

Summary of northern Basin toolkit measures status (as of 25 October 2021)

Toolkit Measure	Summary of measures and anticipated benefits	Status
Targeted recovery of water	<p>Improve environmental watering into Narran Lakes, Lower Balonne and Culgoa floodplains and the Barwon–Darling River, but avoids, minimises or mitigates any adverse socio-economic impacts of the recovery.</p> <p>Note, recovering water upstream of the Beardmore Dam in the Condamine-Balonne is unlikely to contribute to efficiency measures water recovery.</p>	<p>The Australian Government is committed to continuing to recover water to bridge the remaining gap in the northern catchments through modernising off-water delivery infrastructure, to ensure new sustainable diversion limits are reached.</p> <p>On 3 March 2021, the government announced the Off-farm Efficiency Program to achieve efficiency measures outcomes and recover water towards the 450 GL/yr target of water for additional environmental outcomes. This includes up to \$1.33bn for state-led off-farm efficiency projects, up to \$60m for state-led on-farm efficiency projects and up to \$150m for off-farm projects administered by the Australian Government. Further details are available at https://www.awe.gov.au/water/policy/mdb/programs/basin-wide/off-farm-efficiency-program</p> <p>The Australian Government publishes information on progress of Commonwealth environmental water recovery to improve the health of the river system under the Murray-Darling Basin Plan at http://www.agriculture.gov.au/water/mdb/progress-recovery/progress-of-water-recovery</p>
Protection of environmental flows	<p>Strengthen the efficient and effective delivery of environmental flows across the northern Basin; enhancing low flows and fresh flows, particularly in the unregulated river systems of the Condamine–Balonne and Barwon–Darling.</p>	<p>Governments have made significant progress in protecting environmental flows in the northern Basin. In Queensland, existing arrangements largely protect water that has been recovered for the environment and new mechanisms to protect that water have been codified in Queensland water resource plans. These new mechanisms were gazetted in February 2019. All Queensland Water Resource Plans are accredited and fully operational.</p> <p>Arrangements have been established to account for the volume of held environmental water crossing the Queensland-New South Wales border. Queensland, New South Wales and the Commonwealth Environmental Water Office worked together to develop and successfully trial the accounting method during significant flows in early 2021. The States will now proceed to fully implement the arrangements according to an agreed procedure and protocols. Queensland will finalise permanent cross-border held environmental water accounting arrangements by 2024, when water recovery is scheduled to be completed. Further work in NSW is required to formally protect cross-border held environmental water in the NSW intersecting streams and to incorporate remaining identified flows into active management arrangements in the Barwon-Darling.</p> <p>NSW has implemented interim arrangements to protect water for the environment, including use of temporary water restrictions to protect water for the environment through the Barwon–Darling.</p> <p>NSW has developed enduring arrangements for protection of water for the environment to be implemented through Water Resource Plans. All 11 groundwater plans and nine surface water plans submitted to the MDBA for accreditation under the Basin Plan have been withdrawn by NSW after the Authority identified potential inconsistencies with Basin Plan requirements. A formal resubmission date is yet to be negotiated and confirmed.</p> <p>Enduring solutions that are key aspects of NSW reform include:</p> <ol style="list-style-type: none"> 1. active management to protect water for the environment in the Barwon-Darling, and relevant unregulated water sources in the Macquarie and Gwydir; 2. managing resumption of flows in the Barwon-Darling after an extended dry period (first flush rule); 3. limiting daily water take in the Barwon-Darling and 4. increasing the commence to pump threshold near Bourke to protect low flows. <p>NSW commenced active management on 1 December 2020 in the three unregulated water sources. The three other aspects of the reform (first flush rule, daily extraction limits and increases to some A Class access thresholds) came into effect from 1 July 2020 in accordance with the amended Water Sharing Plan for the Barwon–Darling unregulated water source.</p>
Event-based environmental water mechanisms	<p>This includes mechanisms such as one-off temporary trade by event, options over pumping (enduring agreements) and store and release. This measure aims to benefit the Narran Lakes, some areas of the Lower Balonne, the Border Rivers and Namoi regions. Limited benefits are also expected to occur in the Barwon-Darling.</p>	<p>Further discussion with Commonwealth Environmental Water Office (CEWO) has confirmed that new arrangements for accounting for held environmental water crossing the Queensland-NSW border remained the priority up to June 2021, after which the focus has shifted to scoping the work required to facilitate uptake of event-based mechanisms. Early scoping suggests that water plan and or water management protocol amendments will be required in addition to water entitlement amendments to enable instantaneous volumetric limit entitlements to be traded to facilitate event-based mechanisms. This requirement is now scheduled to be completed by end-June 2022.</p>

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	<p>The aim of this measure is to support the development of contractual and other mechanisms to complement the management of water for the environment, to benefit environmental outcomes in the northern Murray-Darling Basin.</p>	<p>Commencing in the second half of 2021 the CEWO began working with Queensland to undertake the hydrological assessments required to support seasonal assignments of water allocations managed under an instantaneous volumetric limit account. This will work be informed by the implementation plan for event-based mechanisms, which is published on the CEWO website: https://www.environment.gov.au/water/cewo/publications/event-based-mechanisms-lower-balonne-implementation-overview</p> <p>The initial focus for this work will be on enabling trade in Lower Balonne Management Zone 5 (Narran River).</p> <p>Any necessary amendments to Water Resource Plans will require assessment by MDBA and accreditation by the Commonwealth Minister prior to any new rules and arrangements coming into effect.</p>
Improved coordination & management of environmental water	<p>Maximise the environmental outcomes of water for the environment moving from upper catchments to downstream rivers, such as the Barwon–Darling and the Lower Balonne Rivers.</p> <p>Improve habitat for many aquatic organisms during dry times and improve the health of rivers downstream – such as the Culgoa and Narran Rivers.</p> <p>Opportunities for joint activities to achieve whole-of-north outcomes through the Northern Basin Environmental Watering Group.</p>	<p>The CEWO and NSW have coordinated joint environmental releases to achieve whole-of-North connected flows:</p> <ul style="list-style-type: none"> • the Northern Connectivity Event in 2018 (http://www.environment.gov.au/water/cewo/northern-rivers); • the Northern Fish Flow in 2019 (http://www.environment.gov.au/water/cewo/catchment/northern-fish-flow-2019); and • the Northern Waterhole Top-Up in 2020/2021 (https://www.environment.gov.au/water/cewo/catchment/northern-waterhole-top-up). <p>A Northern Basin Environmental Watering Group (NBEWG) comprising officials from MDBA, CEWO, NSW and Queensland has been established and has met on several occasions. The NBEWG will provide an enduring and formalised mechanism to coordinate planning and delivery of water for the environment across the northern Basin.</p> <p>The NBEWG, operating under a new terms of reference as a Tier 2 Committee of the Basin Officials Committee and the Environmental Water Committee (Tier 1), met on 5 October 2021. Members agreed to develop agreed objectives and an operating protocol for future connectivity events in the northern basin, particularly under wetter conditions. NBEWG will meet at least annually, likely in April 2022, or as required should planning for a connectivity event become imminent.</p>
Gwydir constraints	<p>There are a number of constraints in the Gwydir catchment which are preventing flows reaching the Gwydir wetland. This measure will remove and manage flows to the wetlands. Significant environmental benefits are expected in the Gwydir wetlands by removing constraints to allow higher river flows whilst addressing third party impacts.</p>	<p>The Australian Government has provided funding to New South Wales to develop individual business cases for Gingham Watercourse, Lower Gwydir Watercourse and Lower Mehi River. The funding supports technical work and stakeholder engagement activities.</p> <p>Further information on the Gwydir Constraints Measures Project is at https://www.environment.nsw.gov.au/topics/water/water-for-the-environment/gwydir/northern-basin-toolkit-gwydir</p> <p>Business cases are expected to be submitted to the Commonwealth in November 2021 for Commonwealth assessment. Decisions on implementation of these projects will be determined by the Commonwealth Minister in the first half of 2022.</p>
Environmental works & measures	<p>This measure includes environmental works to promote fish movement and habitat, improve the effectiveness of environmental water delivery to key ecological assets and broader ecological outcomes in the northern Basin.</p> <p>On-ground works will include construction of fishways and regulators and installation of diversion screens to protect juvenile native fish.</p> <p>The aim of installing fishways is to improve fish passage through removal of barriers (e.g. weirs) to enhance the native fish outcomes.</p>	<p>The Commonwealth Minister has determined that Commonwealth funding will be made available to implement the following proposed projects:</p> <ul style="list-style-type: none"> • NSW Fish for the Future: Reconnecting the Northern Basin • NSW Macquarie Marshes enhanced watering project • NSW Fish for the Future: Fish-friendly Water Extraction project • Queensland Fish Friendly Water Extraction: Condamine-Balonne and Border Rivers project. <p>States have begun initial consultation and on-site investigations. More comprehensive stakeholder engagement will occur in early 2022.</p> <p>The Australian Government has made funding available to Queensland to develop business cases for the following proposed projects:</p> <ul style="list-style-type: none"> • Queensland Enhance the Flexibility and Capability for Distributing and Managing Low Flows Through the Lower Balonne River System Bifurcation Weirs project • Queensland Reconnecting Catchments: Condamine-Balonne project (lower Balonne fish passage).

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		<p>The Commonwealth Minister has also determined that Commonwealth funding will be made available to develop a business case for the proposed Queensland Improving Within-Catchment Fish Resilience (Culgoa River fish passage) project.</p> <p>Activities to develop these three Queensland business cases are expected to include community consultation. Business cases are expected to be submitted to the Commonwealth in June 2022 for Commonwealth assessment. Decisions on implementation of these projects will be determined by the Commonwealth Minister in the second half of 2022.</p>