowledge & Solutions

Reporting Matter	Reporting Requirement (Supporting evidence to be provided by Basin States)	Response (response/milestone achievement/compliance status)
<p>M6 The extent to which local knowledge and solutions inform the implementation of the Basin Plan.</p> <p>[Chapter 6, 8 & 10]</p>	<p>Please describe the process and outcomes of local engagement contributing to key BP implementation activities in 2019-20 as follows:</p> <p>M6a) Water Resource Plans:</p> <ul style="list-style-type: none"> • The engagement process and how local knowledge and views influenced the development of WRPs. • Any activities undertaken to increase Traditional Owners' capacity to participate in the development of WRPs, and improve engagement between water planners and Traditional Owners, in order to incorporate indigenous values and uses into WRPs (BP Ch10 Part 9). 	<p>M6a) The Environment, Planning and Sustainable Development Directorate (EPSDD) has and continues to engage the local community to assist with the development and ongoing implementation of the ACT's Water Resource Plans for Surface and Groundwater.</p> <p>The ACT has previously identified key stakeholders to inform the implementation of the Basin Plan, based on similar water policy engagements, as the ACT had already identified the key local stakeholders throughout the development and implementation of similar works to the Basin Plan, such as the ACT Water Strategy and Catchment management coordination. The nature, size and structure of the ACT limits the number of stakeholders as compared to other Basin states. The extent of community engagement in 2019-20 did not need to be as extensive as previous years as the ACT finalised and received Commonwealth accreditation of the ACT Surface and Groundwater WRPs.</p> <p>EPSDD has and maintains close relationships with the key stakeholders that relate to water and water resource planning. For instance, EPSDD works closely with the ACT water utility, ICON Water, during utility performance reporting, regular water quality monitoring, trade obligations and the review of the environmental flow guidelines. Similarly, EPSDD maintains relationships with the rural lessees, water experts and key community groups that have previously assisted and advised on the development of the ACT Water Strategy, review of the Environmental Flow Guidelines (EFG) and previous work on the Water Resource Plan.</p> <p>The knowledge drawn from these groups has been used to assist in the development of various aspects of the ACT's water resource plan. More specifically, the engagement with key stakeholders has enabled the ACT to review the ACT EFG. The review of the EFG is a requirement of the ACT's Water Resource Act 2007 and occurs every 5 years. EFG describe the quality, timing and quality of water required to sustain freshwater ecosystems. The revised EFG will better inform Basin Plan obligations, such as the Long Term Environmental Watering Plan, Annual Environmental Watering Priorities, Identification of Priority Environmental Assets and Priority Environmental Functions and be consistent with MDBA Basin-wide Environmental Watering Strategy. Thus, the revised EFG is central to the ACT's WRP and have been prepared with these requirements in mind.</p> <p>The review process under the Act required a consultation notice be advertised with a 60 day consultation period and the draft EFG be available on the Governments website (Have your say – ACT Government/Community feedback online link and at shopfronts. Submissions were invited. Key stakeholders were directly engaged which included Icon Water, the National Capital Authority, NSW Department of Environment, Environmental Flow Technical Advisory Panel, Upper Murrumbidgee Demonstration Reach, NRM Advisory Panel and expert scientific workshops (including the MDBA). Two community open workshops that presented the draft EFG were conducted.</p> <p>More broadly, the ACT has continued to engage targeted one-on-one consultations with a number of key stakeholders, agencies and groups on the ACT Water Resource Plan finalisation and implementation. These include:</p> <ul style="list-style-type: none"> • Ngunnawal Traditional Custodians • Icon Water • ACT water experts, including Professor Ian Falconer and Mr Ian Lawrence,

Reporting Matter	Reporting Requirement (Supporting evidence to be provided by Basin States)	Response (response/milestone achievement/compliance status)
		<ul style="list-style-type: none"> ACT Governments Director-General Water Group which comprise, Chief Ministers, Treasury, Economic Development, Territory and Municipal Services Directorate, Health Directorate, General Urban Renewal, Land Development and Emergency Service Agency. NSW Government; In particular Departments of Primary Industries and Water and the Department of Environment and Heritage Rural Landholders Association MLDRIN especially with respect to Aboriginal water resource planning matters Australian Water Association, and ACT Hydrological Society
	<p>M6b) Environmental watering:</p> <ul style="list-style-type: none"> Describe the engagement process and how local knowledge, views and solutions influenced the planning and delivery of environmental water and the outcomes. This includes how the following were considered: <ul style="list-style-type: none"> the views of local communities and persons materially affected by the management of environmental water (BP8.39) indigenous values (BP8.35). 	<p>M6b) The ACT does not retain Held Environmental Water (HEW). However, the ACT only abstracts up to about 10% of available flows on average, with the remaining 90% effectively environmental flows through the ACT's Environmental Flow Guidelines (EFG). The EFG are the main mechanism to deliver environmental flows throughout the ACT by providing releases or spills from dams or by restricting the volume of water that can be abstracted from a water management area. The EFG is an integral component of the ACT's Water Resource Plan as it set out the flow requirements needed to maintain aquatic ecosystems throughout each of the Territory's water management areas. The EFG will also better inform Basin Plan obligations, such as the Long Term Environmental Watering Plan, Annual Environmental Watering Priorities, Identification of Priority Environmental Assets and Priority Environmental Functions and be consistent with MDBA Basin-wide Environmental Watering Strategy which are based on EFG. The review of the EFG was undertaken by the Institute of Applied Ecology of the University of Canberra. Workshops were held for the review process of the EFG. This included involvement with a range of hydrology and freshwater ecology experts and also key stakeholders to source the most up to date information and feedback from the community (please see M6a response on stakeholder and community consultation). The ACT adopts the process of adaptive management in the development, application and refinement of its EFG incorporating improved knowledge and research to address apparent knowledge gaps. This is also aided by a technical advisory group.</p> <p>As mentioned in M6a) above the development and consideration of the revised EFG in 2017-18 involved community engagement.</p>
	<p>M6c) Other Basin Plan implementation activities, namely SDL adjustment:</p> <p>Describe how local knowledge and solutions identified through engagement with local communities, including Aboriginal communities, impacted on the implementation of other key Basin Plan mechanisms or activities including the development and implementation of SDL adjustment measures. (Reporters may also choose to address any of their other engagement priorities, which may vary among jurisdictions). 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>M6c) The ACT has no SDL adjustment mechanisms.</p>

Matter 8: Achievement of Environmental Outcomes at Asset Scale

Reporting Matter	Reporting Requirement (Supporting evidence to be provided by Basin States)	Response (response/milestone achievement/compliance status)
Matter 8 – the achievement of environmental outcomes at an asset scale.]	The MDBA recognises that States may be undertaking a variety of approaches to reporting under Matter 8.	<p>Given the ACT Water Resource Plans for Surface water and Groundwater were only accredited in June 2020, the approach to monitoring, evaluation and reporting for Achievement of Environmental Outcomes at Asset Scale is still in the early phases of development. The following findings from the ACT State of Environment Report, published in early 2020 are provided in relation to Aquatic ecosystem health, Macroinvertebrate condition, riparian condition, native fish and river flows. Relevant chapter of SoE report available at:</p> <p>https://envcomm.act.gov.au/wp-content/uploads/2020/08/05_CSE_SoE2019_AccPDF_HR_chapter_5-1.pdf</p> <p>Aquatic ecosystem health</p> <ul style="list-style-type: none"> The main pressures on aquatic ecosystem condition in the ACT are land use impacts, modified river flows, and climate change. This is the first ACT State of the Environment report to use data from the Catchment Health Indicator Program (CHIP). The program assessed 67 reaches in the Ginninderra, Molonglo and Southern ACT catchments. 38 (57%) reaches were in fair condition across the 3 catchments, 26 (39%) were in good condition. Only 2 reaches were found to be in excellent

		<p>condition and 1 was assessed as poor.</p> <ul style="list-style-type: none"> • Aquatic condition is strongly influenced by land use with reaches in urban and rural areas in poorer health than those in conservation and protected lands. • The Southern ACT catchment had the highest proportion of reaches in good to excellent condition with 15 out of the 26 reaches assessed. • The presence of some good condition reaches in urban areas shows that healthy aquatic ecosystems can be supported with effective management and water-sensitive urban design. <p>Macroinvertebrate condition</p> <ul style="list-style-type: none"> • Only 25% of reaches assessed were found to have good to excellent macroinvertebrate condition, 26% were found to be in poor to degraded condition, with 49% classed as fair. • The Southern ACT and Molonglo catchments had the most reaches with healthy macroinvertebrate communities. • Macroinvertebrate condition was strongly linked to land use but also likely influenced by the mostly dry conditions over the assessment period. <p>Riparian condition</p> <ul style="list-style-type: none"> • Only 14% of reaches were assessed as having good to excellent riparian condition, 37% were found to be in fair condition and 48% were assessed as poor to degraded. • Urban and rural areas generally had fair to degraded riparian condition due to vegetation clearing. However, there were also some fair and poor reaches in conservation and protected areas. • The replanting of native species in cleared riparian zones and the removal of weed species would greatly improve aquatic health and the amenity of aquatic ecosystems for the ACT community. <p>Native fish</p> <ul style="list-style-type: none"> • There are positive trends for some populations of native fish including the Two Spined Blackfish and Macquarie Perch in the Cotter River, and Murray Cod in some sections of the Murrumbidgee River. • Negative native fish population trends include a decline of Trout Cod following the cessation of conservation stocking by the NSW Government in the Upper Murrumbidgee Catchment, and low populations of Golden Perch in the upper reaches of the Murrumbidgee River. • Alien fish species are common in the ACT, with native fish typically accounting for less than 30% of total fish abundance and less than 20% of total fish biomass in the Murrumbidgee River. The dominance of alien species in the Murrumbidgee River is mainly due to high numbers of carp. • The proportion of native fish abundance is higher in the Cotter River, accounting for over 70% of the total abundance and between 45% and 70% of the total biomass between 2014 and 2019. • Alien fish species are having an impact on native fish in the ACT, competing for food and habitat resources, spreading disease and modifying habitat. • Between 2015 and 2019, over 162,000 Golden Perch and 107,000 Murray Cod were stocked in Canberra's lakes and larger ponds. • The presence of Murray Cod and Golden Perch in Canberra's urban lakes and ponds is dependent on stocking. <p>River flows</p> <ul style="list-style-type: none"> • For the Murrumbidgee and Molonglo rivers, annual discharges were well below the long-term average in 2017 and 2018. These years followed two consecutive years of annual discharges higher than long-term average flows (2015 and 2016). • Discharges for the Cotter River and Paddys River also had annual discharges that were well below the long-term average in 2017 and 2018 with only 2016 above the long-term average. • Annual discharges were lowest in 2018 due to the lack of rainfall: the annual discharge in Paddys River was just 7% of the long-term average; the Molonglo River 15%; Murrumbidgee at Lobbs Hole 17%; Murrumbidgee at Halls Crossing 19%; and Cotter River 24%. • These reduced discharges have consequences for ecosystem health as well as the amenity of the ACT's waterways. • Annual discharges for the Murrumbidgee River leaving the ACT were much higher than those upstream of the region. The ACT's additions to Murrumbidgee River flows are vital for downstream ecosystem health and water supply, particularly during low flow periods. • All discharges downstream of storage reservoirs met the environmental flow requirement; this took place despite the significantly reduced rainfall and river flows in 2017 and 2018.
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Matter 10: Environmental Watering

Reporting Matter	Reporting Requirement (Supporting evidence to be provided by Basin States)	Response (response/milestone achievement/compliance status)
[Chapter 8, Part 4]	<p>M10d) Provide at least one case study that demonstrates how environmental watering principles were embedded in the decision-making process and identify the relevant principles <i>[limit 500 w]</i>.</p> <p>M10e) Please provide reasons for any environmental watering that was not in accordance with the Basin annual watering priorities listed at Attachment A (partially/fully), in accordance with Section 8.44 of the Basin Plan and Principle 1 of Division 6.</p> <p>M10f) Confirmation that the management and delivery of planned and held environmental water was consistent with the Basin Plan, including the environmental watering plan's <i>Principles to be applied to environmental watering</i>. If confirming, please provide evidence and examples. If unable to confirm, please describe what actions are underway to enable confirmation in the future.</p>	<p>M10d) The ACT has no Held Environmental Water (HEW). The ACT's Environmental Flow Guidelines (2019) established under disallowable instrument DI2019—37 currently identifies the ecological objectives for ACT aquatic ecosystems and the environmental flows for specific reaches that are required to maintain these ecological objectives. The EFG are the main mechanism to deliver environmental flows throughout the ACT by providing releases or spills from dams or by restricting the volume of water that can be abstracted from a water management area. These environmental flows are secured within the ACT's Licences to take water, under the ACT Water Resources Act 2007, which also require compliance with the environmental flow guidelines. The ACT water utility, Icon Water, has a more detailed Licence to take water, which ensures environmental watering is maintained each year from the water supply dams unless temporary water restrictions are initiated. No restrictions were enacted during this reporting period. The Icon Water licence identifies planned environmental water (PEW) and outlines particular ecosystems, the reaches or location the environmental water must target and the volume or flow requirement. As a case study, the secure deliver of the ACT's annual environmental water is managed through a prescriptive utility licence arrangement. Options to apply environmental watering to different catchments are not relevant to the ACT.</p> <p>M10e) The ACT provided environmental water in accordance with the Basin annual watering priorities.</p> <p>M10f) The ACT has no Held Environmental Water (HEW). The ACT's planned environmental water was delivered in line with the ACT Annual Environmental Watering priorities. The only Planned Environmental Waters are within the water storage catchments managed by Icon Water. All environmental watering throughout the ACT has been undertaken in line with licence requirements and is outlined in the Icon Water report, 'Licence WU67 Environmental Flows Annual Compliance Report July 2019 to June 2020'. This report summarises the overall performance, quality and volume of environmental flow releases for the period July 2019 to June 2020 as required under Clause C3 of the Licence to Take Water WU67 held by Icon Water under the Water Resources Act 2007 (ACT).</p>

Matter 12: Progress towards Water Quality Targets

Reporting Matter	Reporting Requirement (Supporting evidence to be provided by Basin States)	Response (response/milestone achievement/compliance status)
Matter 12 Progress towards the water quality targets in CH 9	The MDBA recognises that States may be undertaking a variety of approaches to reporting under Matter 12. Matter 12 reporting in 2025 is expected to include more information about water quality outcomes and the role of Water Quality Management plans within Water Resource Plans Water.	<p>Given the ACT Water Resource Plans for Surface water and Groundwater were only accredited in June 2020, the approach to monitoring, evaluation and reporting for Progress towards Water Quality Targets is still in the early phases of development. The following findings from the ACT State of Environment Report, published in early 2020 are provided in relation to Water Quality and Recreational Water Quality. Relevant chapter of SoE report available at: https://envcomm.act.gov.au/wp-content/uploads/2020/08/05_CSE_SoE2019_AccPDF_HR_chapter_5-1.pdf</p> <p>Water Quality</p> <ul style="list-style-type: none"> • Water quality guidelines were met for nearly all monitoring samples taken in the Murrumbidgee River for pH, electrical conductivity and dissolved oxygen. • Turbidity guideline exceedances were for high for the Murrumbidgee River for the years 2015 to 2017. Exceedances in 2018 were lower than other years and are likely related to reduced rainfall and catchment run-off. • Except for nitrogen, water quality in the Murrumbidgee River is comparable upstream and downstream of the ACT, with turbidity slightly improving as the river moves through the region. • For assessments undertaken as part of the CHIP, water quality was found to be excellent for 35% of reaches and good for 62%, with only 2 reaches assessed as fair condition. • All catchments had the majority of their reaches in good to excellent condition for water quality. The Southern ACT catchment had 62% of reaches in excellent condition. • Although the ACT's water quality was generally good, nitrogen concentrations are much higher in the Murrumbidgee River downstream of the Lower Molonglo Water Quality Control Centre. • Water quality condition is linked to land use with the majority of reaches in excellent condition on conservation and protected land. • Despite the added pressures imposed by urban and rural land uses, water quality was still good in these areas, with some reaches attaining excellent condition ratings. This assessment demonstrates the effectiveness of water quality management in some urban areas, particularly as a result of constructed wetlands and other water-sensitive design approaches.

		<ul style="list-style-type: none"> Water quality results may also reflect the decreased rainfall for most of the reporting period. Dry conditions decreased the amount of pollutants entering waterways from rainfall run-off. <p>Recreational water quality</p> <ul style="list-style-type: none"> Nearly every monitored recreation site experienced closures due to the exceedance of enterococci (faecal coliform bacteria) guidelines. When compared to the other urban lakes, Lake Ginninderra is the only lake where enterococci is the main cause of recreation closures and had the highest number of closures due to enterococci each year. Murrumbidgee River had a high number of site closures for enterococci. Enterococci results for Paddys River are a concern with substantial periods of closure for the single site monitored. Blue-green algae is the main cause of recreation closures for Lake Tuggeranong and Lake Burley Griffin. Lake Tuggeranong had the highest number of blue-green algae closures in 2016–17 and 2018–19 and was closed for most of the 2018–19 recreational swim season. The Molonglo River was the only river to have recreation closures due to blue-green algae. To reduce the number and duration of recreational closures, there needs to be improved management and interception of run-off in urban areas, and the re-establishment of riparian vegetation in both urban and rural areas.
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Matter 13: Critical Human Water Needs

Reporting Matter	Reporting Requirement (Supporting evidence to be provided by Basin States)	Response (response/milestone achievement/compliance status)
<p>M13 The implementation, where necessary, of the emergency response process for critical human water needs.</p> <p>[Chapter 11] [BPIA 26.1]</p>	<p><i>Context: 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.</i></p> <p>M13a) Please indicate if a water quality trigger (as per s11.05) was reached and if so, what action was taken.</p>	<p>M13) – N/A to the ACT</p>
<p>Chapter 11] [BPIA 27.1, 27.2, 28.1]</p>	<p><i>Context: (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.</i></p> <p><i>(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.</i></p> <p><i>(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)).</i></p> <p><i>(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 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.</i></p> <p>M13b) Please indicate if a trigger was reached and what action was taken to implement water sharing arrangements.</p>	<p>M13b) – N/A to the ACT</p>

Matter 14: Water Quality and Salinity

Reporting Matter	Reporting Requirement (Supporting evidence to be provided by Basin States)	Response (response/milestone achievement/compliance status)
<p>M14 Progress the implementation of 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.</p> <p>[Chapter 9] [BPIA 21.1]</p>	<p><i>Context: BP Ch9.14 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 (in line with BP s9.18) or hypoxic blackwater events.</i></p> <p>M14a) In this context, please describe how these 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 mangement.</p>	<p>The ACT Environmental Protection Regulations 2005 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. The ACT Guidelines for Recreational Water Quality 2010 monitors blue green algal blooms and high levels of faecal coliforms throughout Canberra's lakes. In 2012, the National Capital Authority released their revised Lake Burley Griffin Water Quality Management Plan, containing recommended water quality guides in respect to protection of lake ecosystems, aesthetic values, recreational waters, and irrigation water supply that specifically targets the waters of Lake Burley Griffin. The ACT Aquatic Species and Riparian Zone Conservation Strategy 2007 seeks to maintain and improve the natural integrity of the rivers and riparian zones in the ACT within a regional context. In fact the strategy was reviewed in 2013 which highlighted activities that should lead to more native fish and plants, less erosion, improved water flow and fewer weeds in the longer term.</p> <p>The ACT is largely within the NSW Upper Murrumbidgee River system, and whilst NSW maintains that this system is unregulated, the ACT and MDBA have both defined the ACT and Region as a regulated syste, due to the significant number of water supply dams, including Tantangara, Cotter, Bendora, Corin, Googong, Scrivener Dams and Burrinjuck Dam. The environmental flow guidelines protect base flows in unregulated rivers and abstraction in unregulated rivers and require environmental watering releases from the water supply dams. These flows effectively ensure that streams are generally meeting the appropriate water quality targets.</p> <p>A good example of how the ACT continually develops tools and policy towards improved water management is the ACT Water Strategy (Striking the Balance, ESDD 2014a). The Water Strategy identifies the strategies and the actions that will assist the ACT in achieving the water quality outcomes, which are aligned with the Basin water quality objectives. For example, Strategy 2 is to 'Protect and restore aquatic ecosystems in urban and non-urban areas' set out the three following actions: 1. Improve water quality and ecosystem health in the ACT and region's rivers, lakes, aquifers, ponds and wetlands; 2. Ensure appropriate management (volume, timing, and quality) of environmental flows; and 3. Strengthen compliance and enforcement for water resource management.</p> <p>The following are key achievements under Strategy 2:</p> <ul style="list-style-type: none"> - Establishment and delivery of the Healthy Waterways project, a joint \$93.5 million initiative of the ACT and Australian governments to improve the quality of water entering our lakes and waterways and flowing downstream into the Murrumbidgee River system. The project includes the construction of infrastructure – such as wetlands, ponds and rain gardens – as well as research trials, a community education campaign and improvements to water monitoring practices. - Establishment of the ACT and Region Catchment Management Coordination Group as a statutory body under amendments to the ACT Water Act. The Coordination Group advises the Minister on water catchment management, and consists of members from Federal Government, ACT Government, Icon Water, NSW Government and local NSW regional councils and the community. The Coordination Group is committed to improving catchment management governance in the region by promoting effective coordination and collaboration. - Approval by ACT Government of the ACT and Region Catchment Management Strategy, and interjurisdictional endorsement of the strategy from key stakeholders. - Approval by ACT Government of Implemenation Plan 2 under the ACT Water Strategy, and interjurisdictional endorsement of the second Plan from key stakeholders. - Release of Catchment Heath Indicator Program Reports for Waterwatch from 2014 to 2020; these are now an ongoing process. Waterwatch is a regional citizen science project that monitors the health of the regional waterways. - The review of the Municipal Infrastructure Standards (MIS) has been completed. A further review of the MIS08 – Stormwater was undertaken to include a water quality infrastructure component. - The Environmental Flows Guidelines have been reviewed by the University of Canberra and came into effect on 12 April 2019. <p>The ACT Water Strategy continues to follow a number of progressive policy positions that strengthen the sustainable management of water within the environment, such as the approach of the ACT's Water Resource Act 2007 that has the key principal of the environment is provisioned with water first, then the consumptive water allocation is determined. Additionally, the environmental flow guidelines are set to determine the amount of water needed to maintain aquatic ecosystems of the ACT.</p> <p>The Water Strategy not only contains required actions but measureable targets with indicators. The approach taken by the ACT to develop further procedures and tools provides a good example of policy development focused on water quality improvement.</p>
<p>[Chapter 9] [BPIA 23.1]</p>	<p><i>Context: 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).</i></p> <p>M14b) Please indicate how salinity (and other) water quality targets are being applied. (Note that Basin States may refer to Basin Salinity Management 2030 Strategy reporting to meet this reporting</p>	<p>M14b) The ACT is subject to the new Basin Salinity Management 2030 Strategy and will report on performance as required. Historically, salinity is not an issue in the ACT and is of low risk, given the ACT's position in the Basin, and that our levels stay within the targets that have been set, and salinity reports are provided annually through the Basin salinity audit process. The ACT has submitted its Basin Salinity Management Report to the MDBA, which includes the following findings:</p> <p>The 2019-20 observed end of valley salinity levels at Murrumbidgee at Halls Crossing are:</p> <ul style="list-style-type: none"> • median salinity (50 percentile) = 356uS/cm (above the Year 2000 baseline) • peak salinity (80 percentile) = 458 uS/cm (above the Year 2000 baseline)

requirement, in line with the Schedule 12 Reporting Guidelines).

The 2019-20 observed salt load generation from the ACT is:

Salt load coming into the ACT from NSW o Lobb's Hole (Murrumbidgee River at Angle Crossing) = 4,984 t/yr.,

- Molonglo River at Oaks Estate = 2,720 t/yr., and
- Queanbeyan Sewerage Treatment Plant = 1,259 t/yr.
- TOTAL = 8,964 t/yr.

Salt load leaving the ACT into NSW

- Murrumbidgee River at Halls Crossing = 35,105 t/yr.

Salt load generation from the ACT

- Subtracting the salt load entering the ACT from the volume leaving, provides the annual baseline salt load generation from the ACT of 26,141 t/year.
- Hence -total ACT salt load = 26,141 t/yr. (below the Year 2000 baseline)

The ACT's net salt load generation has been below the Year 2000 Baseline Conditions for the last three years. This has also corresponded with median and peak salinity levels above the Baseline Conditions for the same period. This relationship demonstrates that salinity and salt load generation for the ACT is closely correlated with climatic conditions, with low salt loads and higher salinities in drier (low flow) years, and higher salt loads and lower salinities in wetter (higher flow) years.

Of the salt load generation in the ACT these figures demonstrate that in 2019/20 the Lower Molonglo Water Quality Control Centre is the largest point source contributor representing approximately 55% of the salt load. However, it must be noted that the salt measured at the Lower Molonglo Water Quality Control Centre is largely calcium bicarbonate and nitrate rather than the more harmful sodium chloride. The high proportion of calcium is generally considered beneficial as it reduces soil sodicity and it also reduces the sodium absorption ratio.

The ACT's 2019-20 total salt load of 26,141 t/y is well below the baseline conditions of 32,706 t/yr. The total salt load of 35,105 t/yr. recorded at Halls Crossing is also well below the baseline conditions.

Matter 16: Water Trading

Reporting Matter	Reporting Requirement (Supporting evidence to be provided by Basin States)	Response (response/milestone achievement/compliance status)
<p>M16 The implementation of water trading rules.</p> <p>[Chapter 12] [BPIA 29.1 – 31.1]</p>	<p>M16 a) Provide website links to the publication of information regarding an Approval Authority's interest in a trade (s12.38 (2)).</p> <p>M16b) Provide documentation to support compliance with s12.37 (notice of disclosure)</p> <p>M16c) Describe how you have notified affected parties with the decision to restrict a trade and reasons for the restriction consistent with s12.39.</p> <p>M16 d) How has your State undertaken best endeavours to ensure water announcements have been made generally available?</p> <p>M16 e) Provide documentation that supports a compliance with s12.50 (water announcements to be made generally available).</p>	<p>M16a) The ACT is compliant with the Basin Plan water trading rules as commenced 2014. There are no arrangements in place for interstate trading between the ACT and New South Wales. The ACT has exercised its best endeavours to ensure that its water trading rules, policies and processes meet the obligations under the Implementation Agreement and the Basin Plan.</p> <p>The lack of any interstate water trading arrangements in place during 2019-20 is the result of New South Wales not engaging in addressing and progressing this matter.</p> <p>M16b) – The ACT is not able to outline an authority disclosure process as water trading hasn't been established between the ACT and New South Wales</p> <p>M16c) - The ACT does not notify parties with the decision to restrict a trade as water trading hasn't been established between the ACT and New South Wales</p> <p>M16d) - The ACT does not make announcements on interstate trade as water trading hasn't been established between the ACT and New South Wales</p> <p>M16e) - The ACT does not make announcements on interstate trade as water trading hasn't been established between the ACT and New South Wales</p>
<p>Information and reporting requirements</p>		
<p>[Chapter 12.43, 12.46] [BPIA 31.1]</p>	<p>M16f) 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>M16g) 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>M16f) - There are no arrangements in place for interstate trading between the ACT and New South Wales. However, the very few intra-state water trading was conducted in keeping with set processing times and reporting standards.</p> <p>M16g) - There were no trades where the Commonwealth was a participant for water resources within the ACT.</p>
<p>[Chapter 12] [BPIA 31.2]</p>	<p>M16h) 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>M16h) – Not applicable as there were no unnecessary restrictions on allocation trades with respect to the ACT.</p>

Matter 19: Water Resource Plan Compliance

Reporting Matter	Reporting Requirement (Supporting evidence to be provided by Basin States)	Response (response/milestone achievement/compliance status)
M19 Compliance with water resource plans	M19a) The MDBA will provide Matter 19 reporting questions directly to jurisdictions which had accredited WRPs prior to 1 July 2019 through a separate process.	The ACT Water Resource Plans for Surface water and Groundwater were accredited in June 2020. As such Matter 19 compliance reporting is not required in this report, and will commence in next years reporting.

Other: SDL Adjustment & Constraints Management

Reporting Matter	Reporting Requirement (Supporting evidence to be provided by Basin States)	Response (response/milestone achievement/compliance status)
[BPIA 14.2]	<p>Ob) Describe progress in the further development of the Ministerial Council agreed package of constraints proposals, and in addressing issues identified in the phased assessment process.</p> <p>Oc) Describe progress towards the successful implementation of constraints measures by 2024, including coordinated cross-jurisdictional activities and community involvement, to enable flow rates of up to 80,000ML per day at the South Australian border.</p>	<p>Ob) - The ACT is not directly involved in the Constraints Management Strategy. There are no projects proposed for the ACT nor does the Strategy have any application to the ACT.</p> <p>Oc) – N/A to the ACT</p>

Other: Water Resource Plans

Reporting Matter	Reporting Requirement (Supporting evidence to be provided by Basin States)	Response (response/milestone achievement/compliance status)
[BPIA 24.1]	<p><i>Context: Progress with the development of Water Resource Plans for accreditation is currently being reported by the MDBA, through quarterly jurisdictional reports</i></p> <p>Od) This reporting is <u>optional</u>. Basin states may choose to comment on their progress where this differs, or is expected to differ, from the most recent MDBA quarterly report on WRP development.</p>	Od) – ACT Water Resource Plans for Surface water and Groundwater were accredited by the Commonwealth Minister in June 2020.

Attachment A: Basin Environmental Watering Priorities (BAEWP) for reference in reporting why watering not undertaken in accordance, under BPs8.44

The table below provides a reference for exception-based reporting under BPs8.44. The table lists Basin annual environmental watering priorities for 2019-20 and the relevant jurisdiction. [To be provided]

Not relevant for ACT

To: Mr Phillip Glyde
Chief Executive
Murray-Darling Basin Authority

From: Dr Erin Brady
ACT Basin Officials Committee Representative
Deputy Director-General, Land Strategy and Environment
Environment, Planning and Sustainable Development Directorate
Australian Capital Territory

Australian Capital Territory annual reporting for 2019-20

The ACT's 2019-20 Basin Plan annual report has been prepared to satisfy reporting requirements for the Implementation Agreement Statement of Assurance and the Basin Plan Schedule 12 matters.

I certify that to best of my knowledge, for the 2019-20 water accounting period the information provided in the self-assessment attached to this statement accurately reflects the extent to which Australian Capital Territory is compliant with the its obligations under the Basin Plan 2012.

The ACT has met obligations under the requirements of the 2012 Basin Plan and has been self assessed as being compliant. No non-compliance or partial compliance has been detected.

I understand that an extension has been granted until 30 November for the completion of the s71 report and as such, will be submitted in due course.

Erin Brady, ACT BOC Representative, on behalf of the Australian Capital Territory.

Erin Brady

A handwritten signature in black ink, appearing to read 'Erin Brady', is written over a horizontal dotted line.

28/10/ 2020