



Government
of South Australia

Department for
Environment and Water

Katarapko Floodplain

Outcomes of 2025-26 environmental watering

The Katarapko Floodplain anabranch system is part of the Murray River National Park, one of the most highly visited parks in South Australia and popular for camping, fishing, boating and bushwalking.

The area is monitored regularly to ensure ecosystem condition remains healthy but following minimal rainfall and no significant inundation since spring 2024, monitoring results in early 2025 showed the site was in decline, posing a risk to floodplain ecosystems.

In spring 2025, conditions and water availability allowed a medium-level operation to be undertaken, with environmental water being delivered to Katarapko for the fourth time since the Splash regulator and associated infrastructure was completed in 2020.

The operation inundated an additional 485 hectares of shedding floodplain and temporary wetland areas that would otherwise require river flows of more than 40 GL/day to be inundated.

The water level at the Splash regulator was raised from 5 August, reaching the target level of 12.9 m AHD in early to mid-October, and increasing to a short peak of 3.0 m above normal pool level for four days in late September.



Fyke net monitoring at Piggy Creek.



Eckerts Wide Water at peak inundation.

Lock 4 weir pool raising

In conjunction with operation of the Splash regulator, Lock 4 weir pool was raised 30 cm above normal pool level to support flows through the anabranch creeks and inundate additional areas. Water quality was closely monitored throughout.

The operation enabled watering of Piggy Creek Lagoon and Boyties Lagoon (formerly Carpark Lagoon) wetlands, which had not been inundated since the 2022-23 River Murray flood.

Targeted inundation of these areas helps to increase the availability of aquatic habitat across the floodplain, therefore increasing macroinvertebrate productivity, foraging areas for waterbirds and waders, and breeding opportunities for frogs and other water-dependent biota.

As a result of the watering operation, expansive areas of Eckert Flat and the semi-permanent Ngak Indau wetland were also inundated.

Ecological outcomes



Frog call monitoring

A wide range of habitat types across both permanent and temporary creeks and wetlands were monitored in spring 2025 to assess frog diversity and abundance in response to the watering operations.

Based on historical records, six frog species, including the eastern banjo frog, long-thumbed frog, spotted marsh frog, emerald-spotted tree frog, beeping froglet and the vulnerable southern bell frog, were expected to be detected at Katarapko Floodplain.

Ecologists were pleased to detect calls from all six of these species, particularly the vulnerable southern bell frog, which had not been detected at Katarapko since 2022!



Southern bell frog, Ngak Indau Wetland



Southern bell frog tadpole, Ngak Indau Wetland

Tadpole surveys

Tadpoles were monitored using fyke nets across a range of aquatic habitat types during the rising, peak and falling phase of the managed operation.

Tadpoles from more than five species were detected, with evidence of tadpoles maturing into metamorphs with legs during the final round of surveys. These results confirm that delivery of water for the environment created suitable habitat and supported successful breeding opportunities for native frogs.

A highlight from the 2024-25 surveys was the detection of southern bell frog tadpoles for the first time since the Splash regulator was completed in 2020.

By-catch monitoring

By-catch of other freshwater animals in the fyke nets during tadpole surveys highlighted the great diversity and abundance of native small-bodied fish, yabbies, freshwater shrimp and macroinvertebrates present in the aquatic habitats.

During one survey 2,300 Australian smelt were caught within the one net!



By-catch sample of Australian smelt caught and monitored at Ngak Indau Wetland

Ecological outcomes



Waterbirds

Waterbird monitoring detected 37 species across five wetland locations during the rising, peak and falling phases of the operations. Sightings included numerous duck species, as well as pelicans, cormorants, dotterels, spoonbills, Australian white ibis, great egrets and white-faced herons.

The most abundant waterbirds were hardhead and grey teal ducks, with more than 500 individual hardhead ducks recorded during a survey round at Ngak Indau Wetland.

Three species of conservation significance were found, including freckled ducks, Australasian darters and the endangered migratory species, the common greenshank.



Pair of royal spoonbills (male with breeding plumage) at Boyties Lagoon

Monitoring of waterbirds showed evidence of breeding activity, including pairs of Australasian darters nesting at Ngak Indau Wetland, observations of little pied cormorants building nests in spring and sightings of juvenile dotterels, darters and maned ducks recorded in the summer/falling phase of operations.



Sacred kingfisher on a river red gum at Piggy Creek

Woodland birds

Throughout spring of the 2025 managed operation, 65 species of woodland bird that typically occupy the region during spring/summer were recorded, including horsfield's bronze cuckoo, black-eared cuckoo and white-winged triller.

Migratory species including rainbow bee-eaters and sacred kingfishers were also detected, with sacred kingfishers observed breeding in hollows of black box trees.

Flowering black box trees at several sites provided resources for honeyeater species, including the rare, blue-faced honeyeater, little friarbird, noisy miner, red wattlebird, singing honeyeater, spiny-cheeked honeyeater, rare striped honeyeater, white-fronted honeyeater, white-plumed honeyeater and yellow-throated miner.

Several other rare species were detected during the spring surveys, including gilbert's whistler, hooded robin, restless flycatcher, western gerygone and white-winged chough.

Vulnerable species, including the brown quail, were opportunely spotted, while regular observations of regent parrots were made during site visits.



Flowering lignum at Ngak Indau Wetland

Floodplain tree and lignum monitoring

Visual assessments of floodplain tree condition indicated mixed results.

While the canopy condition of some river red gums and river cooba trees improved in areas where managed operations replenished soil moisture, other areas showed signs of canopy decline, most likely due to regionally dry conditions in recent years.

Overall, condition of lignum had improved, especially within areas that were inundated as part of the managed operations.

Black box trees and mixed species floodplain tree communities have remained relatively stable compared to last year.

Understory vegetation

Vegetation monitoring across 48 floodplain and six wetland locations occurred in autumn 2026, a few months after the operations were complete.

Ecologists recorded several flood-dependent and amphibious species, including rat-tail couch, grey germander, native liquorice, spreading nut-heads, bluerod, and common sneezeweed, with marked improvements in diversity and abundance in wetland areas that were inundated for the first time in years.

Several rare species like the tufted burr-daisy, swamp daisy, spiny lignum, creeping boobialla, pale beauty heads and slender fissure-plant were also observed.

Areas that remained dry during operations tended to have more terrestrial species and lower vegetation diversity and abundance.



Rare tufted burr-daisies emerging at Boyties Lagoon

More information

For further information about Katarapko Floodplain, visit www.environment.sa.gov.au/katarapko-floodplain

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

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

If you have further queries, please contact the Environmental Water Team at DEW.ewater@sa.gov.au