

# Barrage and Water Level Management Policy



Government  
of South Australia

Department of Environment,  
Water and Natural Resources

*The Department of Environment Water and Natural Resources (DEWNR) will undertake management actions for the Lower Lakes Barrages in a transparent, evidence based and adaptive manner. These management actions seek to ensure the Coorong, Lower Lakes, and Murray Mouth (CLLMM) water levels and barrage outflows are sufficient to maintain the ecological character of the Coorong and Lakes Alexandrina and Albert Ramsar Wetland and ensure lake levels are sufficient to allow for delivery of water for Critical Human Water Needs and consumptive entitlement holders in the lower Murray. During normal operating conditions, water levels will be managed within a variable operating envelope of +0.5 m to +0.85 m AHD.*

## What guides this Policy?

The Policy is guided by the:

- *Water Act 2007 (Cth)* via the principles, objective and requirements of the Murray-Darling Basin Plan, the Basin-Wide Environmental Watering Strategy and the *Murray-Darling Basin Agreement 2008*
- *Environment Protection and Biodiversity Conservation Act 1999 (Cth)* via the CLLMM Ramsar Management Plan
- *Natural Resources Management Act 2004 (SA)* via the Water Allocation Plan for the River Murray Prescribed Watercourse
- *River Murray Act 2003 (SA)* via the Lower Lakes, Coorong and Murray Mouth Environmental Water Management Plan, SA River Murray Annual Operating Plan, and the Long Term Environmental Watering Plan for the South Australian River Murray Water Resource Plan Area (see Sections 4 and 6).
- *Aboriginal Heritage Act 1988 (SA)* via the Meeting of the Waters registered heritage site, the Kungun Ngarrindjeri Yunnan Agreement, 2009 and Speaking As Country Deed, 2014.

## Who is this Policy for?

The Policy applies to DEWNR staff with responsibility for decision making with regard to providing advice on the management and operation of water levels and the barrages.

The Policy also applies to the Barrage Operations Advisory Group, which meets fortnightly to discuss and agree on optimal barrage operations taking into account current conditions.

# What is the scope of this Policy?

The Policy refers to the Lower Lakes Barrages, which include the Goolwa, Mundoo, Boundary Creek, Ewe Island and Tauwitche Barrages. Geographically, the operation of the Lower Lakes Barrages has an impact on water levels in the Lower River Murray (below Lock 1 at Blanchetown, SA), Lower Lakes, Coorong and Murray Mouth (Figure 1).

Where possible, critical lake levels will be maintained above +0.5 m and below +0.85 m AHD. Water availability and localised weather and tide conditions are permanent factors that significantly influence the management and operation of the Lower Lakes. From time to time there may be a departure from these levels, particularly when factors are beyond reasonable control, including periods of low water availability. If water levels in the Lower Lakes cannot be maintained above the critical point of +0.4 m AHD, the planning phase of the *Drought Emergency Framework for Lake Alexandrina and Lake Albert* (DEF) is triggered to preserve water levels in the Lower Lakes. The DEF and associated response measures take precedence over this Policy.

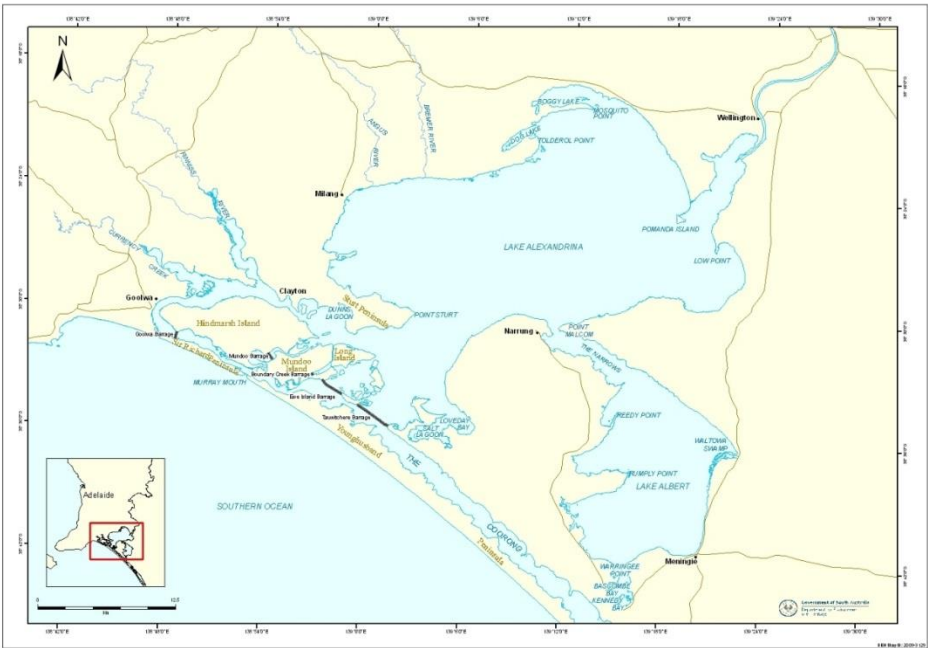


Figure 1. CLLMM region including barrages, Coorong, Lower Lakes and Murray Mouth.

# What do I need to know?

The following principles guide water level management and barrage management actions:

1. **Consistency with legislative objectives:** described in the *Water Act 2007 (Cth)* (Murray-Darling Basin Plan, Basin-Wide Environmental Watering Strategy and Long-term Environmental Watering Plan for the South Australian River Murray Water Resource Plan Area), *Environment Protection and Biodiversity Conservation Act 1999 (Cth)* (Ramsar Management Plan), *River Murray Act 2003 (SA)* and *Aboriginal Heritage Act 1988 (SA)* (Meeting of the Waters registered heritage site as well as associated agreements including Kungun Ngarrindjeri Yunnan Agreement, 2009 and Speaking As Country Deed, 2014).
2. **Maximise environmental benefits:** to achieve, where applicable, both short and long-term, multiple objectives that improve and enhance environmental assets, water quality and ecosystem functions.
3. **Utilise a risk-based approach:** that considers relevant social, cultural, economic, water quality and environmental implications of water level management and barrage management actions.
4. **Apply the precautionary principle:** to mitigate threats of serious or irreversible damage to the CLLMM natural resources where there is a lack of scientific certainty.
5. **Culturally and socially responsible management:** to have regard and respect for the values, perspectives and connections of local communities, in particular the Ngarrindjeri, regarding the CLLMM region and associated commitments under the Ngarrindjeri Regional Partnership Agreement, 2008; Kungun Ngarrindjeri Yunnan Agreement, 2009; Ngarrindjeri Yannarumi (Speaking As Country Deed, 2014); Water Resource Planning Statement of Commitment, 2015; and the Cultural Knowledge Agreement, 2014.
6. **Responsive and adaptive management:** to ensure:
  - clear objectives are set;
  - knowledge (including local knowledge), management, evaluation and feedback over a period of time is linked;
  - there is a commitment to learning; and
  - decisions respond to evidence, as it becomes available (in a transparent manner). This is important in the context of our variable and changing climate.
7. **Evidence based and transparent decision making:** to use the best available evidence for water level management, barrage management actions, and accounting for and reporting on water usage as required by the Decision Making Framework (DMF).
8. **Management for consumptive use:** where possible, maintain water access for consumptive purposes, including for critical water human needs, and water access for entitlement holders below Lock 1.

Multiple objectives may be achieved by barrage management actions. Competing objectives will require prioritisation. Decisions regarding barrage management actions will be informed by the above principles and will take into account the following criteria:

1. **Water demands:** The need for a particular hydrological regime will be informed by the condition of the environmental assets and consumptive demands. This will be a function of the frequency and effectiveness of historical barrage management actions.
2. **Water resource availability:** This includes the current and future River Murray water resources availability informed by the MDBA's projections of flow to South Australia, operational considerations, water held in storage and the availability of environmental water.
3. **Operational feasibility:** Operators will seek to achieve the highest priority objectives possible for the given water resource availability and barrage management action operating conditions.
4. **Lessons learned:** Prioritisation will consider the outcomes of previous barrage management actions through transparent barrage management action review processes.

The Policy will be implemented consistent with the processes outlined in the Barrage Operating Strategy (BOS) and the South Australian River Murray Annual Operating Plan.



# Where do I get more information?

More information can be found on the [Coorong and Lower Lakes Ramsar Wetland Portal](#) and in the Barrage Operating Strategy.

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