

IMPROVING OUTCOMES OF ENVIRONMENTAL FLOWS THROUGH ADAPTIVE MANAGEMENT:
AUSTRALIA'S LONG-TERM INTERVENTION MONITORING PROJECT

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Abstract:

Legislators have identified adaptive management as a way to improve outcomes from environmental flows. The Australian Government's 'Long-Term Intervention Monitoring' (LTIM) Project is evaluating responses to Commonwealth Environmental Water in the Murray-Darling Basin (MDB). Monitoring, evaluation and reporting of ecosystem responses to environmental flows is undertaken for seven 'selected areas' within the MDB, with results also synthesised at the whole of basin scale. In 2017 project teams from the seven selected areas met to compare approaches, share successes and learn from failures. The parallel implementation of adaptive management in seven projects provides the potential for more rapid learning than is possible with any single project. We found that in each selected area the learnings have enabled managers to adaptively manage environmental water to improve environmental outcomes over short time scales. However, as the spatial and temporal scale of decisions increases, adaptive management becomes harder. Incomplete and/or inconsistent documentation of the decision making processes and learning is also a barrier to better dissemination of findings from individual selected areas to the rest of the LTIM project. Large-scale monitoring and adaptive management of environmental flows is in its infancy. There is potential for rapid advances to improve environmental, social and economic outcomes from environmental flows. However, improved 'reflection' to share the learning from individual projects remains the key to achieving this.