

### **Murray Darling Association Inc.**

463 High Street P.O. Box 1268 Echuca, Vic 3564

#### **Region 4 Ordinary Meeting**

Tuesday 10 March 2020 – 1:00pm EST Venue: The Midway Centre, 6 Midway Drive, Buronga, NSW

#### AGENDA

- 1. ATTENDANCE
- 2. APOLOGIES
- 3. DECLARATIONS OF INTEREST
- 4. WELCOME Cr MacAllister
- 5. MINUTES

Minutes of the previous meeting held on 29 January 2020 (Attachment 1)

#### 6. BUSINESS ARISING

7. REPORTS

The following verbal reports to be provided:

- 7.1 Chairman's Report Cr MacAllister
- 7.2 Council Reports each Council to provide a verbal update of activities from their region
- 7.3 Water Meetings Attended

#### 8. GENERAL BUSINESS

- 8.1 Richard Mintern, Local Engagement Officer with the Commonwealth Environmental Water Office
- 8.2 Strategic Planning MDA Region 4
  - 8.1.1 For discussion 70 GL of up water returned to Horticultural and Agriculture two years ago by the Senate? Could we find out the cost to River Health, native fish health & community health? How can a small group of lobbyist can turn a Nations Senate with no scientific evidence based information?
  - 8.1.2 For discussion the capacity of horticultural businesses like Cubbie Station (all other over extractors need to be addressed too) and their ability to extract water during large rainfall periods and how that extraction puts pressure on downstream communities. How sustainable is this and can we have it addressed by State and Federal Governments and the MDBA? While identifying the conflicted voice of lobbyists.
  - 8.1.3 CSIRO/Universities partnership opportunities
- 8.3 MDA Letter to Minister Pavey re: Approval to take (Attachment 2)
- 8.4 Climate ready communities (Attachment 3)

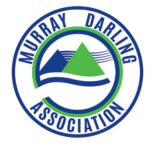
#### Recommendation

That MDA Region 4 supports/does not support the MDA's climate change initiatives

8.5 Climate Ready Regions Conference (Attachment 4)

- 8.6 Phillip Glyde Opinion piece (Attachment 5)
- 8.7 Water Allocation Statement dated 2 March 2020 (Attachment 6)
- 8.8 Extension of embargoes & exemptions (Attachment 7)
- 8.9 Murray-Darling Basin Baseline Diversion Limits estimate for 2019-2020 water year (Attachment 8)
- 8.10 Murray-Darling Basin Sustainable Diversion Limits estimate for 2019-2020 water year (Attachment 9)
- 9. DATE OF NEXT MEETING Proposed 9 June 2020
- 10. CLOSE

The Murray Darling Association acknowledges and thanks Wentworth Shire Council for their support in hosting this meeting of Region 4. ATTACHMENT 1



### **Murray Darling Association Inc.**

463 High Street P.O. Box 1268 Echuca, Vic 3564

#### **Region 4 Ordinary Meeting**

Wednesday 29 January 2020 – 2:30pm EST Venue: The Midway Centre, 6 Midway Drive, Buronga, NSW

#### MINUTES

#### 1. ATTENDANCE – Meeting opened at 2:30pm

In Person	By Videoconference
Cr Jane MacAllister (Wentworth Shire Council)	Emma Bradbury
Cr Jason Modica (Mildura Rural City Council)	
Cr Steve Heywood (Wentworth Shire Council)	
Cr Steve O'Halloran (Balranald Shire Council)	
Cr Marion Brown (Broken Hill City Council)	

#### 2. APOLOGIES

Ken Ross (GM WSC), Greg Hill (CDS), Sarah Philpott (MRCC) Anthony Cirillo (MRCC) Trevor Jolliffe (BC), Darriea Turley (BHCC)

#### 3. DECLARATIONS OF INTEREST

Nil

#### 4. WELCOME

Cr MacAllister

#### 5. MINUTES

Minutes of the previous meeting held on 24 September 2019 (amendments completed)

#### 6. BUSINESS ARISING

#### 7. REPORTS

The following verbal reports to be provided

7.1 Chairman's Report – Cr MacAllister

Since last meeting travelled to Toowoomba - Cubbie Station tour was really interesting 12 or 16 properties amalgamated - they can hold 459 GL - 0% to 99% capacity in 30 days. Cubbie Station was observed to be dry.

7.1.1 Menindee Old Town Weir (Attachment 2)

The Old Weir has been removed many questions from locals - mistrust around Menindee and this action has done nothing to restore faith – authorized through DPIE

7.1.2 Critical Water Advisory Panel update (Attachment 3)

Imposed embargo ahead of rains until 31 January 2020. Domestic and stock fee waivers (What does this mean for users / statutory obligations of government if they haven't paid fees? Jane will ask at the next CWAP) 7.1.3 Terms of Reference - Menindee Water Saving Project Stakeholder Advisory Group (SAG) (Attachment 4)

Draft TOR if anyone has any thoughts please forward to Jane If we can come up with an alternative there is a possibility the Government is looking for alternatives

7.1.4 Mick Keelty 1<sup>st</sup> Year report (Attachment 5)

Todays meeting – importance of connectivity of Darling – communities are realizing Murray has to put in 20%

Queensland not metering – premise is agriculture & horticulture – no push healthy water way first – 640/480 rule has to be revised – well attended approx. 150

Jane will provide a report of meeting (Attached to Minutes)

#### Jason Modica left meeting at 3:54pm

7.2 Council Reports – each Council to provide a verbal update of activities from their region

Balranald – Cr O'Halloran couldn't believe the amount of water coming out of the Murrumbidgee, it is huge – red tape for application for bores need to lobby to hasten this process

Wentworth - Pooncarie on bore water - still trucking water to landholders on request

Broken Hill – Sent an addendum to report on MDA conference Cr Tom Kennedy to write to Premier and local member re Basin plan – letter sent to Premier Ramsar – where is this up to – long term will be important **MOTION - That MDA Region 4 request a formal update from the FWJO in relation to the Menindee RAMSAR proposal and progress on the feasibility report. Moved Marion Brown Seconded Steve Heywood** 

Water Meetings Attended Previously spoken about

#### 8. GENERAL BUSINESS

- 8.1 Toorale update (Attachment 6) 9 February 2020 meeting onsite
- 8.2 MDA submission to ACCC
- 8.3 Climate Ready Regions Conference Saturday 18 April 2020 (Attachment 7)

MDA Region 4 – Clare also opportunity for networking with SA Councils

- 8.4 MDA Climate Change Position Statement & Action Plan (Attachment 8 & 9) WITHDRAWN FROM AGENDA
- 8.5 Geographical Names Board consultation Dual Naming of Darling as Baaka River(Attachment 10)
- 8.6 MDA Region 4 proposed meeting dates 1:00pm start as follows:
  - 10 March 9 June 8 September 8 December

Emma Bradbury Briefing

- Feedback Item 8.4 changed document from a climate change position statement to MDA Climate ready communities revised document is a strategic document Emma will send out
- Marion to forward BH Climate change resolution to gmea@wentworth.nsw.gov.au

- MDB communities funding Regional Economic Diversification Program Partnering with 6 councils employ Economic diversification officers Wentworth Council opportunity for partner
- 2020 Strategic planning workshop 13-14 March 2020 Moama CSIRO will present
- National Conference 12-14 August 2020 at Shepparton Study tour first day Barmah Choke
- Wentworth to resubmit application for 2021 conference

#### 9. DATE OF NEXT MEETING 10 March 2020 at 1:00pm

#### 10. CLOSE at 4:30pm

The Murray Darling Association acknowledges and thanks Wentworth Shire Council for their support in hosting this meeting of Region 4.

#### Interim Inspector-General inquiry into Murray Darling Basin Agreement

Mildura 29 January 2020

Introduction, Mick Keelty spoke about the focus of this inquiry, being whether the River Murray Waters Agreement 1914 is meeting the needs of communities, if the tri state agreement foresaw this type of drought event.

(Background: On 9 September 1914, The Prime Minister and three Premiers concluded the River Murray Waters Agreement, establishing a Commission of four, unanimous voting, cost sharing, water sharing – which included SA's Entitlement Flow, construction of Hume Dam, Lake Victoria Storage, 26 locks and weirs between Blanchetown and Echuca, and nine locks on either the Darling or Murrumbidgee Rivers.

By signing this agreement, the governments of NSW and Vic agreed to limit their Constitutional powers to manage the waters of the River Murray as they saw fit and to provide SA with a share of those resources.)

Keelty explained that this is not an inquiry into water trading – the ACCC interim report is due 31 March, the final report due October 2020.

This Inquiry has been given only two months to deliver its report.

Similarly, this inquiry is not part of the Socio-Economic inquiry, which has just consulted widely.

He explained that the Agreement predated the Basin Plan, which were both followed by targets for SDL's and that he is interested in collecting ideas about what is working and what is not.

He told the gathering of 100 or so at Mildura that irrigators on the NSW Murray are facing their third year of zero allocation, with many looking at foreclosure.

Interested in things that may be changed and how. Points already raised include SA carryover; Environmental outcomes; Conveyance water accounting; RiverOps (especially spill at Choke).

There has been no rain.

Q: Jim Wilton (former Murray Lower Darling CMA) "We looked at growth rings on redgums and found there were floods historically every 7-9 years. What has changed are the major storages off river, decreasing the capacity to deal with circumstances like now. Also, the lower lakes and evaporation of the pools, whether they should be returned to estuarine. Critical Human needs must take priority, currently around 2,160 Bn litres flow out to sea. A review of the lower lakes would also result in review of critical water needs.

Precipitation inflow cloud seeding has been trialled. Lengthen timeframe for what is held in reserve, as we are experiencing longer dry periods.

A: Keelty We have already flagged an inquiry into Lock Zero. Also, the science around dilution flows and salinity needs to be tested. Recommended Independent Science Forum. Northern Basin Commissioner Report recommended establishment of a technology forum.

Q: Howard Jones (Retired irrigator and environmentalist, former BCC member, Chair South West Water Users Association) Allocations, especially NSW Murray "give" for General Security NSW licences. Also, NSW management of the Darling needs looking at.

A: Wanted to hear from Indigenous groups and people from here.

Q: Jane MacAllister: Over consulted, lack of action despite number of commissions, reports, etc = no faith in government or agencies to change anything. If this process began as response to bellyaching from vocal group further upstream along the Murray, so they got a private meeting with yourself and the Minister, must we adopt anarchical techniques to get attention? There are no consultations along the Darling River communities. We (along the Darling) have been patient and respectful and still we must endure inequity in WSP's, which will not be changed to align with legislation. Meanwhile, our river and everything around it continues to die. Federal agencies and MDBA refused to acknowledge the authority of the SA Royal Commission. Had the High Court challenge been allowed to be heard, which every state and territory had joined one side or the other, or both as NSW did, we may have an answer to the authority of State Royal Commissions and pressure may have been brought to bear. Serious concerns have been raised about the legality of some of the management and policies and we wish for an

overarching national judicial oversight, there used to be the NWC until 2014. Water management needs to be taken out of political direction, it is being watched internationally and it is letting us all down.

A: NBC report was scathing towards Department Ag and my opinion has not changed. I have known Bret Walker QC for decades and share his frustration at Royal Commission responses. The meeting was held at my request, due to the concern about effigy with noose when the Minister and myself visited the region. Niall Blair was under police protection at Menindee, due to death threats. This is not the way to get your point across. I am here because I genuinely want to get a feel for what local communities are concerned about. I will be back.

Q: Robert Biggs (Mallee CMA) On Dec 6, 2019, you said "Murray Darling corruption is undermining faith in the Plan." It is being corrupted by governments and agencies. Who is paying for the private dams? Rivers are being converted into drains / delivery systems. On average, historically 18% of SA water came from the Darling River. Correction between allocations when 20% from Darling. Return to legalities in system. Mildura is an oasis and will be corroded if we can't get water. I live in Red Cliffs and have had my water turned off because of Blue-Green Algae. BGA could go all year, if river is not flushing as it should. Re 70GL in the Northern Basin, all for the sake of 120 jobs in the Northern Basin.

A: As Northern Basin Commissioner, I referred further matters to NSW ICAC and Vic Ombudsman, NRAR has been established. Still don't have accurate measure of QLD Floodplain harvesting extraction amounts.

Q: Rachel Strachan (Lower Darling Irrigator) Part of the Tri-State Agreement only now being understood is the importance of northern basin flows into the lower Darling. Priorities Environment and Cultural water THEN irrigation water. Our (Burtundy) Station records show there was only ever 3 months of cease-to-flow and the records go back to the mid 1800's. Darling River water into the Murray was a useful resource, Menindee was critical for General Security users along the Murray.

A: FloodPlain Harvesting IS part of this inquiry.

Q: Frank Dimasi (table grape grower, former Chair of FMIT, family in Mildura since 1952 etc etc) High value customers assets restricted, decrease in property rights, no compensation. Over extraction in north effecting eastern seaboard (?) places all communities at risk. Vic Minister moratorium, thank her for that. Make northern states comply. Overbank environmental water during summer creates zombie water (?) Keeping Murray mouth open is contrary to nature (?) (Pushback from audience on points)

Q: Lindsay Leake: Main concern is lack of flows. The long term average was 9,600GL, revised down to 5.800GL (now 3,000GL) Governments, Industry take into account resource is disappearing. Management failure from top to bottom. Co-ordination between Commonwealth, State and Local government is required.

A: Development unabated cannot go on.

Q: Badger Bates (Barka Wimpatja = Darling River blackfella): Water storages, Menindee, Fish kills, FloodPlain Harvesting MUST STOP. No rain = drought. Storages, irrigation forgot black and white culture. We are station people with bullocks, cannot let bullocks go without food or water, we get fined, yet government can take water and let everything die, including the native animals, fish. Barkandji people invite Mick Keelty to visit Menindee. What good is Native Title? May as well take it back, we have got no river and will not take the shut up money offered. We want what is best for all of us to step together. Killing Mildura with Blue-green algae.

A: Was at Toorale, take credit for funding for fishways and weirs, trying to get NBAN functional.

Badger: Toorale not gonna save the Barka. Let the Darling River flow.

Q: ? Kevin Cock: I was at Canberra and invited them to come to Rally, was at the meeting. Told we've given money to States and they are not playing. Bureaucrats made decisions and did not listen to locals. Would a Royal Commission actually change anything?

A: Metering / telemetry, single point of truth, licence terminology, state to state are the low hanging fruit. Why wait for a Royal Commission? What happens in the meantime?

Q: Richard Wells (Chair of Merbein Common) every irrigator is crapping themselves that rules could be changed regarding High Security. Vic 56%, NSW/SA 100% allocations at the moment. Conservative policy. Environmental water in 2016 flow past here with locks taken out. Authorities afraid to let additional water out of Hume, as it floods the floodplain growers, who may require compensation. Overbank flows have been non-existent since 1956. Change the status of farming community below Hume.

Q: Alan Whyte (Lower Darling Irrigator): Used to be in irrigation before the river ran dry. No sympathy for NSW General Security Irrigators – we had to wait five years for buyback and my citrus trees are being bulldozed as we speak, lovely trees. Biggest mess gets ignored by State and Federal Governments. 50 years everyone forgot about the river. Progress - need to run the river as a whole system. NSW categorical refusal. Agriculture has worked well until recently. Focus on Darling – where does the MDB Agreement speak to the Darling? 640/480 trigger rule. Recalibration of the Menindee Lakes Scheme, as it was engineered incorrectly due to human error. Policy decisions to decrease storage at Menindee. CEWH out to game the system as much as anyone. Intention of rules contrary to current usage (by all parties). Licence acquisitions supply has increased fourfold from the top storage.

A: Thank you, very constructive.

Conclusion by Mick Keelty: We now have an office here in Mildura. Will be up the road. Thank you for your time, I will come back after the report is done, so you can keep me to account.

Badger: Recommendation from today suggested – Please keep water in the Darling – it will help Mildura.

Note: Met Sam from IIG office and Di, who will be Managing the MDBA office in Mildura, established contact and plan for future contact with both, including invitations to be extended to address MDA Region 4 and / or Wentworth Shire Council.

Jane MacAllister Councillor, Wentworth Shire Chair Region 4 and

Vice President Murray Darling Association



admin@mda.asn.au www.mda.asn.au T (03) 5480 3805 ABN: 64 636 490 493 Level 1, 250 Anstruther Street P.O. Box 1268 Echuca, Vic 3564

The Hon Melinda Pavey MP Minister for Water, Property and Housing GPO Box 5341 SYDNEY NSW 2001

Thursday, 13 February 2020

Dear Minister Pavey,

On behalf of the councils of the far west regions of NSW I write to express their concern about both the process and communication of the decision to provide approval to take water for the purpose of floodplain harvesting, announced by the Department of Planning, Industry and Environment yesterday.

The announcement, and the opacity of information provided has caused deep distress to individuals and communities relying on first flush flows to recharge the system and restore connectivity. It has also contributed to a perception of preferential treatment of some water users.

Could you please assist us in affirming the transparency of the process by providing details of the inflows and harvest volumes extracted, and cease- and commence-to-pump times and locations for the subject exemption.

Our members urge that you uphold your previous commitments to the protection of first flush events from the Northern Basin as per your recent call on the Queensland State Government.

Further, we implore NSW to complete and adopt the required water resource plans essential to the protection of flows and consistency of process.

As you will be aware, The Darling River has been disconnected for several years. It remains an identified ecosystem in crisis visiting acute hardship on the towns, communities and people along the system. A connected, healthy river and communities imperative.

The MDA and our member councils remain committed to work constructively with yours and all Basin governments to achieve our common objectives of a healthy working Basin supporting vibrant, connected communities and economies.

Kind regards,

Emma Bradbury Chief Executive Officer

www.mda.asn.au

It's in the Balance



\*SSOCIATION



## ATTACHMENT3 **CLIMATE READY COMMUNITIES** MDA Commitment to Action





Principle 15 codified for the first time at the global level the precautionary approach, which indicates that lack of scientific certainty is no reason to postpone action to avoid potentially serious or irreversible harm to the environment.

#### The Rio Declaration: Principle 15 - the Precautionary Approach

"In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."



The Murray Darling Association (MDA) recognises that climate change is one of the most significant issues that will impact the social, cultural, economic and environmental health and wellbeing of the communities of the Murray-Darling Basin.

Managing this impact requires collaborative efforts to limit global warming, while also taking steps to help Basin communities and ecologies to adapt and become more resilient.

The concentration of greenhouse gas emissions (often measured in carbon dioxide (CO2) equivalent) in the earth's atmosphere is directly linked to the average global temperature on Earth.

Reducing carbon emissions is an important element of managing and responding to climate change. Protecting our natural resources and Basin communities is also essential to a healthy, sustainable and vibrant future.

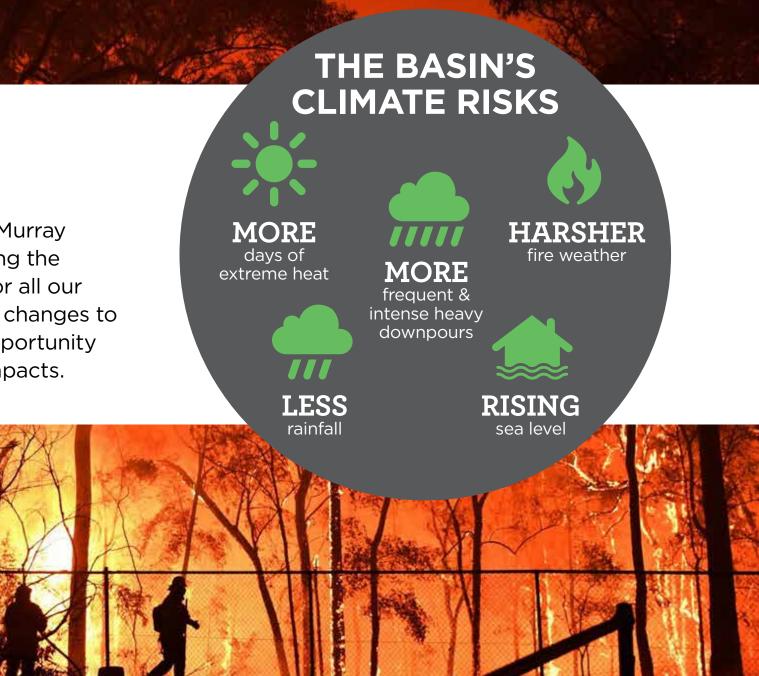
#### The MDA is committed to promote the reduction of carbon emission, to support communities to be climate ready, and to facilitate practices of regeneration, stewardship and sustainability.

This climate change position statement and action plan will provide a roadmap for the MDA to support Basin communities to understanding how climate change is likely to affect our communities, work out ways to adapt, and change the way we do things to become climate ready. "Climate Change is the defining issue of our time and we are at a defining moment. From shifting weather patterns that threaten food production, to rising sea levels that increase the risk of catastrophic flooding, the impacts of climate change are global in scope and unprecedented in scale. Without drastic action today, adapting to these impacts in the future will be more difficult and costly."

- United Nations

# How do we get climate-ready?

Being climate-ready in the Murray Darling Basin means knowing the climate risks and impacts for all our regions. We can then make changes to take advantage of every opportunity and reduce any negative impacts.





## **Our Principles**



Education is key



Successful transition to sustainable resources requires **planning and collaboration** 



Climate related risk is social, economic and environmental risk.



A **transition to a carbon neutral** economy is required



## **About Us**

Established in 1944, the purpose of the MDA is to provide effective representation of local government and communities at state and federal level in the management of Basin resources by providing information; facilitating debate; and seeking to influence government policy.

#### Based on the available science, the MDA recognises that

**Climate change is real** and requires urgent action Local government has the social and moral license to become an active part of the climate change mitigation and adaptation process Education, collaboration and innovation will be critical to address the impacts of climate change

#### **MDA values**



- Respect, honesty, integrity
- Sustainably, equitable, affordable access to water
- Efficient use of water
- Healthy environmental flows, balance with sustainable productive agriculture
- Universality and diversity
- Sustainability
- Social wellbeing





The MDA is committed to taking action to mitigate the impacts of climate change and build among Basin communities through the following actions:

<b>Support MDA regions</b> to explore, invest and implement climate change solutions and innovations (including renewable energy, energy efficient technologies, low- emissions transport, efficient water measures and adaptation infrastructure)	Help MDA members to respond to climate change and facilitate community resilience through coordinate and exchange the highest standards of reliable, authorised and accurate information
<b>Advocate for policies</b> that recognise and mitigate climate change impacts at national and state levels.	<b>Partner with Indigenous communities</b> to better understand and advocate for Indigenous knowledge of land management
<ul> <li>Reduce MDA's environmental footprint</li> <li>a. Create a sustainability team (internally)/ working group (Basin-wide)</li> <li>b. Reduce emissions</li> <li>c. Facilitate staff training related to energy efficiency behaviour change</li> </ul>	<b>Work in partnership</b> with the community, locally-based and relevant NGOs, business and other key stakeholders to manage the risks and impacts associated with climate change

## **Action Plan Implementation**

ACTION	COMMITMENT
<b>Support MDA regions</b> to explore, invest and implement climate change solutions and innovations (including renewable energy, energy efficient technologies, low-emissions transport, efficient water measures and adaptation infrastructure)	
Help MDA members to respond to climate change and facilitate community resilience through coordinate and exchange the highest standards of reliable, authorised and accurate information	
<b>Advocate for policies</b> that recognise and mitigate climate change impacts at national and state levels.	
<b>Partner with Indigenous communities</b> to better understand and advocate for Indigenous knowledge of land management	
Reduce MDA's environmental footprint	
a. Create a sustainability team (internally)/ working group (Basin-wide)	
b. Reduce emissions	
c. Facilitate staff training related to energy efficiency behaviour change	
Work in partnership with the community, locally-based and relevant NGOs, business and other key stakeholders to manage the risks and impacts associated with climate change	

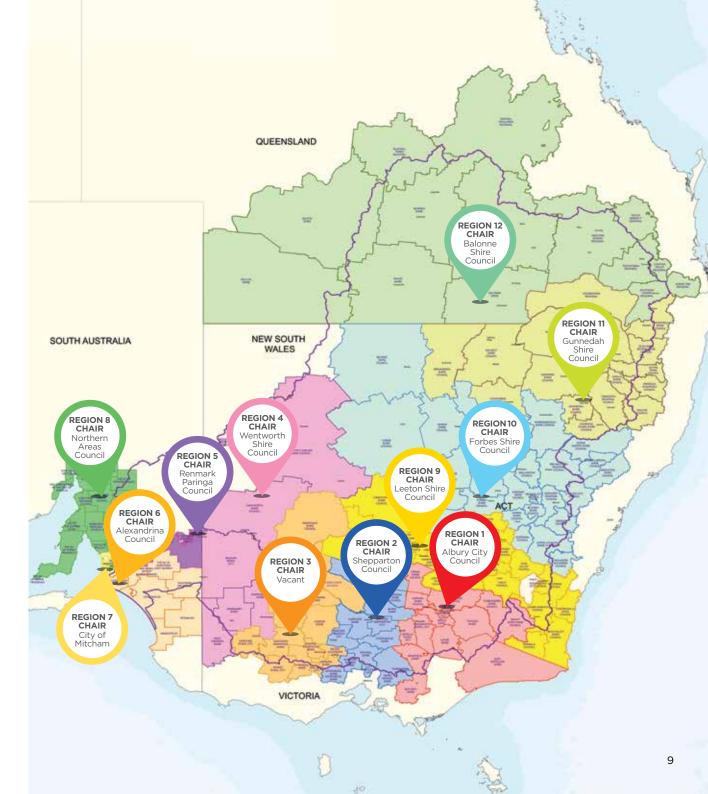
## Our Regions and Climate Change

There are 172 councils that sit within the Basin and whose communities rely upon its natural resources and a healthy, sustainable environment. A changing climate is of critical importance to local government in the Basin.

Divided into 12 regions the MDA is the only interjurisdictional association of local government, and is built on strong foundations of good governance and high standards of accountability and integrity.

Our regions are the essence and strength of the MDA, providing the imprimatur for our actions and our advocacy.

The following region report provides an insight into climate change across the Basin:





## **Region Statement**

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#### Commitment to actions:

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## **Our partners**

Change cannot happen alone. The MDA will work with the following partners to implement our climate change action plan:

Members	Deliver and exchange high quality information and services that create efficiency and value in navigating the complex reality of climate change.				
Community	Inform the community about the role of local government and climate change.				
Basin LGAs	Collaborate effectively and respectfully to maximise efficiencies for local government and their peak agencies by avoiding duplication and providing multi-jurisdictional perspectives.				
Basin Governments	Represent the interests and priorities of local government at the Basin scale on climate change.				
Murray Darling Basin Authority National Water Grid Authority Climate Change Authority Australian Energy Market Authority Inspector-General of Murray-Darling Basin Water Resources	Collaboration and exchange of information and advice to improve knowledge and awareness of climate change, and of the impacts of policy and decisions to create better outcomes for local government and communities.				
Regional LG groups and organisations	Collaborate effectively and respectfully to maximise efficiencies for local government and their peak agencies by avoiding duplication and exchanging inter-regional perspectives.				
State and national peak bodies	Consult and work with state and national peak bodies and other agencies to foster a stronger relationship to local government of sector-specific perspectives and issues.				
Universities	Partner with universities to enhance climate change literacy, and provide practical application of academic research for the benefit of local government and community.				
Media	Raise awareness of climate change position and initiatives through the media.				

## Australia is currently experiencing:

A long-term **increase in extreme fire weather** and in the length of the fire season across large parts of Australia

**Very low rainfall** over parts of southern Australia during April to October in recent decades. Across the same region May–July rainfall has seen the largest decrease, by around 20 per cent since 1970.

**Increasing temperatures** with a rise of over 1 °C since 1910, leading to an increase in the frequency of extreme heat events.

## Australia is projected to experience:

Further **increases in sea and air temperatures**, with more hot days and marine heatwaves, and fewer cool extremes.

**Decreases in rainfall** across southern Australia with more time in drought, but an increase in intense heavy rainfall throughout Australia.<sup>1</sup>

### In the Murray Darling Basin it is projected that:

Average **temperatures will continue to increase** in all seasons.

More **hot days and warm spells** are projected with fewer frosts projected.

**Less rainfall** will fall during the cool season, with rainfall projected to remain unchanged in the warm season.

We will experience a harsher fireweather climate in the future.<sup>2</sup>

The MDA is committed to act and support Basin Communities to be climate ready and resilient.

1. http://www.bom.gov.au/state-of-the-climate/State-of-the-Climate-2018.pdf 2. https://www.climatechangeinaustralia.gov.au/en/climate-projections/future-climate



PO Box 1268 / Level 1, 250 Anstruther Street Echuca Vic 3564 ABN 64 636 490 493

www.mda.asn.au

A SATURDAY 18 APRIL 2020 9AM-4PM CLARE SA

# **READY REGIONS** CONFERENCE

#### OPPORTUNITIES FOR BUSINESS & COMMUNITIES IN THE CHANGING CLIMATE

## ARE YOU READY TO HARNESS THE OPPORTUNITIES OF THE CHANGING CLIMATE?

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Join us for the inaugural South Australian Climate Ready Regions Conference and explore what it means to be climate ready, and be inspired by those already leading the way.

To be opened by Martin Haese, CEO of Business SA & Chair of the Premier's Climate Change Council. Come early for our Friday evening networking event, a native food tasting.

## OUR SPEAKERS WILL COVER

- Commercially integrated climate risk management solutions
- Strengthening community resilience through on ground action
- Building intergenerational capital through Aboriginal knowledge
- Opportunities in water, waste, energy, biodiversity, land management and ESG

#### **REGISTER HERE**







ATTACHMENT 5

## The time is right for NSW to complete their water resource plans

Phillip Glyde, Chief Executive, Murray–Darling Basin Authority

Published: 02 March 2020 • Opinion pieces

- Print page
- Email page

Contact MDBA media <u>Email the MDBA media team</u> <u>Phone MDBA media — (02) 6279 0141</u>

This time two months ago just about all of New South Wales was drought declared.

The focus was rightly on ensuring communities had enough critical water until rains came.

Thanks to significant rain in parts of northern New South Wales and Queensland since mid-January, some rivers are now flowing again, some at flood level.

For many people in the northern Basin this signals the first major break in the drought since the Basin Plan was signed into law in 2012.

For others it's a flood in a drought—people are still doing it tough from lack of rain while the river is running high past their backyard.

In line with the Basin Plan, these first flows have been protected and are expected to reach Menindee Lakes this month. We are watching this water closely via satellite as it heads into the heart of the Basin and will notify the states if we see anyone doing anything wrong.

It is testament to the Basin Plan that irrigators in Queensland knew the rules, and therefore knew when they could start taking water in line with the state government's water resource plans.

Water resource plans are a fundamental part of the Basin Plan. They set clear, transparent rules on how much water can be taken from every catchment in the system and are published for all to see.

Credit is also due to the New South Wales Government for imposing wide-ranging embargoes on water extraction to protect these first flows, as they had agreed to do. However, downstream water users were confused and criticised the partial lifting of the embargoes. These decisions appeared ad-hoc and were not transparent. We will work with both state governments after this event to identify where processes and transparency can be further improved. Confidence is built when communities and water users know the rules. Water resource plans provide this transparency and confidence. They are published for all to see, so ahead of time, water users know what they can or can't do.

We look forward to the New South Wales Government putting forward water resource plans for accreditation. Transparent rules build confidence and confidence builds trust. Quite rightly, communities need to trust that governments are actively managing this finite resource as they agreed they would. All other states and the ACT have submitted their plans and all Queensland and South Australian plans have been accredited.

There's a variety of water users with an interest in this transparency—tourists, families and communities, First Nations people, irrigators, industries and of course the needs of the environment itself, which underpins all other needs.

Our job at the MDBA is to keep an unbiased and whole of Basin perspective. That's what Australians expect us to do. This unwavering commitment is more important than ever because water is scarce, and it is becoming scarcer.

ENDS

Water availability and allocation update



#### ATTACHMENT 6

#### 2 March 2020

## NSW Murray and Lower Darling

#### Water allocation update

This abbreviated statement updates water availability information and confirms that general security allocations in the NSW Murray regulated river water source **remain unchanged**.

An easing of dry and hot conditions has slightly increased inflows above assumed minimums and reduced losses in running the River Murray system. This has resulted in an increase in the NSW Murray resource of 20,000 megalitres (ML). Soil moisture is severely depleted and is suppressing catchment runoff response from rainfall events. Soaking rainfall is required to improve runoff conditions and provide water for allocation.

As dry conditions continue to strain resources, the system is being managed to maintain deliverability of all account water and support full opening allocations to high priority needs in 2020-21. The resource improvement has been set aside for 2020-21 high priority needs (15,000 ML) and to reduce the current year's shortfall to Conveyance entitlement holders (5,000 ML).

Though good inflows prior to winter/spring are unlikely based on historical patterns, individual storms can bring heavy rainfall and good inflows at any time. Water users are encouraged to plan for the worst and hope for the best. In the meantime, conditions will continue to be closely monitored and water allocation statements updated, ensuring that any water that does become available is safely and promptly allocated in accordance with statutory water sharing plans.

The Menindee Lakes system remains critical; below 1 per cent full, holding just 5,500 ML. Rainfall in the northern Basin has resulted in flows in the tributary and headwater streams and temporary water restrictions have assisted flows into the Barwon-Darling system. It is forecast that some flows will reach Menindee by late March, potentially sufficient to provide an autumn replenishment flow to the Lower Darling. Conditions will be closely monitored and updates provided as flows progress down the system and potential Lower Darling replenishment plans firm.

2019-20	High Security	General Security	Average Carryover	Drought Stag	ge
Murray	97%	0%	18%	Stage	2
Lower Darling	30%	0%	19% (not available)	Stage	e 4

#### Next announcement

The next mid-month comprehensive water allocation statement for the NSW Murray and Lower Darling valleys will be published on **Monday 16 March 2020**.

A further indicative water availability outlook for the start of next year (1 July 2020) will be reported in the next statement. While it is still early for reliable forecasts, they will continue to be updated on a mid-monthly basis until mid-May in the lead-up to the new water year. The reliability of the outlook will improve as the forecast period reduces. Water availability and allocation update



The availability outlook for next year aims to help water users with their end of year water management decisions. Forecast conditions are best estimates only and not guaranteed water availability. They should be used with caution, particularly when projecting many months ahead.

Subscribe here to receive the Department of Planning, Industry and Environment's monthly email update on water planning, management and reform in New South Wales.

ATTACHMENT 7



**Government Gazette** 

#### of the State of

New South Wales

#### Number 42 Friday, 28 February 2020

The New South Wales Government Gazette is the permanent public record of official NSW Government notices. It also contains local council, non-government and other notices.

Each notice in the Government Gazette has a unique reference number that appears in parentheses at the end of the notice and can be used as a reference for that notice (for example, (n2019-14)).

The Gazette is compiled by the Parliamentary Counsel's Office and published on the NSW legislation website (www.legislation.nsw.gov.au) under the authority of the NSW Government. The website contains a permanent archive of past Gazettes.

To submit a notice for gazettal, see Gazette Information.

By Authority Government Printer



#### **Temporary Water Restriction (Barwon-Darling) Order 2020**

under the

#### Water Management Act 2000

I, Emma Solomon, by delegation from the Minister administering the *Water Management Act 2000*, in pursuance of section 324 (1) of the *Water Management Act 2000* and being satisfied that it is necessary in the public interest to do so, make the following Order.

Dated 28 February 2020

EMMA SOLOMON Executive Director, Policy, Planning & Sciences Department of Planning, Industry and Environment By delegation

#### **Explanatory note**

The object of this Order is to continue temporary water restrictions on certain take of water from the Barwon-Darling Unregulated River Water Source and the Barwon-Darling Valley Floodplain until 17 April 2020.

This Order is made under section 324 (1) of the *Water Management Act 2000* in order to cope with a water shortage.

#### Temporary Water Restriction (Barwon-Darling) Order 2020

under the

#### Water Management Act 2000

#### 1 Name of Order

This Order is the Temporary Water Restriction (Barwon-Darling) Order 2020.

#### 2 Commencement

This Order commences on 29 February 2020.

#### 3 Duration

This Order will remain in force up to and including 17 April 2020 unless that date is amended or the order is repealed before that date.

#### 4 Temporary water restrictions

This Order is a direction to restrict the take of water from the water source and floodplain specified in Schedule 1 in accordance with the restrictions specified in Schedule 1.

#### 5 Interpretation

(1) In this order:

*Barwon-Darling Unregulated River Water Source* means the Barwon-Darling Unregulated River Water Source as described in the *Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012.* 

*Director* means any of the following:

- (a) Director, Water Planning Implementation, Water Group for the Department of Planning, Industry and Environment,
- (b) Executive Director, Policy, Planning & Sciences, Water Group for the Department of Planning, Industry and Environment,
- (c) any person who is for the time being acting or performing the duties and responsibilities of the role specified in paragraph (a) or (b).

*farm dam* means a privately owned dam typically of earthen construction designed to collect or store water for use on a property.

forecast includes a qualitative assessment or quantitative assessment.

*higher priority needs* includes the requirements for the relevant water source, or part of the relevant water source, and its dependent ecosystems, basic landholder rights and access licences (including town water supply) of a higher priority.

- (2) A management zone specified in Column 2 of the table to Schedule 1 has the same meaning as that management zone in the *Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012.*
- (3) Unless otherwise defined, words and expressions that are defined in the *Water Management Act 2000* or in regulations made under that Act have the same meaning in this Order.

#### **Schedule 1 Restrictions**

#### Part 1 Restriction for Barwon-Darling Unregulated River Water Source

#### 1 Restriction

- (1) Unless approved by the Director, a holder of a licence specified in Column 3 of the table to this Part is prohibited from taking water from any part of the Barwon-Darling Unregulated River Water Source in the management zones specified opposite the licence in Column 2 of the table.
- (2) The Director may approve, in any manner, the licence holder to take water for the following period:
  - (a) from the day in relation to which the Director is of the opinion that there is, or is forecasted to be, water available for take by the licence holder because there is, or is forecasted to be, sufficient water available for higher priority needs, and
  - (b) up to and including 17 April 2020 or, if earlier, the day in relation to which the Director is of the opinion that there is, or is forecasted to be, no water available for take by the licence holder because there is, or is forecasted to be, insufficient water available for higher priority needs.
- (3) Subclause (1) does not prohibit the taking of water:
  - (a) from a farm dam, or
  - (b) for the purpose of testing metering equipment in accordance with clause 2.

#### 2 Take of water permitted for testing metering equipment

This order does not restrict the take of water if the following applies:

- (a) the holder of the access licence is, or will be, required to comply with the mandatory metering equipment condition,
- (b) the take of water is done in compliance with the conditions of the licence and the relevant approval, including in accordance with any cease to pump, reporting and recording conditions on the licence,
- (c) the take of water is for the purpose of a duly qualified person validating, or checking the accuracy of, metering equipment for compliance with the mandatory metering equipment condition,
- (d) the total take of water for the purpose under subclause (c) up to and including 17 April 2020 must be:
  - (i) no more than 0.5ML, or
  - (ii) if take is from a pump that is greater than 500mm, no more than 1ML,
- (e) the duly qualified person notifies the Natural Resources Access Regulator within 24 hours of the take of water for the validation or accuracy checking by:
  - (i) phone on 1800 633 362, or
  - (ii) email to <u>nrar.enquiries@nrar.nsw.gov.au</u>.

#### Table

Column 1	Column 2	Column 3		
Water Sharing Plan	Management Zone	Access Licence		
Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012	Culgoa River Junction to Bourke Management Zone Bourke to Louth Management Zone Louth to Tilpa Management Zone Tilpa to Wilcannia Management Zone Wilcannia to Upstream Lake Wetherell Management Zone	unregulated river (A Class) access licence unregulated river (B Class) access licence unregulated river (C Class) access licence		

#### Part 2 Restriction for Barwon-Darling Valley Floodplain

#### 3 Restriction

- (1) Unless approved by the Director, a person must not take water for the purpose of floodplain harvesting from the Barwon-Darling Valley Floodplain unless the take is by a work for the purpose of a tailwater return system.
- (2) The Director may approve, in any manner, the person to take water for the purpose of floodplain harvesting for the following period:
  - (a) from the day in relation to which the Director is of the opinion that there is, or is forecasted to be, water available for take by the person because there is, or is forecasted to be, sufficient water available for higher priority needs, and
  - (b) up to and including 17 April 2020 or, if earlier, the day in relation to which the Director is of the opinion that there is, or is forecasted to be, no water available for take by the person because there is, or is forecasted to be, insufficient water available for higher priority needs.
- (3) Subclause (1) does not apply to any of the following:
  - (a) a person taking water pursuant to a basic landholder right,
  - (b) the take of water by a water management work that cannot be reasonably prevented from taking water due to the nature of the work (passive take).

**Note.** For example, this order does not apply to passive take by on-farm storages, dams and open channels.

#### Notes.

- 1 See Schedule 6 to the *Water Management (General) Regulation 2018* for a map of the Barwon-Darling Valley Floodplain at www.legislation.nsw.gov.au.
- 2 WaterNSW may notify the person of any approval given by the Director.

It is an offence, under section 336C of the Water Management Act 2000, to fail to comply with this direction. An individual found guilty of an offence under section 336C is liable to a penalty not exceeding 4,550 penalty units and, in the case of a continuing offence, a further penalty not exceeding 600 penalty units for each day the offence continues. A corporation found guilty of an offence under section 336C is liable to a penalty not exceeding 18,200 penalty units and, in the case of a continuing offence, a further penalty not exceeding 1,200 penalty units and, in the case of a continuing offence, a further penalty not exceeding 1,200 penalty units for each day the offence continues. As at the commencement of this Order, a penalty unit is \$110.

3

#### ATTACHMENT 8

#### Murray-Darling Basin Baseline Diversion Limits - estimate for 2019 / 2020 water year

These estimates apply for the 2019/20 water year and were calculated at 27 November 2019. These estimates are subject to change as new information is available.

Zones	<b>SDL Resource Unit</b> (within zones)	take from a regulated river (GL/y)	take from a watercourse (GL/y)	take by floodplain harvesting (GL/y)	take from a watercourse under basic rights (GL/y)	take by runoff dams (excluding basic rights) (GL/y)	dams under	net take by commercial plantations (GL/y)	total BDL <sup>(1)</sup> (GL/y)	estimates of BDL by Authority in 2012 <sup>(2)</sup> (GL/y)	increase (+) / decrease (-) since 2012 (GL/y)
NORTH	ERN BASIN										
-	Queensland										
	Condamine-Balonne <sup>(3)</sup>	-	601.0	147.0	6.0	203.0	61.0	1.0	1,019.0	978.3	40.7
	Moonie <sup>(3)</sup>	-	36.8	3.8	0.4	40.0	11.0	-	92.0	84.2	7.8
	Nebine <sup>(4)</sup>	-	9.8	-	0.1	-	11.0	-	20.9	31.2	- 10.3
	Paroo <sup>(4)</sup>	-	0.2	0.7	0.3	-	10.6	-	11.8	9.9	1.9
	Queensland Border Rivers <sup>(3)</sup>	-	246.0	50.0	3.6	61.0	16.0	1.0	377.6	320.1	57.5
	Warrego <sup>(4)</sup>	-	59.1	2.8	0.2	-	13.5	-	75.6	127.7	- 52.1
	total northern Basin Queensland zone	-	952.9	204.3	10.6	304.0	123.1	2.0	1,596.9	1,551.4	45.5
	Northern New South Wales										
	Barwon-Darling Watercourse	-	186.5	11.5	-	-	-	-	198.0	198.0	-
	Gwydir NSW Bordor Biyorc	296.2	11.2	17.8	NA	104.0	20.0	1.0	450.2	450.2	-
	NSW Border Rivers	188.4	16.3	3.0	NA	79.0	16.0	-	302.6	302.6	-
	Intersecting Streams <sup>(5)</sup> Namoi	- 251.2	16.8 78.1	- 14.0	NA NA	105.0 139.0	6.0 21.0	- 5.0	127.8 508.3	114.0 508.3	13.8
	Macquarie-Castlereagh	380.3	78.1 44.0	- 14.0	NA	139.0	110.0	44.0	734.3	734.3	-
	total northern Basin New South Wales zone	1,116.1	352.9	46.2	-	<b>583.0</b>	173.0	50.0	<b>2,321.2</b>	2,307.4	13.8
total nort	hern Basin	1,116.1	1,305.8	250.5	10.6	887.0	296.1	52.0	3,918.1	3,858.8	59.3
SOUTH	ERN BASIN										
	Southern New South Wales										
	Lower Darling	55.0	NA	-	NA	-	5.5	-	60.5	60.5	-
	Murrumbidgee - NSW	1,957.7	42.4	-	NA	344.0	41.0	116.0	2,501.1	2,501.1	-
	NSW Murray total southern Basin New South Wales zone	1,680.0 <b>3,692.7</b>	27.7 <b>70.1</b>	-	NA -	70.0 <b>414.0</b>	10.0 <b>56.5</b>	24.0 <b>140.0</b>	1,811.7 <b>4,373.3</b>	1,811.7 4,373.3	-
	ACT	·							·	,	
	ACT (surface water) <sup>(6)</sup>	-	42.7	_	NA	0.7	0.3	11.0	54.7	52.5	2.2
	total southern Basin ACT zone	-	42.7 42.7	-	- -	0.7 0.7	0.3 0.3	11.0 11.0	54.7 54.7	52.5	2.2
	Victoria										
	Broken	13.2	-	-	NA	19.0	11.0	13.0	56.2	56.2	-
	Campaspe	110.9	1.7	-	NA	23.0	16.0	1.0	152.6	152.6	-
	Goulburn	1,551.6	28.8	-	NA	47.0	39.0	23.0	1,689.4	1,689.4	-
	Kiewa	-	11.0	-	NA	2.1	4.5	7.0	24.6	24.6	-
	Loddon Ovens	88.6 25.4	- NA	-	NA	59.0	26.0 17.0	5.0	178.6	178.6 83.4	-
	Victorian Murray	1,662.1	NA	-	NA NA	9.0 13.0	17.0	32.0 22.0	83.4 1,707.1	03.4 1,707.1	-
	total southern Basin Victoria zone	3,451.8	41.5	-	-	172.1	123.5	103.0	3,891.9	3,891.9	-
	South Australia										
	Eastern Mount Lofty Ranges <sup>(7)</sup>	-	15.3	-	-	9.8	-	3.2	28.3	28.3	-
	South Australian Murray <sup>(7)</sup>	-	681.1	-	-	-	-	-	681.1	665.0	16.1
	Marne Saunders <sup>(7)</sup>	-	-	-	-	2.9	-	0.1	3.0	2.9	0.1
	SA Non-Prescribed Areas <sup>(8)</sup>	-	-	-	-	55.2	-	-	55.2	3.5	51.7
	total southern Basin South Australia zone	-	696.4	-	-	67.9	-	3.3	767.6	699.7	67.9
total sout	thern Basin (ex disconnected)	7,144.5	850.7	-	-	654.7	180.3	257.3	9,087.5	9,017.4	70.1
DISCON	INECTED TRIBUTARIES										
	Lachlan	286.7	15.7	-	NA	230.0	57.0	29.0	618.4	618.4	-
	Wimmera-Mallee (surface water) <sup>(3)</sup>	66.9	1.3	-	1.1	13.1	11.0	5.7	99.1	128.5	- 29.4
TOTAL		8,614.2	2,173.5	250.5	11.7	1,784.8	544.4	344.0	13,723.1	13,623.1	100.0
	BDL:										
	Interceptions					1,784.8	544.4	344.0	2,673.2	2,736.2	- 63.0
	Watercourse diversions	8,614.2	2,173.5	250.5	11.7				11,049.9	10,886.9	163.0
									13,723.1	13,623.1	100.0

N/A = Authority is yet to estimate this take

(1) current estimate of BDL calculated at 19 September 2019 for water year 2019/20 :

- where a water resource plan has been accredited, the estimates from that WRP are used

- in the ACT, a Basin Plan amendment made in 2018 increased the BDL estimate for take from a watercourse

- work done by NSW DPI to update long term diversion limit equivalent (LTDLE) factors in 2018 improved the BDL estimate for Intersecting Streams SDL resource unit

- otherwise the estimate is from the Basin Plan as originally prepared in 2012.

See notes (3) to (7) below

(2) original estimates of BDL made by the Authority in 2012 and published in Schedule 3 of the Basin Plan

(3) improved estimate of the BDL as per accredited Condamine-Balonne, Queensland Border Rivers - Moonie, and Wimmera-Mallee (surface water) water resource plans. These plans were accredited by the relevant Commonwealth Minister on 18 September 2019.

(4) improved estimates of the BDL as per accredited Warrego-Paroo-Nebine Water Resource Plan. The plan was accredited by the relevant Commonwealth Minister on 18 June 2017.

(5) As part of NSW's 2018 work to improve long term diversion limit equivalent (LTDLE) factors, work was completed to better understand diversions in the Warrego River that form part of the Intersecting Streams SDL resource unit. A water recovery factor was calculated for an *additional special high flow class* entitlement based on an improved estimate for *take from a watercourse*. Consistent with that work, the improved estimate of BDL for that form of take for the Intersecting Streams BDL is presented here. Further information about the improved estimate is available from NSW DPI web site https://www.industry.nsw.gov.au/water/plans-programs/water-resource-plans/ltdle-cap-factors

(6) improved estimate of the BDL as per Basin Pan Amendment Instrument (No.1) 2018.

ACT advised an improved description of the baseline diversion limit is available due to population growth up to 30 June 2009 (0.5GL per year), The Living Murray contributions made by the ACT (2 GL per year) and new information on historic Commonwealth water use within the ACT (0.2 GL per year). This updates the Authority's estimate of the BDL from 40.5 GL per year to 42.7 GL per year.

(7) improved estimate of the BDL as per accredited Eastern Mount Lofty Ranges and South Australian River Murray Water Resource Plans. The plans were accredited by the relevant Commonwealth Minister on 13 November 2019.

(8) improved estimate of the BDL as per accredited South Australian Murray Region Water Resource Plan. The plan was accredited by the relevant Commonwealth Minister on 20 August 2019.

#### Murray-Darling Basin Sustainable Diversion Limits - estimate for 2019 / 2020 water year

These estimates apply for the 2019/20 water year and were calculated at 27 November 2019. These estimates are subject to change as new information is available.

	SDL Resource Unit (within zones)	Baseline Diversion Limit <sup>(1)</sup> (GL/y)	local reduction amount <sup>(2)</sup> (GL/y)	shared reduction amount <sup>(3)</sup> (GL/y)	SDL adjustment amount at 30 June 2019 <sup>(4)</sup> (GL/y)	SDL - after SDLAM adjustment at 30 June 2019 <sup>(5)</sup> (GL/y)
ORTHERN						
	Queensland					
	Condamine-Balonne	1,019.0	100.0	-	-	919.0
	Moonie	92.0	-	2.1	-	89.9
	Nebine	20.9	1.0	2.8	-	17.1
	Paroo	11.8	-	-	-	11.8
	Queensland Border Rivers	377.6	14.0	-	-	363.6 55.5
	Warrego total northern Basin Queensland zone	75.6 <b>1,596.9</b>	8.0 <b>123.0</b>	12.1 <b>17.0</b>	-	55.5 1,456.9
	total northern basin Queensianu zone	1,550.9	123.0	17.0	-	1,430.9
	Northern New South Wales					
	Barwon-Darling Watercourse	198.0	32.0	-	-	166.0
	Gwydir	450.2	42.0	7.6	-	400.6
	NSW Border Rivers	302.6	7.0	-	-	295.6
	Intersecting Streams	127.8	-	13.8	-	114.0
	Namoi	508.3	20.0	-	-	488.3
	Macquarie-Castlereagh	734.3	55.0	2.6	-	676.7
	total northern Basin New South Wales zone	2,321.2	156.0	24.0	-	2,141.2
otal northe	ern Basin	3,918.1	279.0	41.0	-	3,598.1
OUTHERN	PACIN					
JUTHERN	Southern New South Wales					
	Lower Darling	60.5	8.0	14.3	-	38.2
	Murrumbidgee - NSW	2,501.1	320.0	277.9	145.7	2,048.9
	NSW Murray	1,811.7	262.0	165.8	112.3	1,496.2
	total southern Basin NSW zone	4,373.3	590.0	458.0	258.0	3,583.3
	АСТ					
	ACT (surface water)	54.7	-	4.9	-	49.8
	total southern Basin ACT zone	54.7	-	4.9	-	49.8
	VICTORIA					
	Broken	56.2	-	1.3	1.0	55.9
	Campaspe	152.6	18.0	13.2	2.3	123.7
	Goulburn	1,689.4	344.0	186.4	157.0	1,316.0
	Kiewa	24.6	-	1.1	1.2	24.7
	Loddon	178.6	12.0	9.8	9.8	166.6
	Ovens	83.4		2.7	2.7	83.4
	Victorian Murray	1,707.1	253.0	210.8	65.5	1,308.8
	total southern Basin Victoria zone	3,891.9	627.0	425.3	239.5	3,079.1
	SOUTH AUSTRALIA					
	Eastern Mount Lofty Ranges	28.3	-	-	-	28.3
	South Australian Murray	681.1	- 101.0	- 82.8	- 45.5	542.8
	Marne Saunders	3.0	-	-		3.0
	SA Non-Prescribed Areas	55.2	-	-	-	55.2
	total southern Basin South Australia zone	767.6	101.0	82.8	45.5	6 <b>29.</b> 3
otal southe	ern Basin (ex disconnected)	9,087.5	1,318.0	971.0	543.0	7,341.5
						.,
ISCONNEC		C10 4	10 0			E70 4
	Lachlan	618.4	48.0	-	-	570.4
	Wimmera-Mallee (surface water)	99.1	23.0	-	-	76.1

Notes

The Basin Plan (Schedule 2) expresses the SDL for surface water SDL resource units as:

SDL = BDL - local reduction amount - shared reduction amount + SDL adjustment amount

(1) - Baseline diversion limit (BDL) as estimated by the Authority and published in Basin Plan Schedule 3, or

- as improved by a Basin State and settled in an accredited water resource plan. Currently: Condamine-Balonne, Moonie, Nebine, Paroo, Warrego and Queensland Border Rivers (all Queensland), Wimmera-Mallee (Victoria), and SA Non-Prescribed Areas SDL resource units have been revised from the estimates in Schedule 3

- a legislative amendment in 2018 (Basin Plan Amendment Instrument (No.1) 2018) for the ACT, increased the BDL estimate for take from a watercourse

- work done by NSW DPI to update long term diversion limit equivalent (LTDLE) factors in 2018 improved the BDL estimate for Intersecting Streams SDL resource unit

For 2019/20, as other Water Resource Plans are accredited the SDL may change reflecting improvements in the estimate of the BDL.

More detail about BDLs can be found at: https://www.mdba.gov.au/basin-plan-roll-out/sustainable-diversion-limits, under More Information

(2) - local reduction amount as set out in Basin Plan Schedule 2. This includes amendments to the Basin Plan that commenced in law on 3 July 2018 to increase the northern Basin local reduction amount from 247 GL/y to 279 GL/y, as a result of the Northern Basin Review (Basin Plan Amendment Instrument (No.1) 2018).

(3) - shared reduction amount as set out in Basin Plan s6.05. This includes amendments to the Basin Plan that commenced in law on 3 July 2018 to decrease the northern Basin shared reduction amount from 143 GL/y to 41 GL/y, as a result of the Northern Basin Review (Basin Plan Amendment Instrument (No.1) 2018). The amendment also extended the time for a Basin state to request a re-allocation of the shared reduction amount within a Basin zone, to 31 December 2018. New South Wales, Queensland, South Australia and Victoria made requests to re-allocate the shared reduction amount in their zones. Following consultation with Department of Agriculture and Water Resources, the Authority agreed to these requests (where relevant) on 12 March 2019. All shared reduction amount requests are now applied in the table.

(4) - SDL adjustment amount as determined by the MDBA based on the Sustainable Diversion Limit Adjustment Mechanism (SDLAM) amendment instrument that commenced in law on the 13 January 2018. The SDL reflects supply contributions, efficiency contributions and the application of the net 5% limit rule. As efficiency projects are completed and entitlements are registered with the Commonwealth Environmental Water Holder, the SDL adjustment amount will change. This column reflects the SDL adjustment amount as determined on the basis of efficiency entitlements held at 30 June 2019 (Table B). When planning assumption work is completed this may affect the long term average quantity of water that is available under the registered efficiency entitlements, and the SDL adjustment amount. Further information about supply and efficiency projects can be found at https://www.mdba.gov.au/basin-plan-roll-out/sustainable-diversion-limits/sdlam, including the *register of sustainable diversion limit adjustment measures* (Table B) available at https://www.mdba.gov.au/basin-plan-roll-out/sustainable-diversion-limits/sdl-adjustment-proposals-state-projects

(5) - SDL after SDLAM adjustment - this is the sustainable diversion limit (SDL) volume at 30 June 2019 and calculated by deducting from the BDL, the local reduction amount, shared reduction amount, and adding the SDL adjustment amount. The SDL value is expected to change through to 2024, as efficiency projects deliver environmental entitlements, and improved estimates of BDLs are adopted when a WRP is accredited.