

Report on environmental watering coordination and principles – South Australia

The South Australian 2014–15 annual report on implementing the Basin Plan environmental management framework (Schedule 12, Item 10)

Reporting context

The Basin Plan aims to protect and restore water-dependent ecosystems to support a healthy working Basin. To help achieve this, the Plan makes more water available for the environment and also guides how environmental watering is planned, coordinated and used at a Basin-scale.

The processes for planning and delivering environmental water including principles to be applied when watering occurs are set out in the environmental management framework in Chapter 8 of the Basin Plan. It includes:

- processes to co-ordinate the planning, prioritisation and use of planned environmental water and held environmental water, under which:
 - the Authority is obliged to prepare a Basin-wide environmental watering strategy
 - each Basin State is obliged to prepare long-term watering plans for water resource plan areas
 - each Basin State is obliged to identify annual environmental watering priorities for water resource plan areas; and
 - the Authority is obliged to identify Basin annual environmental watering priorities (Division 5)
- the principles to be applied in environmental watering
- a mechanism to enable the Authority to co-ordinate the recovery of additional environmental water.

The purpose of this report is to monitor how Basin governments are implementing the environmental management framework. The report is a requirement of Chapter 13 of the Basin Plan and relates to Item 10 of Schedule 12.

Indicators for measuring success

Implementation of the environmental management framework is evaluated using the following indicators:

- Basin-wide environmental watering strategy, long-term watering plans and annual priorities were prepared with the required content and are published, reviewed and updated, **(10.1)**
- Watering strategies, plans and priorities are prepared in consultation with other parties and having regard to matters as required **(10.2)**
- How environmental watering principles are applied **(10.3)**

10.1: Basin-wide environmental watering strategy, long-term watering plans and annual priorities were prepared with the required content, published, reviewed and updated as obligated under Part 4 of Chapter 8, Divisions 2-5

Response (CEWH only)

10.2: Watering strategies, plans and priorities were prepared consistently with Part 4 of Chapter 8, in relation to coordinating, consulting and cooperating with other Reporters and the matters to which regard must be had (Chapter 8, Part 4)

10.2.1. Describe how coordination, consultation and cooperation occurred including with other governments

Response

Environmental watering priorities were developed within South Australia under a range of flow scenarios and provided to the MDBA prior to 31 May. In 2014-15, work commenced on development of long term watering plans for South Australian water resource plan areas. Watering strategies, plans and priorities were prepared consistent with Part 4 of Chapter 8 including having regard to the Basin Wide Environmental Watering Strategy.

The annual watering plan and priorities were developed in close cooperation with Local Action Planning Committees, government stakeholders, environmental water holders, environmental asset managers and key community and scientific groups. Watering proposals were prioritised using criteria regarding benefit, cost, risk and quantity of water. Stakeholder groups either attended workshops or were provided with an overview of the process and invited to provide input at each step via the provision of factsheets and presentations at their regular meetings. Emails and phone calls were addressed and new proposals considered for inclusion in the priorities.

The priorities were provided to the environmental water holders for planning discussions about cooperative watering with upstream sites. The MDBA coordinated a multi-site strategy for The Living Murray water. The Commonwealth Environmental Water Office developed a delivery options plan for its water. SA participated in cross-jurisdictional planning groups and advisory committees to help plan and deliver environmental water.

The annual watering plan and priorities are publically available on the Department of Environment, Water and Natural Resources website: <http://www.environment.sa.gov.au/managing-natural-resources/river-murray/river-restoration-and-environmental-water>

10.2.2. Describe what difference coordination, consultation and cooperation made

Response

Coordination at the State and Basin level has allowed the outcomes of environmental watering to be maximised. For example, coordinated planning to allow return flows from upstream watering to be re-used at downstream sites. Consultation enabled the identification of important sites and watering priorities for key stakeholders and also the gathering of on-ground observations. Cooperation with other states resulted in greater coordination and the ability to consider relevant environmental needs throughout the River Murray system.

10.3: How environmental watering principles were applied, consistently with Division 6 of Chapter 8, Part 4

10.3.1. Provide at least one case study that demonstrates how environmental watering principles were applied and identify the relevant principles.

Response

In 2014-15, South Australia managed the delivery of planned and held environmental water consistent with the Basin Plan, including developing and submitting the annual environmental watering priorities by 31 May 2015, and applying the principles set out at Division 6 of Chapter 8 of the Basin Plan in undertaking environmental watering in accordance with the Basin annual environmental watering priorities.

Case studies of how environmental watering principles were applied in managing environmental water are outlined below.

Principle 3: Maximising environmental benefits

South Australia worked cooperatively with the upstream states, the MDBA and the CEWH to enable multi-site environmental water delivery by participating in the development of a multi-site environmental watering strategy through the TLM Environmental Watering Group.

During 2014-15, SA received and managed environmental water to maximise multiple benefits by:

- using the local knowledge of Local Action Planning Committees to identify wetlands in need of environmental water;
- consulting with traditional owners (indigenous groups) regarding their priority sites for environmental water;
- developing watering proposals that considered the interests of stakeholder groups;
- undertaking assessments of the benefits of an environmental watering event relative to the costs, risks, quantity of water and relative ecological benefit;
- using scientific and community advisory groups to provide advice and adaptively manage environmental water delivery as flow conditions changed during the year;
- seeking environmental water in spring/summer to mimic the natural timing for higher flows; and
- re-using the return flow from upstream events for ecological outcomes in the channel and CLLMM.

Principle 7: Working effectively with local communities

The South Australian Government undertook consultation with local communities on proposed environmental water planning and delivery through stakeholder groups with interests in environmental watering and with landholders who may be affected by watering actions. Some examples of stakeholder groups involved include:

- the South Australian Murray-Darling Basin Natural Resources Management Board;
- the River Murray Advisory Committee;
- Local Action Planning groups through the Community Action for the Rural Environment committee;

- the Community Advisory Panel and Scientific Advisory Group for the Coorong, Lower Lakes and Murray Mouth;
- the Nature Foundation SA;
- the Ngarrindjeri Regional Authority, including the Mannum Aboriginal Community Association Incorporated; and
- the First Peoples of the River Murray and Mallee Region.

Principle 8: Adaptive management

Environmental water planning for 2014-15 considered different management options under a range of different flow scenarios. A real time advisory committee provided weekly advice during the delivery of environmental water so that its use could be adaptively managed if conditions changed.

South Australian Government officials also participated in a range of groups and committees involved in informing decision making about the real time management of environmental water in response to changing climatic and river conditions. These included:

- the Operations Advisory Group and Barrage Operations Advisory Group which are coordinated by the MDBA and enable quick decision making for real time delivery of environmental water and management of the barrages; and
- the MDBA Environmental Watering Group, the Water Liaison Working Group, the Environmental Water Working Group and the Southern Connected Basin Environmental Watering Committee.

Principle 10: Other management and operational practices

During 2014-15 South Australia continued with a range of infrastructure upgrades to enhance natural flow paths and improve the environmental outcomes possible from managed river operations. These structures allow a greater range of outcomes to be achieved on small sections of the floodplain with less water. Trials for weir pool raising in locks 1 and 2 were undertaken during 2014-15.

Principle 1: Environmental watering to be undertaken having regard to the Basin annual environmental watering priorities

Principle 2: Consistency with the objectives for water-dependent ecosystems

Principle 3: Maximising environmental benefits

Principle 4: Risks

Principle 5: Cost of environmental watering

Principle 6: Apply the precautionary principle

Principle 7: Working effectively with local communities

Principle 8: Adaptive management

Principle 9: Relevant international agreements

Principle 10: Other management and operational practices

Principle 11: Management of water for consumptive use