

Water Allocation Plan for the River Murray Prescribed Watercourse Water Level Variability and Pumping Infrastructure



Background

The River Murray has historically been managed through a system of dams and weirs to maintain the water at fixed levels to ensure a reliable supply of water for irrigation, industrial use and stock and domestic use. While this way of managing the river provides a secure water supply to support industries and the growth of communities, it has had negative impacts on the health of the river system.

A healthy River Murray requires changes to water levels and flow, to allow water and nutrients to move between the river channel and the floodplain. This helps plants to thrive and supports the breeding of many iconic animal and fish species.

Significant investment in water for the environment and infrastructure means that river operators can now change the way water is delivered to provide for greater variability. By manipulating water flow and weir pool levels to provide variability, the health of wetlands, floodplains and backwaters can be improved. Many other environmental

projects are also underway to improve the health of the river environment.

At the same time, water users need to be able to access water through pumping equipment. Most pumping equipment on the River Murray has been designed to take water from a specific location within a limited range of water levels. This will need to change over time to ensure pumping infrastructure can access water at various levels.

Anabranches and backwaters are likely to be more at risk of water quality or access issues because of changing water levels, when natural low flow conditions like drought occur, or when the weir pool is lowered. It is important to protect existing users who have pumping infrastructure (commonly known as offtakes) on anabranches and backwaters by reducing the impacts of water level raising and lowering events and by limiting the number of new offtakes in these vulnerable locations.



The Plan sets out the rules for offtakes on the river and anabranches and backwaters to support the projects that are helping improve the health of the environment through more variable water levels, and make sure that pump owners can adapt to, and manage within, changing water levels.

What is an anabranch or backwater?

An anabranch is a branch of a watercourse that leaves the main channel then returns to it again or dries up. A backwater is a temporary or permanent body of water that fills from the main river channel, excluding the Coorong, Lake Alexandrina and Lake Albert.

Approvals for offtakes

Offtakes in place to take water from the River Murray are managed through water resource works approvals. An approval is required to construct, maintain or operate any offtakes for the purpose of taking water from the river, whether on the main river channel or on an anabranch or backwater.

If the offtake applies to Crown Land, other approvals may be required. Please contact the Crown Lands team via email DEW.CrownLandsEnquiries@sa.gov.au.

What is included in the Plan?

The water level variability policy aims to support the introduction of variable water levels along the River Murray, and to ensure pumping infrastructure is in a location where water quality and quantity is more reliable.

Pumps on anabranches and backwaters

The Plan prevents new water resource works approvals from being granted on anabranches or backwaters as pumps in these locations may be more vulnerable to losing access to a water source or to a decline in water quality that may result from changing water levels. This also aims to reduce the risk of more water being taken in these locations, which could negatively impact on existing users and the health of the system.

If an anabranch or backwater is over-extracted, the Minister can vary a water resource works approval to address the issue. This allows for water use from backwaters or anabranches to be managed on a case-by-case basis with impacts on the environment and other water users to be considered. This provides a targeted approach to manage problems if they occur.

These limitations also apply to the tributary wetlands of Lake Alexandrina, as the same issues apply in this region.

Upper Pike River Anabranch

The only anabranch where new pumps can be approved is within the Upper Pike River Extraction Management Zone. Stock and domestic pumps will be considered in this area where no other suitable water sources are available. This is because there is more certainty around how water levels will be managed in this area. Conditions will apply to the approval that minimise the impact of pumping equipment on the operation of the Pike Environmental Regulator.

Offtakes below Lock 1

Principles are included to ensure water resource works approval holders downstream of Lock 1 can operate their pumping infrastructure within the levels outlined in the Barrage and Water Level Management Policy.

This is to provide pump owners below Lock 1 with certainty about the how river levels will be managed in this part of the River Murray.

I have an offtake on an anabranch/backwater – what does this mean for me?

If you already have an offtake on an anabranch or a backwater then you can continue to use your offtake as you have done in the past. The volume that you can use will be based on your site use approval and your allocation.

You can change the capacity of your existing pumping equipment as long as it does not result in unacceptable impacts on the environment or other water users.

If your offtake is located within the Upper Pike River Extraction Management Zone, and you use water for irrigation purposes, then it is important that you are aware of a new extraction limit in this zone. Please refer to the Upper Pike River Anabranch Fact Sheet to find out more.

Why can new offtakes be approved on the river channel but not on an anabranch/backwater?

In general, the main river channel provides a more secure source of water while anabranches and backwaters are more affected by changing water levels, either natural (from low inflows or drought) or through river management.

New offtakes on the main river channel are unlikely to impact on other existing users or the environment, as the total volume of water that can be taken from the river is capped. Water quality is also likely to be better in the main river channel.

How will I know when river levels will be raised or lowered?

If your offtake is likely to be affected by an event that raises or lowers the river level, then you will be informed of planned actions well in advance of any activity taking place. Weir pool raising and lowering trials are being managed by the Department for Environment and Water. Local communities and stakeholders will be informed when a raising or lowering event is being considered.

Details of raising and lowering events will also be provided in the weekly River Murray Flow Report, available here: www.environment.sa.gov.au/topics/river-murray/flow-reports

Do I need to apply for a new water resource works approval?

If you have an existing water resource works approval, you don't need to do anything. Your current approval will remain in place and if required, your approval will be reissued later in the year to reflect the new policy in the Plan.

If you would like to install a new offtake, you will need to apply for a water resource works approval.

What happens next?

Trials to raise and lower river levels will continue over the next few years to test the best operating range for the river to improve environmental outcomes and reduce impacts on existing users. Lessons learned will help make decisions around how to manage river levels in the future.

The Plan will be reviewed when required and within the next ten years. This review will take into account the results of the trials and whether the current rules in the Plan are still suitable.

In the meantime, water users should consider this new approach to river management when purchasing or modifying pumping equipment to ensure they can operate effectively under more frequent changing river levels and flows.

I want to find out more about...

Limitations on new pumps on anabranches and backwaters, please contact the DEW Berri Office:

T: (08) 8595 2053

E: dewwaterlicensingberri@sa.gov.au

How to apply for a new water resource works approval, please contact the DEW Berri Office:

T: (08) 8595 2053

E: dewwaterlicensingberri@sa.gov.au

Weir pool raising and lowering, please contact DEW on:

T: (08) 8463 6505

Or visit:

www.environment.sa.gov.au/topics/river-murray/improving-river-health/environmental-projects

The Upper Pike River Anabranch, please refer to the Fact Sheet available on the Natural Resources website:

www.naturalresources.sa.gov.au/rivermurraywap

The Water Allocation Plan for the River Murray Prescribed Watercourse:

T: (08) 8463 6877

E: rmwap.feedback@sa.gov.au

Or visit:

www.naturalresources.sa.gov.au/rivermurraywap