



Water Renewal Taskforce

Better management of environmental water

Final progress report

June 2020



Published by NSW Department of Planning, Industry and Environment

dpie.nsw.gov.au

Title: Better management of environmental water

First published: June 2020

Department reference number: PUB20/402

More information

NSW Department of Planning, Industry and Environment—Water Reform Taskforce

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Abbreviations

Abbreviation	Expanded term
Basin Plan	<i>Murray-Darling Basin Plan 2012</i>
CEWO	Commonwealth Environmental Water Office
CTP	commence-to-pump
Barwon-Darling WSP	<i>Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012</i>
DPIE-Water	Department of Planning, Industry and Environment's Water group
E-water hub	Environmental water hub web site portal
HEW	held environmental water
IDEC	individual daily extraction component
Interim Solutions	As set out in Better management of environmental water—Interim solutions package, June 2018, page 4-9 .
IWG	Interagency Working Group for Better Managing Environmental Water
NCE	Northern Connectivity Event
NFF	Northern Fish Flow Event
NRAR	Natural Resource Access Regulator
NRC	Natural Resources Commission
MDB	Murray-Darling Basin
MDBA	Murray-Darling Basin Authority
MER	monitoring, evaluation and reporting
ML	megalitres
DPIE-B&C	Department of Planning, Industry and Environment-Biodiversity and Conservation
Qld	Queensland
Q 1–4	Quarter 1 to 4 of the calendar year
Roadmap	Part of the interim solutions package, Better management of environmental water—Interim solutions package, June 2018 .
SAP	stakeholder advisory panel

Abbreviation	Expanded term
Snapshot	<i>Better management of environmental water—Northern Murray-Darling Basin snapshot, December 2018</i>
WNSW	WaterNSW
Work plan	<i>Better management of environmental water in NSW— Work plan, April 2019</i>
WRAP	<i>Securing our water—NSW Government water reform action plan, December 2017</i>
WRP	Water resource plan
WSP	Water sharing plan

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Better management of environmental water

Program milestones

In December 2017, the NSW Government released [Securing our water—NSW Government water reform action plan, December 2017 \(WRAP\)](#), which included commitments to improving the management of environmental water, reforming metering and improving transparency. The WRAP actions for environmental water management include:

- establishing an Interagency Working Group (IWG)
- this IWG making recommendations for interim solutions within 90 days of starting
- improving transparency about how environmental water is managed and protected.

The Department of Planning, Industry and Environment's Water group initially [consulted on options for the better management of environmental water](#) in March 2018. The department asked for public feedback on broad approaches and measures to improve management of environmental water in unregulated rivers.

In June 2018, the NSW Government released the advice from the IWG, [Better management of environmental water—Interim solutions package, June 2018](#), and announced that the government would progress these recommendations, including:

- a package of interim solutions (**Interim Solutions**)
- a roadmap for developing and implementing interim and enduring solutions (**Roadmap**).

In December 2018, the NSW Government released the [Better management of environmental water—Northern Murray-Darling Basin snapshot, December 2018 \(Snapshot\)](#), which summarised for the public the proposed solutions to better manage environmental water in the NSW northern Murray-Darling Basin, progress to date and next steps.

In February 2019, the department provided the Murray-Darling Basin Authority (MDBA) with a detailed work plan, which was updated in April 2019. This [Better management of environmental water in NSW—Work plan, April 2019 \(Work plan\)](#) includes more detail of the work we must do to advance proposed solutions to better management of environmental water. This work plan fulfilled one the commitments made in the [Interagency Agreement between NSW and MDBA](#) to bring key Murray-Darling Basin Plan 2012 commitments into effect from 1 July 2019, with water resource plans (WRPs) due to be submitted for accreditation in mid-2020.

The environmental water commitments set out in the WRAP for 2018 were all assessed as complete in the [WRAP Independent Review](#) published in February 2019.

Review of delivery dates

The timeframes set out in the Roadmap and for other deliverables were based on information available at the time and dependent on the water sharing plan and water resource plan development and consultation timeframes, particularly for the Barwon–Darling.

Dates for completion of some tasks were rescheduled to accommodate changes in the planned public exhibition of the Barwon-Darling Surface Water Resource Plan and proposed water sharing plan amendments, and submission of this WRP for accreditation.

Public exhibition of the Barwon-Darling WRP was rescheduled to allow us to consider the findings of the Natural Resources Commission (NRC) review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012.

The plan was publicly exhibited between 26 September and 29 October 2019. Outcomes from public exhibition can be seen in the summary report, [Factsheet: Barwon-Darling Surface Water Resource Plan—Outcomes of public exhibition](#).

Water resource plans, including the proposed water sharing plan amendments, will be submitted to the MDBA for accreditation in June 2020. This is in line with the interagency agreement between the MDBA and the NSW Government.

This shifted timeframe meant it was not possible for water sharing plan changes to be in place in July 2019, as prescribed in the Roadmap. Instead, water sharing plans are likely to start in Q2 2020, following NSW Government approval of the water sharing plan amendments for the Barwon–Darling, Macquarie Bogan and Gwydir unregulated water sharing plans. Amendment clauses relating to active management will commence Q4 2020.

As a result, some delivery dates in the ‘better management of environmental water’ program have not been met. These tasks are ongoing and have been handed over to partner agencies including the department’s Water Implementation team and WaterNSW for completion. We expect to complete all tasks in the program by 1 December 2020.

Final progress update

This is the sixth and final progress report for the program.

The department has regularly produced and published reports on the progress of the ‘better management of environmental water’ program. Progress reports provide an insight into the process of developing and implementing environmental water reform, enable the tracking of key deliverables under the program and increase transparency by the NSW Government.

This report complements the final report for the ‘better management of environmental water’ program available at <https://www.industry.nsw.gov.au/water-reform/better-management-of-environmental-water>.

Progress against the deliverables detailed in the WRAP, the Interim Solutions, the Roadmap, the Snapshot and the Work plan is summarised in Figure 1. The tasks to progress each initiative in Figure 1 are detailed in the following pages.

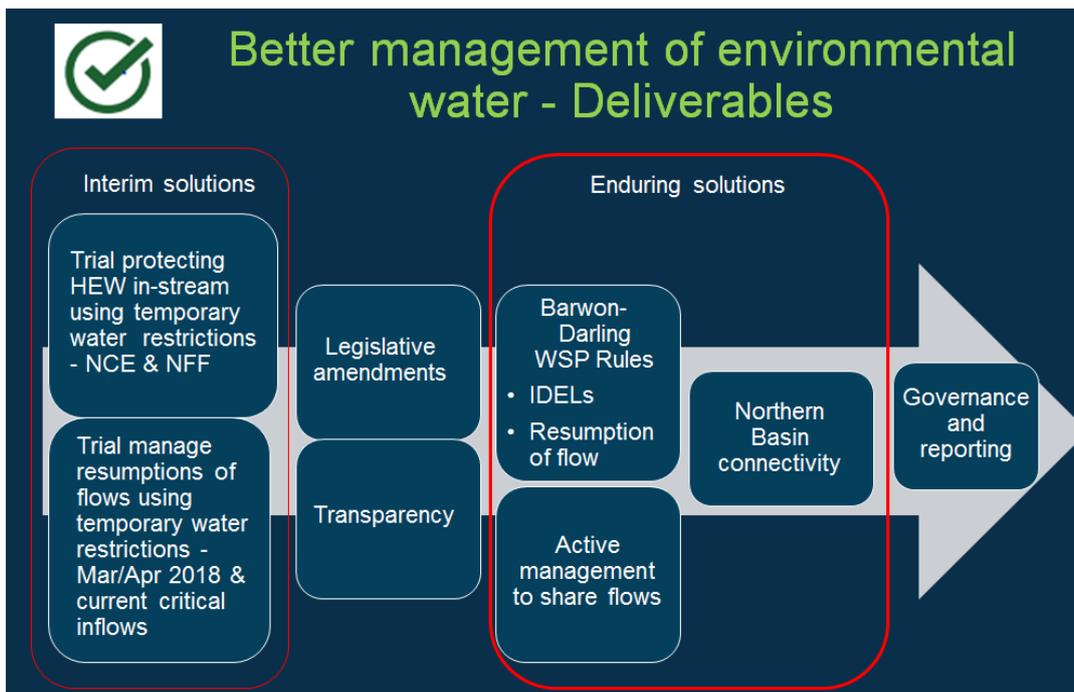


Figure 1. Summary of deliverables in the 'better management of environmental water' program

Other water reform activities progressing under the WRAP, such as improved measurement of water take and improved transparency, will support the implementation of solutions to better manage environmental water.



Interim solutions: Protect held environmental water and manage resumption of flows

What we are doing

Trial the protection of held environmental water using temporary water restrictions and develop interim protocols to protect the first flows from extraction after an extended dry period.

How we will do it	Source document	Due	Status
<p>Trial the protection of held environmental water</p> <p>Continue the trial to protect held environmental water to deliver the Northern Connectivity Event (NCE) using temporary water restrictions (s.324 order) to prohibit take of held environmental water (HEW), released from upstream storages. If there is a mix of HEW and other flows in the system, trial a form of active management.</p> <p>If required, establish event protocols to balance the protection of instream HEW and extractive use when the flows in the unregulated systems are above the commence-to-pump levels.</p>	<p>Interim Solutions Roadmap</p>	<p>Q2 2018</p>	<p>Completed</p> <p>Temporary water restrictions were used to protect the Northern Connectivity Event in April–July 2018.</p> <p>The NCE event did not have a mix of HEW and other natural flows in the system and as such there was no opportunity to trial a form of active management and no requirement to establish event protocols to manage access if natural flows were above commence-to-pump thresholds.</p> <p>Additional</p> <p>DPIE-Water/NRAR/WNSW continue to manage HEW released from upstream storages, being used in-stream, into the connected Barwon-Darling, through temporary water restrictions.</p> <p>Temporary water restrictions were used in May 2019 to protect a release of held environmental water by the federal and NSW governments flowing into the Barwon River from the Macintyre and Gwydir regulated rivers as part of the Northern Fish Flow Event.</p>
<p>Trial management of resumption of flows after an extended dry period</p> <p>Subject to climatic conditions, trial the management of the resumption of flow following a cease-to-flow event using temporary water restrictions to</p>	<p>Interim Solutions Roadmap</p>	<p>Q2 2019</p>	<p>Completed</p> <p>Temporary water restrictions were put in place between March–April 2018 to prohibit take by Barwon-Darling access licence holders (other than town water supply and stock and domestic license holders) to protect the initial flows after an extended dry period.</p>

How we will do it	Source document	Due	Status
<p>prohibit take by access licence holders.</p> <p>Establish interim event protocols to manage resumption of flows after a cease-to-flow event.</p> <p>Report on outcomes of any trials in accordance with the interim event protocols.</p>			<p>DPIE-Water have published a report on operations and outcomes during the period when these restrictions were in place. This report can be found at: Observations of the Mar/Apr 2018 s. 324 Event.</p> <p>Additional</p> <p>DPIE-Water/NRAR/WNSW are continuing to manage resumption of flows in the Barwon-Darling with temporary water restrictions to cope with water shortages, threats to public health and manage water for environmental purposes, including HEW being used in-stream for the NFF event.</p> <p>Temporary water restrictions were used in November–December 2019 and again in February–April 2020 to protect inflows after rain events in the northern basin. The use of multiple S324 orders allowed the replenishment of town water supplies, supply for high priority users, filling of instream refuge pools for fish and other aquatic biota, and flow into the Lower Darling system.</p>



Legislative and water sharing plan amendments

What we are doing

Amending legislation to support implementation of interim and enduring solutions to support better management of environmental water.

Table 1. Legislative amendments

How we will do it	Source document	Due	Status
Water Management Amendment Bill 2018 introduced to Parliament to progress proposed legislation amendments aimed at better management of environmental water.	Interim Solutions Roadmap	Q2 2018	Completed June 2018: <i>Water Management Amendment Act 2018</i> assented.
Start amendments to WSPs as set out in the Water Management Amendment Bill 2018.	Roadmap	Q3 2018	Completed June 2018: <i>Water Management Amendment Act 2018</i> assented and amendments to WSPs started on assent.

How we will do it	Source document	Due	Status
<p>Temporary Water Restrictions</p> <p>Amend the existing temporary water restriction provision to allow the minister to restrict or prohibit the taking of water where the minister is satisfied it is necessary for the purposes of managing water for environmental purposes.</p>	Interim Solutions	Q2 2018	<p>Completed</p> <p>The <i>Water Management Amendment Act 2018</i> included an amendment to the temporary water restriction under section 324 of the <i>Water Management Act 2000</i> to make it clear that ‘managing water for environmental purposes’ is within the scope of the existing public interest test in relation to making temporary water restriction orders.</p>
<p>Imposition of mandatory Conditions by Legislation</p> <p>Imposition of mandatory conditions by regulation; enables regulations to impose mandatory conditions on access licences and approvals to limit, for environmental purposes, the taking of water in specified circumstances.</p>	Interim Solutions	Q2 2018	<p>Not required—amendment did not proceed</p> <p>The <i>Water Management Amendment Act 2018</i> did not include provisions to enable regulations to impose mandatory conditions on access licenses and approvals to limit, for environmental purposes, the taking of water in specified circumstances. Therefore, this action is no longer required.</p>
<p>Consult on regulations for mandatory conditions and temporary water restrictions for protection or management of water for the environment</p>	Roadmap	Q2 2019	<p>Not required—amendment did not proceed</p> <p>The <i>Water Management Amendment Act 2018</i> did not include provisions to enable regulations to impose mandatory conditions on access licenses and approvals to limit, for environmental purposes, the taking of water in specified circumstances nor did it include the regulation making power for section 324 temporary water restrictions. Therefore, this action is no longer required.</p>
<p>Temporary trade of IDECs</p> <p>Amend the access licence dealings provisions to enable individual daily extraction components to be assigned between access licences</p> <p>Enable information about assignment of individual daily extraction components to be included in the water allocation account for an access licence</p>	Interim Solutions	Q2 2018	<p>Completed</p> <p>The <i>Water Management Amendment Act 2018</i> amended the dealing provisions of the <i>Water Management Act 2000</i> to provide for temporary assignment of IDECs and establishing of an account to manage this, detailed in section 71Q—Assignment of individual daily extraction components.</p>

Table 2. Water sharing plan amendments

How we will do it	Source document	Due	Status
<p>Active management WSP amendments</p> <p>Amend Part 12 of the WSPs for the Barwon-Darling, the Macquarie Bogan and the Gwydir Unregulated and Alluvial Water Sources to allow access rules in these plans to be amended to facilitate active management to share flows¹</p>	Interim Solutions	Q2 2018	<p>Completed</p> <p>The <i>Water Management Amendment Act 2018</i> included changes to access rules in the Barwon-Darling, Macquarie-Bogan and Gwydir Unregulated Water Sources water sharing plans to facilitate active management to share flows.</p>
<p>IDECs</p> <p>Amend the WSP for the Barwon-Darling Unregulated and Alluvial Water Sources to provide for reconsideration individual daily extraction components (IDECs).</p>	Interim Solutions	Q2 2018	<p>Completed</p> <p>The <i>Water Management Amendment Act 2018</i> included changes to the Barwon-Darling WSP to allow IDECs to be established, amended, assigned or removed. The notes in the plan regarding IDECs were also amended to note they are to be reviewed.</p>
<p>Clarify take limit in the Barwon–Darling</p> <p>Amend the Barwon-Darling WSP to clarify individual annual take limits for water access licences, removing ambiguity in interpretation and clarifying the original intent of the rule¹</p>	Interim Solutions	Q2 2018	<p>Completed</p> <p>The <i>Water Management Amendment Act 2018</i> included changes to the individual annual take limit for A, B and C-class access licences in the Barwon-Darling Unregulated Water Source to ensure enforceability of the clause in line with its original intent, clarifying that it is to limit the individual annual take (including water taken and assigned) to equal to 300 % of the total shares (when expressed as 1ML/unit share).</p>



Improve transparency and access to information

What we are doing

Publish information on the Department of Planning, Industry and the Environment's website to inform the public about how we manage environmental water and what we do to protect environmental water.

Redesign the department's website to provide updated and more accessible information on water management.

¹ [Confirmed in the WRAP Independent Review](#)

How we will do it	Source document	Due	Status
Publish information on the DPIE—Water website about activities in protecting environmental water.	WRAP	Q4 2018	<p>Completed¹</p> <p>A range of material on activities in protecting environmental water has been published, including:</p> <ul style="list-style-type: none"> • Consultation paper on Better Management of Environmental Water—March 2018 • Better Management of Environmental Water—Interim solutions package—June 2018 • Better Management of Environmental Water in NSW—Northern Murray to Darling Basin Snapshot—December 2018 • Scoping Review—Translucency rules in NSW inland rivers • Effectiveness and alternative scenario review—February 2018 • Enhanced Environmental Water Delivery fact sheet—May 2018 • Planned Environmental Water fact sheet—September 2018 • How water is managed fact sheet • How Water Sharing Plans Work fact sheet • Maintaining the protection of planned environmental surface water fact sheet—September 2018.
Publish explanatory materials to inform the public on how environmental water is managed.	WRAP	Q1 2019	<p>Completed</p> <p>A range of information on how environmental water is managed has been published on the DPIE-Water website (see above) and DPIE-B&C website during 2018 and 2019.</p> <p>An online environmental water hub (ewater-hub) has been launched to improve accessibility to information on how environmental water is managed. The ewater-hub links users to information on the DPIE-Water website</p>

How we will do it	Source document	Due	Status
			<p>and other agency publications on environmental water management.</p> <p>Additional (ongoing):</p> <p>Activities relating to the management of environmental water are being incorporated into the Water Insights Portal. This portal acts as a one-stop shop for water information for licence holders and the public. The rollout of the environmental water components is expected to be complete in the Water Insight Portal by Q1 2021.</p> <p>DPIE-Water has developed an education strategy to ensure water users understand the regulations and rule changes. Explanatory material will be distributed to licence holders in the three affected WSPs, in line with start dates.</p>
<p>Progress report on the delivery of the roadmap/progress to develop solutions to better manage environmental water.</p>	<p>Interim Solutions Roadmap</p>	<p>Q2 2019</p>	<p>Completed</p> <p>The Snapshot on progress against enduring solutions deliverables in the Roadmap was released in December 2018.</p> <p>This report forms the progress report on delivery of the Roadmap.</p>
<p>Analyse and report on the operation and outcomes of the recent March–April 2018 s.324 event in the Barwon-Darling.</p>	<p>Roadmap</p>	<p>Q3 2018</p>	<p>Completed</p> <p>Observations from the March April s.324 Event published.</p>
<p>Community report on the Northern Connectivity Event, prepared by the Commonwealth Environmental Water Office (CEWO).</p>	<p>Roadmap</p>	<p>Q3 2018</p>	<p>Completed</p> <p>CEWO has published community updates on the Northern Connectivity Event.</p>
<p>Report on the Northern Connectivity Event, including consideration of operational, hydrological and governance aspects of environmental water management.</p>	<p>Roadmap</p>	<p>Q4 2018</p>	<p>Completed</p> <p>This commitment was met by delivery of the following reports:</p> <ul style="list-style-type: none"> • Review of the NRC Event during Temporary Water Restrictions by MDBA—a review to assess the effectiveness of the governance and management

How we will do it	Source document	Due	Status
			<p>arrangements in place for the NCE, and operational activities, processes and procedures implemented to ensure compliance with the temporary water restriction rules.</p> <ul style="list-style-type: none"> Northern connectivity event 2018—Independent observer report by Garry Smith.



Enduring solution: Barwon-Darling WSP rules—manage resumption of flow

What we are doing

Investigating options to establish a resumption of flow rule in the Barwon-Darling that acknowledges the importance of the first flow through a river system following an extended period of low or no flows.

How we will do it	Source document	Due	Status
Options identified and shortlisted. Hydrological analysis complete on short-listed options.	Roadmap Workplan	Q3 2018	Completed
Complete ecological and economic analysis of shortlisted resumption of flow protection options.	Roadmap Workplan	Q3 2018 Q2 2019	<p>Completed:</p> <p>Reports include:</p> <ul style="list-style-type: none"> Potential ecological outcomes from a Resumption of Flow rule in the Barwon-Darling River (Preliminary Assessment) Barwon-Darling Assessment of the economic impacts of Resumption of Flow and IDECs Options Additional economic analysis—Barwon-Darling Surface Water Source
Identify package of proposed rule changes, including resumption of flow rule and complete analysis of package.	Workplan	Q2 2019	Completed

How we will do it	Source document	Due	Status
Consult with Barwon-Darling Stakeholder Advisory Panel and the IWG on proposed rules.	Roadmap Workplan	Q3 2018 Q2 2019	Completed The proposed resumption of flow rule options presented to the Barwon-Darling Stakeholder Advisory Panel in June 2019 and the IWG on 28 June 2019. The draft proposed package of rules presented to the SAP in March 2020 for final review, following WRP public exhibition.
Publicly consult on proposed rules as part of WRP public consultation. Review draft rules following public consultation.	Roadmap Workplan	Q4 2018 Q3 2019	Completed The draft Barwon-Darling unregulated river WSP went on public exhibition October 2019. The WSP proposed package of rules including resumption of flow rules have been reviewed as a result of submissions received during public consultation.
Submit proposed WSP rule changes to the MDBA as part of the WRP package.	Workplan	Q4 2019	Anticipated completion Q2 2020: Proposed WRP rule changes are expected to be approved by DPIE-Water June 2020 before being delivered to the MDBA for accreditation.



Enduring solution: Barwon-Darling WSP rules—limit daily water take

What we are doing

Investigating options to establish Individual Daily Extraction Components (IDECs) in the Barwon-Darling, including developing a method for distributing IDECs between water access licence holders and developing rules for trade. Also working with delivery partners to ensure IDECs can be implemented.

How we will do it	Source document	Due	Status
IDEC distribution options identified and shortlisted. Hydrological analysis complete on short-listed options.	Roadmap Workplan	Q3 2018	Completed

How we will do it	Source document	Due	Status
Complete ecological and economic analysis of shortlisted IDEC distribution options.	Roadmap Workplan	Q3 2018 Q2 2019	Completed. <ul style="list-style-type: none"> Potential ecological outcomes from the implementation of IDECs in the Barwon-Darling River (Preliminary Assessment) Barwon-Darling Assessment of the economic impacts of Resumption of Flow and IDECs Options Additional economic analysis—Barwon-Darling Surface Water Source Final report has been presented to the IWG
Identify preferred package of proposed rule changes, including IDEC distribution and trade rules and complete analysis of package.	Workplan	Q2 2019	Completed
Consult with Barwon-Darling Stakeholder Advisory Panel and the IWG on proposed rules.	Roadmap Workplan	Q3 2018 Q2 2019	Completed <ul style="list-style-type: none"> Options for distribution and trade of IDECs presented to the SAP and IWG in 2018 during development. The draft proposed package of rules was presented to the SAP in March 2020 for final review, following WRP public exhibition.
Publicly consult on proposed rules as part of WRP public consultation. Review draft rules following public consultation.	Roadmap Workplan	Q4 2018 Q3 2019	Completed The Draft Barwon-Darling unregulated river WSP went on public exhibition October 2019. The WSP proposed package of rules including IDECs have been reviewed as a result of submissions received during public consultation.
Submit proposed WSP rule changes to the MDBA as part of the WRP package.	Workplan	Q4 2019	Anticipated completion Q2 2020 Proposed WSP rule changes are expected to be approved by DPIE June 2020 before being delivered to the MDBA for accreditation.



Enduring solution: actively manage held environmental water in-stream

What we are doing

Investigating options to actively manage access to flows to allow held environmental water to remain in-stream for environmental purposes in the Barwon–Darling, and parts of the lower Gwydir and lower Macquarie. Also working with delivery partners to ensure it can be implemented.

How we will do it	Source document	Due	Status
Present information to Barwon–Darling, Gwydir and Macquarie–Castlereagh Stakeholder Advisory Panels on the concept of active management.	Workplan	Q3 2018	<p>Completed</p> <p>Presentations on the concept of active management were made to the Barwon-Darling and Gwydir Stakeholder Advisory Panels in September 2018.</p> <p>The concept of active management was discussed with the Macquarie–Castlereagh Stakeholder Advisory Panel in September 2018.</p> <p>Presentations also made to the Gwydir EWAG (October 2018) and the Macquarie EFRG (November 2018) and Lower-Murray-Darling SAP (November 2018).</p>
Draft and finalise policy positions for active management for consultation.	Workplan	Q2 2019	<p>Completed</p> <p>Draft active management policy was delivered at WRP consultation for the Barwon-Darling, Macquarie-Castlereagh and Gwydir.</p>
Prepare case studies to show how active management will work and potential benefits.	Workplan	Q2 2019	<p>Completed</p> <p>Case studies were prepared to show the benefits of active management. The case studies were used as part of the WRP public consultation package.</p>
Consult with Barwon-Darling Stakeholder Advisory Panel, stakeholders interested in the Gwydir and Macquarie-Castlereagh areas and the IWG on proposed active management WSP rules and draft policy positions.	Roadmap Workplan	Q3 2018 Q2 2019	<p>Completed</p> <p>Completed initial consultation on the concept of active management.</p> <p>Targeted consultation has been undertaken on the draft policy</p>

How we will do it	Source document	Due	Status
			<p>positions and options for active management, including:</p> <ul style="list-style-type: none"> • workshop with government agencies in May 2019 • workshop with the Barwon-Darling SAP on 13 June 2019 • two further workshops to be held with targeted stakeholders in the lower Macquarie-Castlereagh and lower Gwydir in late June. • Draft active management package of rules presented to final SAP meetings for the Barwon-Darling, Macquarie-Castlereagh and Gwydir WRP
Prepare draft water sharing plan rules for active management.	Workplan	Q3 2019	Completed
Publicly consult on proposed active management WSP rules and draft policy positions as part of the WRP public consultation.	Roadmap Workplan	Q4 2018 Q3 2019	<p>Completed</p> <p>Active management WSP rules and draft policy positions went out on public exhibition as part of the WRP consultation process for the Barwon-Darling, Macquarie-Castlereagh and Gwydir WRP areas as follows.</p> <ul style="list-style-type: none"> • The draft Barwon-Darling Unregulated WSP public exhibition—26 September to 29 October 2019. • The draft Macquarie-Bogan Unregulated WSP public exhibition—22 November 2018 to 1 February 2019. • The draft Gwydir Unregulated River WSP public exhibition 18 October to 29 November 2018. <p>WSP proposed package of rules including active management have been reviewed as a result of</p>

How we will do it	Source document	Due	Status
			<p>submissions received during public consultation.</p> <p>The draft proposed package of rules was presented to the SAP in March 2020 for final review, following WRP public exhibition.</p>
<p>Prepare draft and finalise active management protocols for the Barwon–Darling, lower Gwydir and lower Macquarie-Bogan unregulated systems, including consultation with relevant stakeholders.</p>	<p>Roadmap Workplan</p>	<p>Q2 2019 Q2 & Q3 2019</p>	<p>Anticipated completion Q3 2020</p> <p>Subject to government approval of proposed plan amendments to implement active management.</p> <p>DPIE-Water is developing procedure manuals for each of the three systems using the policy positions that were finalised during public consultation.</p> <p>Targeted stakeholder consultation occurred throughout Q1 & 2 2020. An engagement plan has been developed to guide consultation with target stakeholder groups in 2020.</p>
<p>Submit proposed WSP rule changes to the MDBA as part of the WRP package.</p>	<p>Workplan</p>	<p>Q4 2019</p>	<p>Anticipated completion Q2 2020</p>
<p>Business case for additional resourcing and gauging to actively manage sharing of flows, based on adequacy of existing hydrometric network and current management arrangements.</p>	<p>Roadmap</p>	<p>Q1 2019</p>	<p>Anticipated completion Q2 2020</p> <p>DPIE-Water is contributing to the NSW Hydrometric review.</p> <p>A funding bid for the existing gauging sites used to support active management has been submitted to the Australian Government. If successful, the funding will be used to upgrade and maintain sites. A proposal for additional gauges was also provided.</p> <p>Completion subject to federal funding program timeframes and prioritisation of projects.</p>
<p>Finalise arrangements for commencement of active management to share flows including the acquisition and installation of</p>	<p>Roadmap</p>	<p>Q2 2019</p>	<p>Anticipated completion Q4 2020</p> <p>Active management to commence 1 December 2020 in the Barwon-Darling, Macquarie Bogan and</p>

How we will do it	Source document	Due	Status
gauging stations (subject to funding and resourcing, and outcome of earlier analysis and consultation).			Gwydir Unregulated Water Sources. Completion to be consistent with WRP timetable subject to government approval of proposed plan amendments. Acquisition and installation of gauging sites subject to Commonwealth funding program timeframes and prioritisation of projects.



Enduring solution: better understand northern connectivity

What we are doing

An analysis of water sharing rules that contribute to connectivity in the NSW northern Basin. This involves documenting current rules in eleven NSW water sharing plans across six valleys and how they potentially contribute to hydrological connectivity between the Barwon-Darling River and its tributaries.

How we will do it	Source document	Due	Status
<p>Analysis of current WSP rules</p> <p>Analysis of current water sharing plan rules and <i>Water Management Act 2000</i> requirements that relate to hydrological connectivity.</p> <p>Analysis of how the current water sharing plan rules contribute to hydrological connectivity.</p> <p>Publish a report on the findings of the northern connectivity analysis and consider next steps.</p>	<p>Interim solutions</p> <p>Snapshot</p> <p>Work plan</p>	<p>Q3 2018</p> <p>Q2 2019</p>	<p>Completed</p> <ul style="list-style-type: none"> Northern connectivity independent observer report by Garry Smith—published on the department's website 8 July 2019 (Northern Connectivity Independent observer report) Stocktake of Northern Basin Connectivity water management rules Stocktake of Northern Basin Connectivity rules—analysis of implementation and effectiveness
<p>Review northern Basin Monitoring Evaluation and Reporting Plans to identify work required to improve our understanding of how water sharing plan rules and the use of held environmental water contributes to improved connectivity and</p>	<p>Snapshot</p> <p>Work plan</p>	<p>Q3 2019</p>	<p>Anticipated Completion Q2 2020</p> <p>Progress:</p> <p>Northern Basin Monitoring Evaluation and Reporting plans are currently being reviewed by DPIE-Water. The review will identify if a</p>

How we will do it	Source document	Due	Status
environmental outcomes in the Northern Basin.			Northern Basin MER framework is required or if a compilation of the relevant MER plans for the Northern Basin WSPs is enough.
Consult with relevant stakeholder advisory panels on options and analysis, if required, on northern Basin connectivity rules.	Roadmap	Q3 2018	Not required to date.
Public exhibition of any proposed rule changes to the WSP in northern Basin if required as part of the water resource.	Roadmap	Q4 2018	Not required to date.



Improve governance to support better management of environmental water

What we are doing

Improve interagency collaboration and provide advice on enduring governance to support better management of environmental water.

How we will do it	Source document	Due	Status
Establish an interagency working group (IWG) to develop solutions to improve the management of environmental water.	WRAP	Q1 2018	Completed² The IWG was established and conducted its first meeting in February 2018.
IWG to present interim solutions within 90 days of commencement.	WRAP	Q2 2018	Completed³ In May 2018, the IWG recommended a package of interim solutions and a roadmap for developing enduring solutions to better manage environmental water to the then minister ('Better Management of Environmental Water—Interim Solutions Package'). In June 2018, the minister announced that government would progress the recommendations.

² [Confirmed in the WRAP Independent Review](#)

³ [Confirmed in the WRAP Independent Review](#)

How we will do it	Source document	Due	Status
<p>IWG to operate at least until WRPs commence, assisting government to drive and progress the roadmap deliverables.</p>	<p>Interim Solutions</p>	<p>Q2 2018</p>	<p>Completed</p> <p>IWG continued under revised terms of reference.</p> <p>The final IWG meeting occurred in June 2020. WSPs for the Barwon-Darling, Macquarie Bogan and Gwydir unregulated water sources to commence 1 July 2020.</p>
<p>Development and implementation of appropriate MER for the interim solutions trials.</p>	<p>Interim Solutions</p>	<p>Ongoing</p>	<p>Anticipated completion Q2 2020</p> <p>Progress:</p> <p>Reports on the trial to manage HEW being used in-stream include:</p> <ul style="list-style-type: none"> • MDBA review of governance and management arrangements, operational activities, processes and procedures implemented to ensure compliance. <p>Reports include:</p> <ul style="list-style-type: none"> • Independent investigation into NSW water management and compliance - Interim report • Independent investigation into NSW water management and compliance - Final report • The Murray-Darling Basin Water Compliance Review • River flows and connectivity - 2017 Basin Plan evaluation • Northern Connectivity independent observer report - July 2019 • Stocktake of Northern Basin Connectivity rules—analysis of implementation and effectiveness • Stocktake of Northern Basin Connectivity water management rules. <p>Report on the trial of resumption of flow includes:</p> <ul style="list-style-type: none"> • Report on the operation and outcomes of the March–April 2018 s.324

How we will do it	Source document	Due	Status
			event in the Barwon-Darling finalised (Observations from the March-April 2018 s324 event).
Work plan for delivery of roadmap.	Roadmap	Q2 2018	Completed A work plan outlining steps to delivery of the enduring solutions was also provided to the MDBA, as per NSW Government /MDBA interagency agreement.
IWG provide advice on enduring governance arrangements.	Roadmap	Q2 2019	Completed