



Australian Government



# River Murray deliverability shortfall response plan

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The Murray–Darling Basin Authority pays respect to the Traditional Owners and their Nations of the Murray–Darling Basin. We acknowledge their deep cultural, social, environmental, spiritual and economic connection to their lands and waters.

The guidance and support received from the Murray Lower Darling Rivers Indigenous Nations, the Northern Basin Aboriginal Nations and our many Traditional Owner friends and colleagues is very much valued and appreciated.

Aboriginal people should be aware that this publication may contain images, names or quotations of deceased persons.

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# Introduction

The primary purpose of this document is to describe the arrangements for the coordinated response to a shortfall in the River Murray system.

This edition of the plan will focus on Delivery Shortfalls in situations where the Menindee Lakes are not under Murray–Darling Basin Authority (MDBA) control, as this is considered the most likely shortfall risk at the present time. Future versions will be expanded to cover System Shortfalls and Delivery Shortfalls where the Menindee Lakes are under MDBA control.

This plan is one of a number of coordinated plans which together guide the joint response to a shortfall. Each state will have their own shortfall plans describing their response at both a state and local level. It is anticipated that these plans cover not only the actions which will be taken but also how they will be communicated.

A Delivery Shortfall occurs when demands exceed those anticipated when releases were made several weeks earlier and there is insufficient water in transit to meet all demands. For a full introduction and discussion of shortfalls, the risk and causes see *Managing Delivery Risks in the River Murray system*. For further information on the conditions contributing to shortfalls see *Assessing the Risk of Shortfall*.

It is important to note that Delivery and System shortfalls are not related to availability issues, sometimes referred to as a Water Availability Shortfall. Water Availability is a separate issue and not covered in this plan.

## Alert levels

A 3-tiered alert system, based on thresholds, is used to assess and communicate the level of shortfall risk. When flows are higher than these alert levels, the risk of shortfall is considered minimal.

The alert system is based on comparing the anticipated demands to the forecast flows at a series of points along the river. The points chosen are the Wakool Junction, Euston Weir and Wentworth Weir.

## Demands and inflows

The demands are broken into several categories. The first is the steady demands, which are the demands which show little or no variation in the short term. These demands are the minimum flow required over that point, which should be maintained even during a shortfall event, and environmental orders. Environmental orders are considered to be a Steady Demand as they are known well in advance and show little variability on a day to day basis (compared to irrigation diversions).

The second demand is the Variable Demand. This is made up of the forecast underlying diversions and conveyance requirements. Both of these show high levels of variation on a daily basis, although over a longer term the underlying trend is relatively steady.

The next demand is the variation buffer. This is an allowance to account for the day to day variation in diversions and conveyance from the underlying values. This has been set at the 99th percentile of variation for both currently.

The final demand is the additional buffer. This is an additional buffer to separate the point where demands are just able to be met to the point they are comfortably being met. This has been set to 20% of all demand currently. This is not a physical volume of water required to be sent down the river, rather it is used to gauge how much flows exceed demand by.

Inflows are the forecast inflow in the Murray at the top of each reach plus any tributary inflows which occur in the reach.

## Alerts

The Red Alert zone is defined as inflows not sufficient to meet the Steady Demands, Variable Demands plus 50% of the Variation Buffer. At this point, over a series of days, not all demands will be met (even though they may be on individual days due to the variability of demands).

The Orange Alert zone is defined as inflows not sufficient to meet the Steady Demands, Variable Demands plus 100% of the Variation Buffer. At this point all demands can be met over a period of days, but there will be days where they are not all met.

The Yellow Alert zone is defined as inflows sufficient to meet the Steady Demands, Variable Demands plus 100% of the Variation Buffer and the Additional Buffer. At this point all demands are met, however the margin is not large.

Above this point there is sufficient inflows to meet all demands by a considerable margin and flows above this point provide negligible risk of shortfall (Green zone).

Figure 1 gives a hypothetical example of how the alert levels are determined from the known demands and buffers.

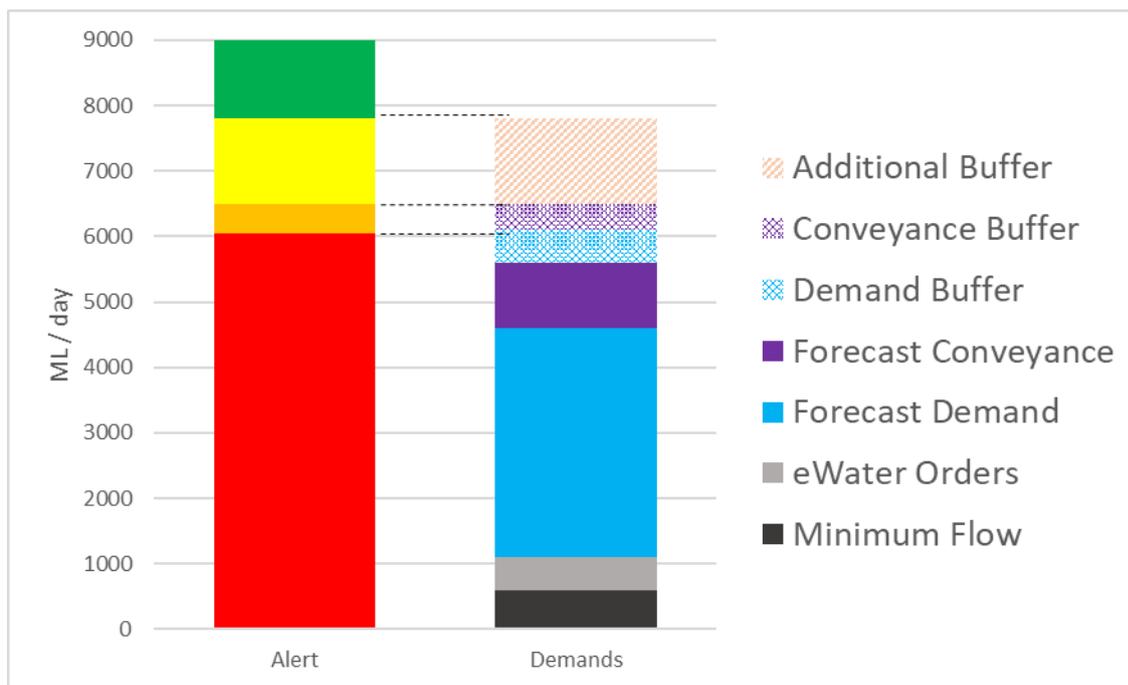


Figure 1 example showing how Alert levels are calculated from demands and buffers; values shown for illustrative purposes only

The Minimum Flow and Variation Buffer used to make up the alert levels is shown for each reach of interest in Table 1. The Variation Buffers were determined according to the report *Assessment of Daily Diversion and Conveyance Variation 2019/20*. These buffers will continue to be refined and updated as future data becomes available. The other components (environmental orders, underlying diversion demand and conveyance) are determined at the time, as are the inflows.

Table 1 Alert level components

Reach	Steady Demand	Variable Demand	Variation Buffer (ML / day)
<b>Wakool Junction to Euston</b>	All environmental orders Wakool Junction to South Australia (SA) Border + 1,050 ML / day minimum flows	All forecast conveyance and diversion Wakool Junction to SA Border	310 – Diversions 322 – Conveyance
<b>Euston to Wentworth</b>	All environmental orders Euston to SA Border + 1,050 ML / day minimum flows	All forecast conveyance and diversions Euston to SA Border	507 – Diversions 433 – Conveyance
<b>Wentworth to SA Border</b>	All environmental orders Wentworth to SA Border + 1,050 ML / day minimum flows	All forecast conveyance and diversions Wentworth to SA Border	76 – Diversions 447 – Conveyance

Note that these thresholds only apply during the peak demand period (generally November to March), and outside of this period they may be exceeded without the risk of a shortfall developing.

# Mitigation options

There are a number of potential mitigation measures which should be considered by river operators in conjunction with WLWG which may help avoid or alleviate a potential shortfall. These measures are summarised in Table 2, with further details available in the report *Shortfall Mitigation Measures*. Note that there may be further mitigation measures available in any specific scenario which are not listed here which should also be considered.

In considering these measures it is important to take the current and forecast situation into account, and to recognise that not all measures may be appropriate in all situations. Furthermore, many of these measures are by their nature one-off measures which may only be available once in a season. Not all of these measures are likely to be available to river operators at any given point in time.

A further point of note is that the mitigation measures can be applied to varying degrees. It is expected that the river operators will liaise with WLWG and the relevant State Constructing Authority to determine which measures can be applied and to what degree, taking into account all of the conditions at the time of the shortfall incident.

Table 2 Potential mitigation measures

Measure	Level compared to Full Supply Level (cm)	Potential volume (GL)	Potential flow rate (ML/day)	Travel time to Wakool Junction under regulated flow conditions	Comments
<b>Reduce Diversion to National Channel</b>	n/a	n/a	3,800	5 – 6 days	Requires to discussion with Goulburn Murray Water. Can be used in isolation or in harmony with releases from Victorian Mid Murray Storages.
<b>Lower Torrumbarry Weir (Lock 26)</b>	-15 -40* -55 Weir removed	1.1 3.1 4.2 35.0	n/a	5 – 6 days	Fishway functionality impacted at -10 cm. Capacity to reduce the pool level is dependent on the diversion rate targeted at National Channel.
<b>Manipulate Euston Weir Level (Lock 15)</b>	+50** +20* -20* -40** -150** Weir removed	7.1 2.8 2.7 5.0 17.7 34.0	n/a	n/a	Raising pool level > 20 cm above FSL will likely incur significantly higher losses as water flows into Euston Lakes. Fishway functionality may be impacted depending on upstream and downstream levels.
<b>Manipulate Mildura Weir Level (Lock 11)</b>	+10** -25* -40** -200** Weir removed	0.8 2.3 3.4 12.6 34.0	n/a	n/a	
<b>Manipulate Wentworth Weir Level (Lock 10)</b>	+10* -10* -25* Weir removed	1.4 1.4 2.8 47.0	n/a	n/a	During periods of no flow in the Darling River, Wentworth Weir Pool represents the only water source for irrigators on lower Darling arm of the weir pool. Fishway functionality may be impacted depending on upstream and downstream levels.
<b>Manipulate Kulnine Weir Level (Lock 9)</b>	+25** +10* -20* -40**	3.7 1.5 3.0 5.8	n/a	n/a	Lake Cullulleraine pump, servicing the Millewa Waterworks District, loses access when pool level reduces beyond 10 cm below FSL. Fishway functionality may be impacted depending on upstream and downstream levels.
<b>Manipulate Wangumma Weir Level (Lock 8)</b>	+30** +10* -30 Weir removed	1.4 0.5 1.9 16.0	n/a	n/a	Flow into Potterwalkagee Creek ceases when pool level drops beyond 40 cm below FSL. Fishway functionality may be impacted depending on upstream and downstream levels.
<b>Manipulate Rufus River Weir Level (Lock 7)</b>	+20* -10* -60** -90**	1.0 0.5 2.4 3.6	n/a	n/a	Raising the pool by 20 cm may slightly increase losses with water flowing into the Lindsay River. 60 cm below FSL can maintain a minimum flow of 600 ML/day in Mullaroo Creek for ecological purposes. This can potentially be reduced to 90 cm below FSL for a short period while maintaining a flow of 400 ML/day to Mullaroo Creek. Fishway functionality may be impacted depending on upstream and downstream levels.

Measure	Level compared to Full Supply Level (cm)	Potential volume (GL)	Potential flow rate (ML/day)	Travel time to Wakool Junction under regulated flow conditions	Comments
<b>Request Release Kow Swamp</b>	n/a	15.0	600	5 – 6 days	Salinity issues to be considered, slow fill rate means possibly one time use per season. Maximum delivery rate 700 ML/day at Kerang Weir (100 ML/d is the normal operational flow so the additional volume is limited to 600 ML/day).
<b>Request Release Lake Charm</b>	n/a	6.0	150	5 – 6 days	Slow fill rate means possibly one time use per season.
<b>Request Release Kangaroo Lake</b>	n/a	6.0	610	5 – 6 days	Slow fill rate means possibly one time use per season.
<b>Request Release Lake Boga</b>	n/a	21.0	500	5 – 6 days	Slow fill rate means possibly one time use per season.
<b>Inter Valley Trade NSW</b>	n/a	n/a	1,500	3 – 4 weeks	May be able to call pulse up to 3,000 ML/day. May be able to deliver from in-stream weirs and backfill from storages to reduce travel time.
<b>Inter Valley Trade VIC</b>	n/a	n/a	2,650	17 – 18 days	May be able to start from Goulburn Weir at lower rate which will arrive 2 – 3 days earlier.

*\*Within normal operational range.*

*\*\*Requirements for special approvals that may include SCA, WLWG or BOC*

# Actions

There are 2 independent stages in this plan, the alert levels which indicate the risk of a delivery shortfall and the implementation steps which are activated when a decision is made to implement restrictions.

The 3 alert levels (plus green, representing normal operations) outline the preparatory steps which will be taken as the risk of shortfall increases, while the action steps outline the actions to be taken at the various stages of managing a shortfall event. The relationship between the stages is shown in Figure 2. Some actions are repeated in both the alert levels and implementation steps as the plan is written in such a way to allow restrictions to be implemented sooner than the red alert level, if this is deemed the most appropriate course of action.

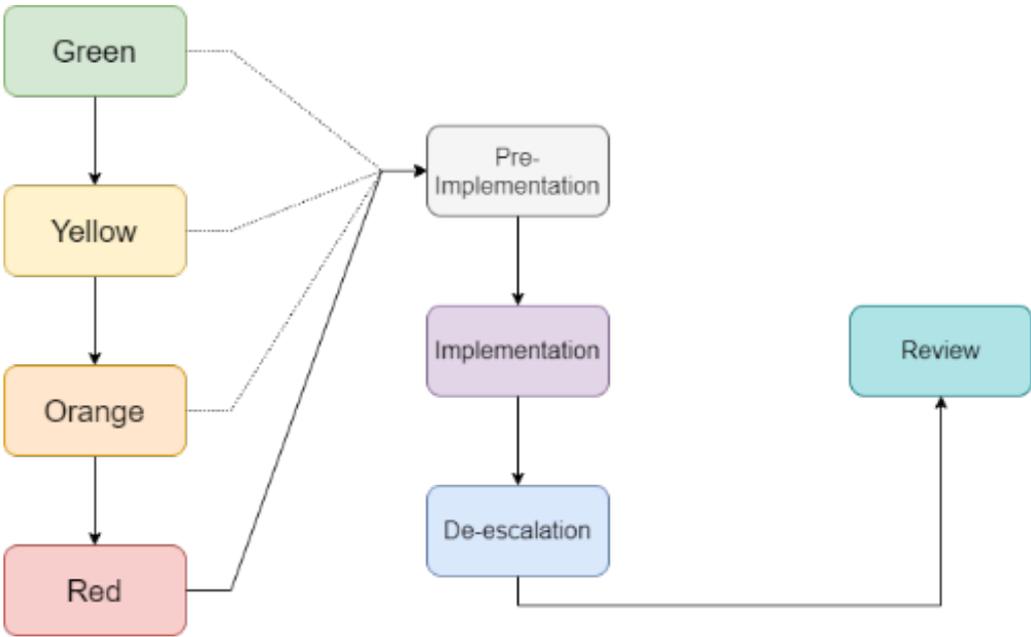


Figure 2 Flow chart of alert levels and actions described in this plan

The alert levels are described in a previous section. The implementation stage is broken into 3 steps – prior to restrictions being implemented, the implementation of restrictions and finally the de-escalation stage as restrictions are removed. At the completion of a shortfall event a review will be undertaken.

## Alert levels

The actions to be undertaken at each of the alert levels is shown in Table 3. It is important to note that nothing in this plan prevents actions being taken at a different alert level than shown here, if this is considered to be the best course of action. The purpose of the alert levels is to indicate the level of risk of a shortfall occurring – they do not indicate that a shortfall is occurring or that restrictions should be imposed.

In some circumstances an alert level may be skipped. In this case, its actions should be undertaken in conjunction with the next alert level.

It is not necessary to work through all the alert levels before moving to the implementation steps. If conditions warrant a move to the first implementation step (Pre-Implementation) this can be done at any time.

As the situation moves through the alert levels, the level of communication, both publicly and with relevant jurisdictions, increases. As a general principle the aim should be to provide as much information publicly as soon as possible. However, it is acknowledged that releasing information regarding a potential shortfall will likely lead to an increase in demand as users attempt to “get ahead” of possible restrictions. In some circumstances, where forecasts indicate a shortfall will be narrowly avoided, careful consideration should be given to the likely increase in demand before public statements are made. In these circumstances it may be that making public statements about the risk of a shortfall may turn a ‘near miss’ into a shortfall requiring restrictions, which may have been avoided without a public statement.

The risk of shortfall will be communicated in MDBA’s *River Murray Weekly Report* based on the current alert level at the time of writing. The terms “low”, “moderate” and “high” will be used in place of Yellow, Orange and Red to clearly indicate the level of risk. Outside the period of concern for shortfalls the message will revert to the Green level message that the risk of shortfall is negligible.

The available mitigation measures (see above) are monitored and considered once the Yellow Alert level is reached. Careful consideration should be given to if and when to use the available measures. Most mitigation measures will only be available once during a shortfall event, or even once a season, so they should be timed to ensure the maximum benefit is obtained from their use. Many measures, such as lowering weir pools, involve trade-offs such as impacts on tourism and recreation, which need to be carefully weighed against the benefits of mitigating a shortfall. It may be decided for example not to use some mitigation measures in a minor shortfall early in the season, when the economic impact is projected to be low, to ensure they are available to be used if a more serious shortfall with greater economic impact arises later.

Table 3 Action list for Alert levels

Level	Action	Who	Comments
Green	Operations as usual	All <sup>1</sup>	n/a
	Weekly Report – Shortfall risk ‘negligible’	MDBA	Peak period only to avoid message being ignored?
Yellow	Inform WLWG members have entered yellow alert phase	MDBA	n/a
	Update WLWG as required	MDBA	Provide updates at fortnightly WLWG meetings and as situation changes
	Compile snapshot of available mitigation measures & potential volumes	MDBA	Continue to review regularly until risk of shortfall is passed
	Weekly Report – Shortfall risk “low”	MDBA	n/a
Orange	Immediate WLWG Meeting	WLWG	Discuss situation & forecasts. Consider whether restrictions may be applied and the best time to apply them
	Inform RMOc	MDBA	n/a
	Investigate options for reducing demand	All	Speak with key users, consumptive and environmental, to ascertain their projected demands and what capacity they have to reduce demands to avert a shortfall
	Consider use of mitigation measures	WLWG	Consider available mitigation options and appropriate time to use
	Consider media release	WLWG	Consider the likely impacts of making a media release under the current circumstances, and whether it could help users to prepare or risks increasing the risk of shortfall by increasing demand
	Weekly Report – Shortfall risk “moderate”	MDBA	n/a
Red	Prepare to restrict diversions	States	n/a
	Daily meetings of WLWG+	WLWG	WLWG+ refers to core WLWG member plus appropriate operational & comm’s staff from partner agencies as observers
	Inform BOC	MDBA	n/a
	Update RMOc	MDBA	RMOc kept informed on a regular basis

<sup>1</sup> All in this table refers to all jurisdictions – MDBA, Commonwealth, Victoria, New South Wales and South Australia

Level	Action	Who	Comments
	Consider use of mitigation measures	WLWG	Consider available mitigation options and appropriate time to use
	Decision on whether and when to implement restrictions	WLWG	Decision to be made on whether restrictions need to be imposed, and if so when is the appropriate time to impose them
	Decision on sharing of restriction between states	BOC (with RMOC advice)	If no agreement has been reached beforehand a decision needs to be made as to how the restriction will be shared amongst states. Seek RMOC advice before referring to BOC for decision.
	Weekly Report – Shortfall risk “high”	MDBA	n/a
	Media release	MDBA	Outline the situation, the likely duration of any shortfall, and if restrictions are to be imposed that these will be communicated by the states

## Implementation steps

The Implementation Steps are shown in Table 4. These steps are designed to be implemented in a sequential fashion. Some actions also occur in the alert level action list as, depending on circumstances, it might be agreed to prepare for or implement restrictions before the orange or red alert levels are reached.

During a shortfall event where a decision has been made to implement restriction, WLWG will meet daily to discuss the situation and agree on any required changes to system operation, including changes to the level of restrictions required. Key operational and communications staff from partner agencies will be invited to attend as observers (referred to as WLWG+ in the action list). This will allow WLWG to obtain on the ground operational information directly from the source if requested, and also allow communications staff to be getting information first-hand.

Careful consideration should be given to where and when to impose restrictions. While the shortfall may be forecast to occur in only a small number of reaches, forecast demand in reaches upstream and downstream may contribute to the shortfall. Restrictions should be considered on reaches up and downstream of the problem reaches, if this is likely to reduce the impact on the problem reaches, however reaches should not be restricted if doing so will have no impact on the shortfall.

Timing of any restrictions also needs to be considered. Depending on the time of year a longer period of lighter restrictions may be preferable to a shorter period of heavy restrictions. This will depend on the circumstances at the time of the event, and will be based on likely impacts, crop development stages, weather forecasts and a range of other factors.

A prompt decision on how restrictions will be shared between states is crucial to allowing users to be forewarned and prepared. Once agreed the available volume for diversion in each reach will be apportioned to states. States will be clearly informed of the volume they can extract in each reach over a given period.

MDBA will monitor conditions and forecasts closely. If the situation changes and the volume available for diversion is revised by WLWG the volume apportioned to states will also be revised. Care should be given when revising the volumes available that it is not done too frequently as this could lead to confusion amongst users as to how much they are entitled to take.

When conditions improve sufficiently that restrictions are no longer required, consideration should be given to how quickly restrictions are eased. There is likely to be considerable pent-up demand as irrigators attempt to replenish accumulated soil water deficits and dams, and if not carefully managed this may lead to another shortfall when restrictions are eased. States will communicate with users to estimate the likely pent-up demand and communicate this to WLWG, who will take this into consideration when determining how and when to lift restrictions. A staged lifting should be considered if circumstances warrant.

Table 4 Action list for Implementation steps

Steps	Action	Who	Comments
Pre-Implementation	WLWG+ meet daily	WLWG	Additional attendees to be determined by the WLWG members.
	Briefings	All	Appropriate stakeholders (internal & external) as per shortfall response plans
	Notify jurisdictions of any changes to circumstances	MDBA	n/a
	Consider use of mitigation measures	WLWG	Consider available mitigation options and appropriate time to use
	Investigate options for reducing demand	All	Speak with key users, consumptive and environmental, to ascertain their projected demands and what capacity they have to reduce demands to avert a shortfall
	Forecast magnitude & duration of shortfall	MDBA	Communication to Jurisdictions on what resource will be available
	Decision on sharing of restriction between states	BOC (with RMOC advice)	If no agreement has been reached beforehand a decision needs to be made as to how the restriction will be shared amongst states. Seek RMOC advice before referring to BOC for decision.
	Notification via Media Release, Social Media etc of upcoming shortfall	MDBA	MDBA notifies that a shortfall is predicated to occur and states will advise users how they will be impacted
	Implement State response plans	States	n/a
	Nominate key contact person	All	All jurisdictions to nominate a key contact person to ensure clear lines of communication
Implementation	WLWG+ meet daily	WLWG	n/a
	Briefings	All	Appropriate stakeholders (internal & external) as per shortfall response plans
	Notify jurisdictions of any changes to circumstances	MDBA	
	Consider use of mitigation measures	WLWG	Consider available mitigation options and appropriate time to use
	Monitor conditions and forecasts	MDBA	n/a
	Monitor extractions closely	MDBA	n/a

Steps	Action	Who	Comments
Implementation	Monitor & reassess availability	WLWG	Assess if levels of restrictions need to be altered, being mindful not to change too often to avoid confusing users. MDBA provide recommendations to WLWG
	Inform all users a shortfall is occurring	States	Including irrigators, environmental, community, cultural etc.
	Inform public a shortfall is occurring	MDBA	Refer to states for details on restrictions & implementation
	Apportion available resource amongst states	MDBA	Apportion according to agreed sharing mechanism. Clearly inform states how much they can take by reach
	Apportion State shares amongst users	States	n/a
	Inform users of their permitted take	States	n/a
	Monitor and enforce user compliance	States	n/a
	Communicate with the public regularly & when situation changes	All	Media releases, social media etc.
De-Escalation	WLWG+ meet daily	WLWG	n/a
	Briefings	All	Appropriate stakeholders (internal & external) as per shortfall response plans
	Notify jurisdictions of any changes to circumstances	MDBA	n/a
	Consider use of mitigation measures	WLWG	Consider available mitigation options and appropriate time to use
	Quantify expected demand as restrictions ease	States	Consult with users on “pent up” demand which is likely to occur when restrictions eased
	Consider a staged easing of restrictions in light of demands	WLWG	Consider whether “pent up” demand could lead to another shortfall if restrictions eased too quickly
	Notify jurisdictions restrictions no longer required	MDBA	n/a
	Notify all users restrictions are no longer required	States	n/a
	Notify BOC & RMOC shortfall is complete	MDBA	n/a
	Notify public shortfall is complete	MDBA	Media releases, social media etc.

# Communications

Clear, consistent and co-ordinated communications by all parties will be vital to successfully managing a shortfall. Figure 3 gives an overview of the communications responsibilities. MDBA is responsible for communications relating to system operations and to the general public, states are responsible for communicating to their users how they will be impacted and the various agencies/organisations under the states are responsible for communicating directly with individual users.

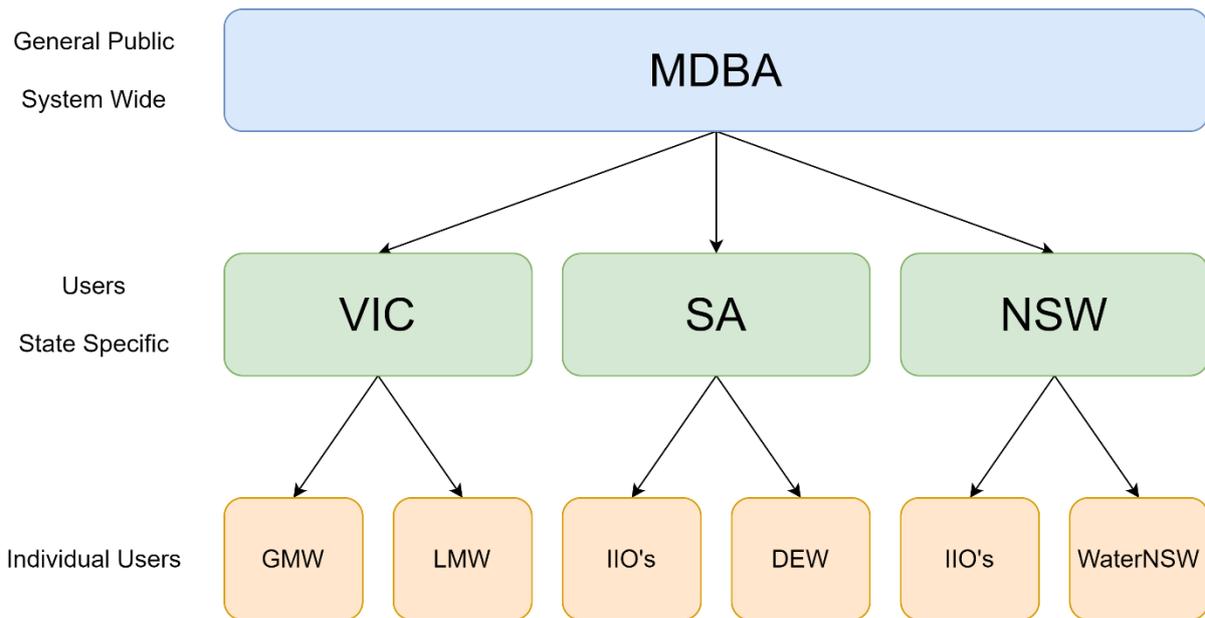


Figure 3 Communications overview

It is vital that communications are aligned across all jurisdictions to avoid mixed and confusing messages. It is common for irrigators to irrigate in multiple jurisdictions, and they need to be receiving consistent messages from each. Communications will be primarily operational in nature. It is recommended that communications staff from relevant agencies attend the daily WLWG+ meetings as observers so they are receiving information and messages firsthand.

Any communications should be shared amongst jurisdictions before being released. Given the nature of a shortfall, deadlines may be tight, and all jurisdictions must commit to reviewing and responding to any proposed communications promptly. Ideally these will have been either discussed at or based on outcomes of the daily WLWG+ meeting, so all parties are pre-warned.

MDBA communications will be focussed on the operational situation in the River Murray and the risk of shortfall or that a shortfall is occurring. It will direct readers to state communications for information about how they will be impacted. During a shortfall, MDBA will communicate updates on the situation and direct readers to state communications for updates on changes on how they are affected. MDBA will advise when the shortfall has ended, and normal operations have recommenced.

# State response plans

Each State and the MDBA are responsible for developing and maintaining their own Shortfall Response Plans, which will fit under this over-arching plan. The state plans will describe how they will undertake their actions in this plan, including calculating, informing and implementing restrictions at the individual user level as well as ensuring compliance. State plans will also describe how they will communicate as per this plan.

A brief summary of each of the state plans is provided in Table 5. This is only a high-level overview, for further detail refer to the individual plans.

Table 5 Overview of State Response Plans

Insert column title	Victoria	South Australia	New South Wales
<b>Plan Name</b>	Victorian River Murray Shortfall Response Plan	South Australian River Murray Shortfall Management Plan	n/a
<b>Current Version</b>	Draft	Commenced development	n/a
<b>Nominated contact</b>	Victorian Shortfall Co-ordinator	TBD	n/a
<b>WLWG+ observers</b>	Operational staff from GMW & LMW Communications staff from DELWP, GMW & LMW Policy staff from DELWP	Operational staff from DEW and SA Water Communications staff from DEW Policy staff from DEW	n/a
<b>Method for apportioning restrictions</b>	Agreement in place to share between GMW & LMW Restrictions based on extraction share for private diverters and delivery share within districts	Under development	Based on forward orders, if orders exceed NSW share of capacity orders will be revised downwards
<b>Methods for monitoring compliance</b>	Take monitored via telemetered meters (GMW districts, LMW districts & diverters) GMW diverters via field staff	Under development	Delivered by NRAR, to be determined
<b>Communication process</b>	NVRM inform LMW & GMW of their share GMW & LMW communicate direct to their customers – SMS, direct calls / emails, ordering systems etc	Email, social media & local radio	Water Information Statements Customer notices Social Media & subscription services

# List of abbreviations

Abbreviation	Definition
<b>BOC</b>	Basin Officials Committee
<b>IIO</b>	Irrigation Infrastructure Operator
<b>MDBA</b>	Murray–Darling Basin Authority
<b>MinCo</b>	Ministerial Council
<b>RMOC</b>	River Murray Operations Committee
<b>WLWG</b>	Water Liaison Working Group

## Further information

Two reports have been prepared in conjunction with the Shortfall Response Plan to assist in its development.

*Shortfall Mitigation Measures* provides the basis for Table 2 outlining the potentially available mitigation measures. It provides further details on these measures and any considerations regarding their use.

*Assessment of Daily Diversion and Conveyance Variation 2019/20* provides the Variation Buffers for each reach and explains in detail how these were developed. This approach will be further refined when data from subsequent seasons becomes available, and these buffers will continue to be updated.

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**Office locations – First Nations Country**

**Adelaide** – *Kurna*

**Canberra** – *Ngunnawal*

**Goondiwindi** – *Bigambul*

**Griffith** – *Wiradjuri*

**Mildura** – *Latji Latji*

**Murray Bridge** – *Ngarrindjeri*

**Toowoomba** – *Jarowair and Wakka Wakka*

**Wodonga** – *Dhudhuroa*

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