

Report on Managing Water Quality and Salinity- Australian Capital Territory

The Australian Capital Territory's annual report on the implementation of the water quality and salinity management plan (Schedule 12, Item 14)

Reporting context

The water quality and salinity management plan provides a Basin-wide framework of water quality objectives and targets for Basin water resources. The water quality and salinity management plan is set out in Chapter 9 of the Basin Plan and includes a list of the key causes of water quality degradation, water quality objectives for Basin water resources and water quality targets for long-term planning.

The purpose of this report is to monitor the extent to which the water quality and salinity management plan has been implemented. This report is a requirement of Chapter 13 of the Basin Plan and relates to Item 14 of Schedule 12.

Indicators for measuring success

Implementation of the water quality and salinity management plan is evaluated using the following five indicators:

- Recorded salinity at reporting sites is consistent with the salinity targets (**Indicator 14.1**)
 - Adequacy of the flushing of salt from the River Murray System to the Southern Ocean (salt export) (**Indicator 14.2**)
 - Governments are having regard to water quality and salinity targets when managing water flows (**Indicator 14.3**)
 - Governments are having regard to water quality targets when making decisions about using environmental water (**Indicator 14.4**)
 - Measures governments take to achieve end-of-valley salinity targets (**Indicator 14.5**)
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Indicator 14.1: Salinity at reporting sites is consistent with the salinity targets in s9.14(5)

14.1.1: Proportion of days where measured salinity met the target EC at reporting sites

Response
No response required from Basin Governments or CEWH. MDBA report only.

Indicator 14.2: Adequacy of flushing to provide salt export (s9.09)**14.2.1: Estimated Salt Export (Tonnes) from the River Murray System to the Southern Ocean****Response**

No response required from Basin Governments or CEWH. MDBA report only.

14.2.2: Flushing Adequacy**Response**

No response required from Basin Governments or CEWH. MDBA report only.

Indicator 14.3: Managing water flows with regard to water quality targets (s9.14)**14.3.1: What procedures and tools were in place to enable water quality targets (dissolved oxygen, recreational water quality and salinity) to be met****Response**

The ACT has a number of guidelines and requirements on water quality that affect the management of water flows. These include the ACT Recreational Water Quality Guidelines 2010 (revised in October 2014). The ACT has salinity concentration and salinity load targets for the ACT's main streams on the basis of water entering the ACT and leaving the ACT. Water quality is assessed for compliance with licence conditions set for the water utility, ACTEW Water, and the Environment Protection Regulations 2005. Stream-flow is measured continuously at a number of sites throughout the ACT at hydrographic stations. The ACT Water Strategy (2014) sets out water quality indicators to ensure the health of the ACT's rivers and catchments, in particular the Murrumbidgee River. The Water Use and Catchment General Code (ACT Government, 2009) also sets out permitted uses and environmental values and identifies the water quality and stream flow criteria related to the full protection of these uses and values.

14.3.2: Statement of how procedures and tools were used to meet water quality targets**Response**

The Environment and Planning Directorate of the ACT Government manages a monitoring program for ACT water resources that involves the collection of water quality, stream flow and biological data. The monitoring program is based on regular sampling of rivers and lakes. This information is used to determine whether waters flowing through the ACT are of appropriate quality and if the management strategies used to achieve or maintain water quality are adequate. There is an annual ACT Water Report which reports on ACT water quality.

14.3.3: Case study**Response**

Response

The ACT has a program of actions to monitor blue green algae and dissolved solids. Sites for monitoring are located so as to be representative of stream and lake conditions in the ACT. Environment Protection Authority officers undertake the monitoring of blue-green algae in Canberra's lakes especially during the summer months with the exception of Lake Burley Griffin which is a Commonwealth Government responsibility. The ACT Health Population Health division undertakes bacterial monitoring of lake and recreation areas during peak use times. In addition the ACT Government funds the Upper Murrumbidgee WaterWatch program for volunteers to undertake regular monitoring of the ACT's rivers and lakes especially for dissolved solids and blue-green algae. This work is conducted on the basis of the AUSRIVAS methodology and is subject to assessment by the University of Canberra. It supplements data from the Environment Protection Authority and data collected by ACTEW Water and the Queanbeyan Sewage Treatment Plant.

The ACT's Basin Priority Project is based on improving the water quality of the ACT's lakes and streams with a focus on six priority catchments. The first stage of this project is to assess the current monitoring program and develop a more comprehensive monitoring assessment program. This first stage is now well underway.

The ACT annual water report contains a report on water quality including indicators such as dissolved solids.

Indicator 14.4: How were water quality targets taken into account when making decisions about using environmental water

14.4.1. Statement that procedures and tools were in place

Response

This indicator is not relevant to the ACT.

14.4.2. Statement of how procedures and tools were used

Response

Not Applicable

14.4.3. Case study

Response

This indicator is not relevant to the ACT.

Indicator 14.5: Implementation of measures to achieve end-of-valley salinity targets

No response required from Basin governments or CEWH. MDBA reports on this indicator on behalf of Basin governments, drawing on their Basin Salinity Management Strategy implementation reports against end-of-valley targets.

14.5.1: Types of measures implemented

Response

No response required from Basin Governments or CEWH. MDBA report only.

14.5.2: Summary of objectives, activities and achievements with regard to each measure implemented

Response

No response required from Basin Governments or CEWH. MDBA report only.