

Chowilla Floodplain

Water for the Environment 2020/21



Planning for delivery of water for the environment at the Chowilla Floodplain Icon Site during 2020/21 is well advanced. The planning process has included reviewing monitoring data and consideration of the potential benefits and trade-offs for different watering actions. Proposals have been developed which present the details of priority environmental watering actions under the full range of water resource availability scenarios from **dry, median, near average, to wet**.

The scenario based environmental watering proposals identify lower scale (lower water use) actions for drier scenarios and if more water becomes available then larger scale watering can occur.

The outcomes that can be achieved under each of the scenarios will depend on a range factors including the level of River Murray flows, timing, duration and availability of environmental water allocations.

Water for the environment is subject to the same conditions as other water entitlements. If reduced water allocations continue in the coming water year the same restrictions will be applied to environmental water entitlements, therefore reducing the amount available for use.

Watering of priority wetlands during 2019-20 achieved some excellent outcomes but the prevailing dry conditions have resulted in a general decline in floodplain conditions and much of the floodplain is now in need of a drink. The ideal outcome would be a large natural high flow to create flooding across the floodplain. In the absence of that, more targeted wetland watering will occur and if flows permit an operation of the Chowilla regulator is being planned for the 2020-21 water year.

Currently the outlook under the dry and median water resource availability is for low flows to SA, which means limited opportunities for any large scale watering at Chowilla. Under these scenarios the intention is to undertake targeted watering by pumping to priority sites. Should conditions improve to the near average or wet scenarios with flows between 20,000 and 50,000 ML/day then operation of the Chowilla regulator may occur.

Pumping to priority sites

Information from the tree condition monitoring at Chowilla is showing that while many river red gum trees and some areas of black box are still in good condition many areas of black box and river cooba are still struggling and there has been a loss of condition in some areas of river red gum. In 2020-21 water for the environment will be provided to up to 6 priority wetland and floodplain sites under the drier water resource availability scenarios.

The final sites that are chosen will depend on volumes of water for the environment allocated as well as availability of resources to rebuild or repair banks to hold the watering and pumping costs.

Sites under consideration for pumping include:

- Monoman Island Depression
- Punkah Creek Floodrunner
- Lake Limbra
- Gum Flat
- Werta Wert Wetland

Further watering at the successful drip irrigation trail site Monoman Island may also be undertaken to continue to improve the condition of the black box community.



Operation of the Chowilla Creek regulator

Conditions across the floodplain are very dry with increasing areas of bare soil and tree health is in decline in many areas. As a result, if rainfall and flow conditions in the Murray Darling Basin improve, an operation of the Chowilla creek may become feasible. Operation of the regulator will enable a large areas across the floodplain to receive water.

The operation of the regulator in 2020-21 is proposed to water significant areas of black box and river cooba trees in the mid to higher elevation areas of the floodplain as well as providing good conditions for other floodplain and aquatic plants and wildlife. A high level operation will only be undertaken if wetter conditions occur with River Murray flow to SA of around over 20,000- 35,000 ML/day or more during spring.



Optimising flows through inlet weirs and weir pool raising

Another important focus for Chowilla in all flow conditions is managing flows through the inlet weirs on Pipeclay and Slaney creeks to optimise the flowing habitat for native fish in the Chowilla creeks. SA Water change the settings on the inlet weirs as the River Murray flow conditions change to ensure that the fishways can operate effectively to attract and pass fish and to increase flowing water habitat within the Chowilla creeks.

Raising of Lock 6 by up to 60 centimetres will occur in conjunction with the operation of the Chowilla regulator if that is undertaken. If the Chowilla regulator operation does not proceed a moderate weir pool raising at Lock 6 (raising water levels by up to 42 centimetres above normal pool) may also be undertaken to commence in early August 2020. This will support flows through the anabranch and provide benefits for soils, vegetation and wildlife along the creeks and the River Murray.

More information

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