

Chowilla Floodplain Icon Site

2018 Environmental Regulator operations

Planning is underway to operate the Chowilla environmental regulator during late winter and spring 2018, in order to raise water levels in Chowilla Creek, to improve the ecological condition of this significant area.

The regulator will only be operated if appropriate flow conditions occur and approvals are met.

Given the ongoing dry conditions the current plan is to undertake a low level “in-channel rise” operation of the regulator. This will result in raised water levels within the creek banks and only limited inundation into low level flow paths and wetlands. Lock 6 will also be raised and the weirs on Pipeclay and Slaney Creeks operated to manage the flows into the Chowilla anabranch.

The in-channel rise environmental watering will contribute to a range of ecological benefits including:

- improving soil moisture availability along the creek edges
- supporting ongoing growth of river red gum and cooba, including seedlings and saplings along the banks, that have established in response to flooding and environmental watering in recent years
- improving the condition of lignum in low lying wetlands and along the creek banks
- providing conditions to encourage growth of flood dependent water plants
- moving small amounts of carbon and nutrients from fringing areas of the creeks and low level wetlands to boost the food web (zooplankton, phytoplankton, macro-invertebrates) that will contribute to food supplies for other animals such as birds, frogs and fish
- providing habitat for waterbirds, frogs and invertebrates.



Photo: A variety of water plants, Brandy Bottle wetland

The extent that these ecological targets can be achieved depends on the scale (height and duration) of the event.

If there is a marked improvement in forecast River Murray flow conditions over the next couple of months the **target height for operation of the Chowilla regulator and Lock 6 may be increased** to achieve broadscale floodplain inundation, and the event could extend into mid-late December.



In-channel rise regulator operation

The 2018 operation of the environmental regulator will involve the progressive positioning of stop logs at the Chowilla Regulator to raise water levels in Chowilla Creek and through the anabranch to create an 'in-channel rise'. Water levels will be raised by approximately 1.6 to 2 metres (up to 18 to 18.4 mAHD). Flows will remain within-channel throughout the event however water levels will rise to near the top of the creek banks, resulting in some water flowing into low-level flow paths and wetlands.

The event will also involve the operation and monitoring of the vertical slot fishway at the Chowilla Creek regulator, helping to facilitate fish movement.



Photo: Chowilla Creek environmental regulator in operation

Mid to high level regulator operation

If there is a marked improvement in forecast flow conditions over the next couple of months, a larger scale mid-high level operation may be implemented. This would result in raised water levels in Chowilla creek by up to 3.45 metres above normal pool level (19.85 m AHD) to achieve broadscale floodplain inundation (over approximately 4,000 to 8,000 hectares). Updated information will be provided if conditions change and such an event becomes possible.

Operation of Lock 6 and the inlet weirs

Lock 6 will be raised gradually during the in-channel rise operation by approximately 20 centimetres above normal pool level up to 19.45m AHD. If a larger scale Chowilla regulator operation is undertaken, Lock 6 would also be further raised by up to 62cm (19.87 mAHD) and ancillary regulators on Woolshed Creek and the Chowilla Island Loop would also be operated.

The inlet weirs on Pipeclay and Slaney Creeks will be managed by SA Water to vary inflows during the Chowilla regulator operation and through the winter-spring period. This flow management through the Chowilla anabranch is important to manage water quality and protect important fish habitat. Fishways at these weirs will also be observed and adjusted through the event.



Timing

The in-channel rise operation of the regulator is being planned to start during mid-August 2018 if environmental water can be provided and River Murray flows are sufficient. The event is expected to occur over approximately ten weeks and conclude in early to mid-November. If a larger scale operation becomes feasible the event could extend into mid to late December. However, as for all operations, the exact timing and scale of the event may be amended depending on River Murray flows and environmental conditions.

Updates regarding the details of the timing and scale of operations are provided in the weekly [SA River Murray Flow Report](https://www.environment.sa.gov.au/topics/river-murray/flow-reports). (<https://www.environment.sa.gov.au/topics/river-murray/flow-reports>). To request a copy to be sent straight to your inbox email sarah.meins@sa.gov.au.

The operation of the environmental regulator is coordinated by Department for Environment and Water, with structures operated and maintained by SA Water.

Pumping to wetlands

If conditions are not suitable for operation of the regulator or the operation is constrained to only very low levels, then water for the environment may also be pumped to a small number wetlands, where declining tree conditions indicate they will benefit from watering. These sites may include Woolshed Creek, Coppermine waterhole, Brandy Bottle wetland and Twin Creeks depression.

Water for the environment

Environmental water from [The Living Murray program of the Murray-Darling Basin Authority](#) will be delivered during the operation to ensure there are sufficient passing River Murray flows are sufficient to provide the water needed to raise water levels behind the regulator, and to cover the water that evaporates and seeps into the soil during the event. A small volume may also be provided for wetland pumping.

Monitoring

Monitoring will be undertaken in conjunction with the operation including monitoring of surface water, groundwater, soils, trees, lignum, understory vegetation, fish, water birds and frogs to assess the benefits of the watering, guide the management of structures and to inform the management of future events.



Photo: Water bird monitoring, Werta Wert Wetland



Game Reserve and boat access during the operation

The Chowilla Game Reserve will remain open to the public throughout the 2018 operations.

Boating

The regulator on Chowilla Creek will be closed to boat passage during the operation. Small boats (tinnies) moving up Chowilla Creek from the main river will only be able to move up as far as the regulator.

Boating access will also be possible upstream of the regulator, with a designated launch site available at Campsite 13. Small boats can also be launched at other campsites where it is safe to do so. The Customs House boat ramp, on the southern side of the River Murray, will be available as usual.

Water craft such as kayaks and canoes can be carried around the Chowilla Creek regulator but it is a significant structure so you need to be prepared to carry boats for approximately 300 metres. Portage for kayaks and canoes is also possible around the smaller weirs at Pipeclay and Slaney Creeks along the existing tracks.

It is important to note that for safety reasons access on all of these structures is NOT permitted under any circumstances.

Due to raised water levels above the Chowilla regulator during the in-channel rise event, vessels should navigate with caution when in the vicinity of, or travelling under bridges, and when navigating near the river banks, as elevated water levels may limit passage beneath the bridges, increase the width of shallows and submerge hazards near the banks in some places.

Vehicles

The majority of public access tracks and roads on the Chowilla floodplain will remain open during an in-channel rise operation, however some may be restricted to 4WD access only. If a larger scale event is undertaken this could result in campsite and road closures—further information will be provided in this event.

It's important to remind visitors to Chowilla Game Reserve to stay on public access tracks and adhere to park signage. It is an offence to drive off-road or leave formed tracks in any park or reserve. We encourage park visitors to proceed with caution on tracks they are unfamiliar with, and not to enter any flood waters.

Campsites

A small number of campsites will be closed during the operation.

Remember to book before you go. To confirm the availability of campsites and purchase campsite permits online, please visit parks.sa.gov.au or call the Natural Resources Centre in Berri on (08) 8580 1800.

For more information

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