Coorong, Lower Lakes and Murray Mouth Community Advisory Panel and Scientific Advisory Group



Government of South Australia Department for pyironment and Water

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The joint Coorong, Lower Lakes and Murray Mouth (CLLMM) Community Advisory Panel (CAP) and Scientific Advisory Group (SAG) meeting was held on 1 April 2025 on Kaurna Country at the Brighton Sports and Social Club. The meeting was chaired by Julie Barrie (CLLMM CAP Chair).

Recent CLLMM monitoring and research findings from SAG scientists

- Diadromous fish (common galaxias and congolli) abundances observed moving through barrage fishways comprised 25% of the total catch over spring and early summer.
- Fish assemblages in the Coorong shifted to more marine and estuarine species, driven by increased salinity levels from reduced barrage flow. Species diversity decreased in the South Lagoon.
- Young of year black bream sampled in the Coorong in autumn 2024 were aged using otoliths, with spawning determined between late January and mid-March 2024. This timing can inform future fishery closures for this species in the CLLMM.
- The 2022-23 flood delivered a largely positive Coorong water quality response.
- Last summer, the Coorong's mudflat macroinvertebrate communities continued to change. In the Murray Mouth region, invertebrate abundance and diversity improved markedly compared to the very low numbers observed directly after the 2022-23 flood. In the South Lagoon, diversity and abundances decreased due to higher salinity levels.
- In the Lower Lakes, high abundances of frogs were recorded in fringing wetlands in early summer, however breeding effort (calling) reduced markedly as water levels receded. No southern bell frogs were detected.

The Ngarrindjeri Aboriginal Corporation (NAC) and Department for Environment and Water (DEW) provided an update on recent cultural activities delivered via The Living Murray program. These included thukabi (turtle), yabby (kultawari) and threatened fish monitoring programs undertaken with The University of Adelaide. During the monitoring, high numbers of long-neck and short-necked turtles were caught, however very few of these were juveniles, raising concerns about recruitment and the impacts of nest predation. In March, low water levels in the Lower Lakes resulted in fewer threatened fish observations and sub-optimal wetland habitat. CAP members expressed their gratitude to NAC and the Raukkan community for a recent tour of Teringie wetlands.



Thukabi (turtle) monitoring, summer 2025. Photos: Scotte Wedderburn, University of Adelaide and NAC).

With extended dry conditions experienced in South Australia and the southern Basin, CLLMM CAP and SAG members emphasised the importance of end-of-system delivery of water for the environment and expressed their gratitude to the Commonwealth Environmental Water Holder (CEWH) for increasing the volume of Direct Trade to South Australia and approving upstream autumn watering events. The group was also concerned about the potential impacts of a recurring blue-green algae in the Lower Lakes and algal species in the Coorong. With uncertainty about water availability in 2025-26 and the potential for continued dry conditions, the group encouraged conservative management of water levels in the Lower Lakes and supported the DEWt's management of entitlement flow and associated deferral strategy.

Planning for 2025-26 environmental delivery to the CLLMM has commenced and members were supportive of proposed delivery patterns. Peak flow delivery in spring and early summer will promote ecological outcomes in both the Coorong and Lower Lakes, while Direct Trade delivery through late summer and autumn is needed to protect Lower Lakes water levels and allow continuous flows through barrage fishways to the Coorong. Members noted the very dry conditions in the South Australia's South East and the subsequent drawdown of Morella Basin, meaning local salinity relief for the South Lagoon is not currently available.

An update was provided on projects delivered by the Goyder Institute for Water Research's CLLMM Research Centre. Many of the CLLMM SAG scientists are delivery partners involved in projects focused on lokeri (freshwater mussels), threatened fish, climate change, estuarine connectivity and blue/teal carbon. Goyder staff encouraged community members to get involved.



Sediment profile (with worm casings) and sediment surface from Murray Mouth/estuary. Photos: Sabine Dittmann, Flinders University)

Presentations were received from the CEWH, Murray-Darling Basin Authority (The Living Murray program), DEW's Biodata SA team, the *Healthy Coorong, Healthy Basin* program and the Shorebird and Wetland Habitat project. Members were pleased to hear that funding will be provided to deliver shorebird outcomes in the CLLMM and surrounding regions and encouraged project managers to consider Waltowa Wetland as a priority.

The next joint CLLMM CAP/SAG meeting will be held in October 2025.



April 2025 CLLMM CAP/SAG meeting