LA TROBE UNIVERSITY

Centre for Freshwater Ecosystems

Fact Sheet

Commonwealth Environmental Water Office

Evaluating the contribution of Commonwealth environmental water to achieving Basin Plan objectives: supporting the adaptive management of Commonwealth environmental water.

Project objectives

The objectives of the Long Term Intervention Monitoring (LTIM) Project are to:

- Monitor and evaluate the ecological response to Commonwealth environmental water at Selected Areas
- Evaluate the contribution of Commonwealth environmental water to the objectives of the Murray-Darling Basin Plan
- Infer ecological outcomes of Commonwealth environmental water in areas of the Murray-Darling Basin not monitored
- Support the adaptive management of Commonwealth environmental water

Long Term Intervention Monitoring

Monitoring is undertaken to understand the impact of Commonwealth environmental water at both an area (Selected Area) and Basin scale. This evaluation is one step in the adaptive management of Commonwealth environmental water.

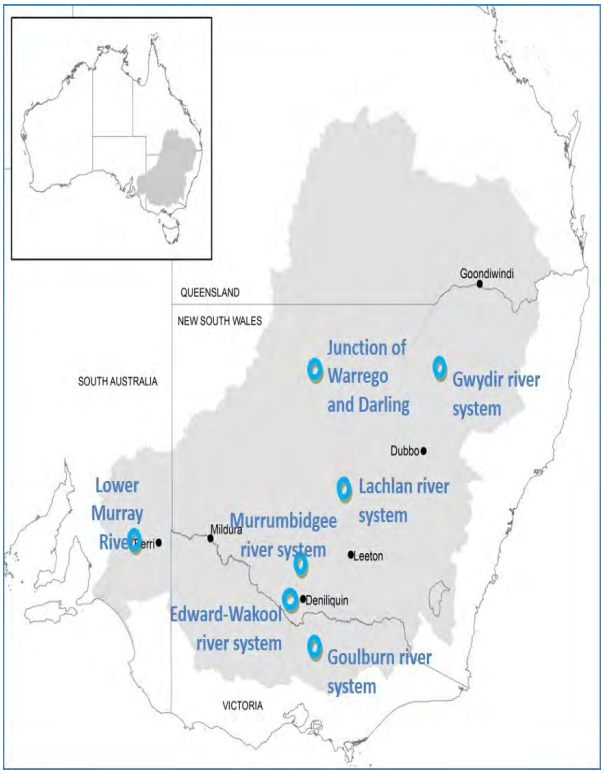
The Office has engaged monitoring teams, led by research institutions, to develop and implement 5-year monitoring and evaluation for Selected Areas within the Basin.

La Trobe University, in collaboration with the CSIRO, are acting as Monitoring and Evaluation Advisers for the project and will conduct an annual Basin evaluation of outcomes at the Basin scale.

The focus of the monitoring is to identify ecological outcomes from the use of Commonwealth environmental water to support reporting and adaptive management.

Selected Areas for monitoring

Monitoring and evaluation of Commonwealth environmental water is undertaken in seven areas within the Murray-Darling Basin (Figure 1). These Selected Areas were chosen to provide maximum possible coverage of areas where Commonwealth environmental watering will occur and to complement, rather than duplicate, monitoring activities already being undertaken by others including Basin states and the Murray-Darling Basin Authority. The monitoring at the Selected Areas commenced in 2014-15 and will continue until June 2020.



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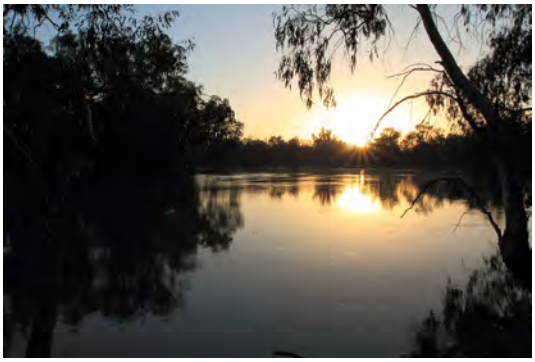
Australian Government
Commonwealth Environmental Water Office

Basin scale evaluation



Lower Murray River

As Monitoring and Evaluation Advisers, La Trobe University and CSIRO are undertaking a Basin scale evaluation of the contribution of Commonwealth environmental water to the environmental objectives of the Basin Plan.

Monitored outcomes at the Selected Areas will be compared to expected outcomes, to evaluate response. Over time, with increased data, models will be developed and used to predict ecological responses and measure the impact of Commonwealth environmental water across the Basin. La Trobe University will work with collaborators from CSIRO, the University of Melbourne, Monash University, University of Canberra, Griffith University and independent consultants to improve capacity to predict expected outcomes.

Goulburn River

La Trobe University and CSIRO will report the outcomes of Commonwealth environmental watering at the Basin scale to the Commonwealth Environmental Water Office annually, as well as cumulatively, over a five year period. Importantly, these reports will capture the lessons learnt from the watering actions undertaken to ensure a cycle of continual improvement in the management of Commonwealth environmental water.

Basin Matters

The Basin scale evaluation will be based on outcomes for six ecological indicators, derived from the Basin Plan objectives. Collectively these indicators are referred to as Basin Matters and they are:

Murrumbidgee river floodplain

- Hydrology: Flow regimes and connectivity
- Ecosystem diversity
- Vegetation diversity
- River Metabolism
- Fish populations
- Generic diversity (e.g. frogs)

Resources

For further information and to access the following reports from the LTIM Project visit: www.latrobe.edu.au/ or www.environment.gov.au/water/cewo/monitoring/ltim-project:

- CEWO LTIM Logic and Rationale
- The Environmental Water Outcomes Framework
- Basin Evaluation Plan
- Selected Area Monitoring Plans