## **Pike Floodplain** 2025-26 proposed environmental water operations





A low-level operation of the Pike Floodplain environmental watering infrastructure is planned for late winter through to spring 2025. The final decision to proceed, and the scale and timing of the operation, will depend on River Murray conditions, including flows received through winter and spring, environmental water availability and approvals.

Ongoing flood recovery construction works are likely to limit the timing of operation of the environmental regulators to a winter and early spring watering event in 2025. Delivery of water via pumping is planned at 2 Pike Floodplain wetlands later in spring.

Under dry conditions, it is planned to commence lowlevel raising of water at the Pike regulator to 15.2 m AHD (0.65 m above normal operating level) from the end of July, with Lock 5 being gradually raised to 16.8 m AHD (0.5 m above normal pool level) to support flow through the Pike River anabranch.

If higher river flows are experienced, a slightly more extensive inundation will be possible, raising water levels at the Pike regulator to 15.5 m AHD (0.95 m above normal pool level) with Lock 5 being raised by 0.5 m.





The planned low-level watering operation will inundate approximately 418 hectares of floodplain located adjacent the permanent waterbodies. Up to 667 hectares will be watered if the regulator can be raised higher, with a level of 15.5 m AHD inundating

The watering event will improve the resilience of longlived vegetation and consolidate the improvements seen following the 2022-23 River Murray flood when abundant regeneration of river red gum and black box trees occurred along the permanent watercourses.

approximately 775 hectares along the Lock 5 weir pool.

Supporting young trees that have grown from seeds transported by the flood is a key objective of operation, including at locations such as the northern loop of Mundic Creek, where trees have been cleared in the past therefore meaning a limited opportunity for regeneration from local seed sources.

Achieving variability in water levels adjacent permanent anabranches and wetlands also aims to encourage a wider zone of reeds and rushes.

Duck Hole will be inundated under the proposed regulator operations. This wetland has high habitat value for a diversity of waterbirds due to its complex mix of deep open water, shallow edge zones, dense stands of lignum, emergent woody debris, fringing black box woodland and closeness to red gum woodlands lining Mundic Creek to the north and east. With additional flows, a slightly higher operation of the regulators will water an increased extent of fringing lignum, reach floodplain trees that are in declining condition, and provide refuge and additional shallow foraging habitat for resident waterbirds (e.g. extending water further out into the Snake Creek floodplain). It is also planned to pump water to Mundic Wetland to sustain young black box that emerged following the 2022-23 flood, and to maintain spiny and tangled lignum. Mundic Wetland is positioned at a high elevation on the floodplain and is one of few higher elevation locations where water can be delivered to support the new black box saplings. Watering in 2025 builds on the 2024 watering action to support these young trees through another summer, so they grow to more resilient stages that can survive longer periods without inundation.

Mundic Wetland has a cover of tangled lignum, and a substantial amount of spiny lignum emerged on the fringes of the wetland after the 2022-23 flood. Pumped delivery of water provides an opportunity for aquatic plants to complete their lifecycles in the absence of high carp numbers. These keystone plant species provide valuable habitat and food resources. In addition to the high habitat value of this vegetation cover, the shallow basin of Mundic Wetland provides extensive foraging habitat for waders, including areas of productive damp mud that will persist for a period of several months after watering. Providing this waterbird habitat is considered a high priority under the current dry conditions.

Pumping water to the Tanyaca Horseshoe floodplain is also planned to provide extensive shallow waterbird foraging habitat. A key objective of watering this part of the floodplain is to build on the vegetation regeneration resulting from the 2022-23 flood that was previously supported by the 2024 delivery of water for the environment.



Black-tailed native hens at Mundic Wetland following delivery of water for the environment in spring 2024.

Monitoring of fauna and water quality will occur throughout the operation and vegetation response will be assessed in autumn 2026, after delivery of water for the environment is complete.

Dissolved oxygen and salt levels will continue to be monitored closely throughout the operation, which will be adaptively managed in response to any changes in river and anabranch conditions.



Grey teal on the Tanyaca Horseshoe floodplain after delivery of water for the environment in spring 2024.

## **More information**

For further information about Pike Floodplain, please visit <u>environment.sa.gov.au/pike-floodplain</u>

If you would like to be added to future floodplain operation updates, please join our subscriber list at <u>environment.sa.gov.au/ewater-subscribe</u> and select the locations you are interested in. Alternatively, you can email your preferred details to <u>DEW.ewater@sa.gov.au</u>

Updates regarding water for the environment planning, including operations at Pike, Katarapko and Chowilla floodplains, weir pool manipulations and other activities are also provided in the weekly SA River Murray Flow Report (released each Friday). To view the Flow Report or subscribe to receive it directly to your email, please visit <u>environment.sa.gov.au/flow-report</u>

If you have further queries about the proposed floodplain operations, please contact the Department for Environment and Water's Environmental Water Team at <u>DEW.ewater@sa.gov.au</u>





Government of South Australia Department for Environment