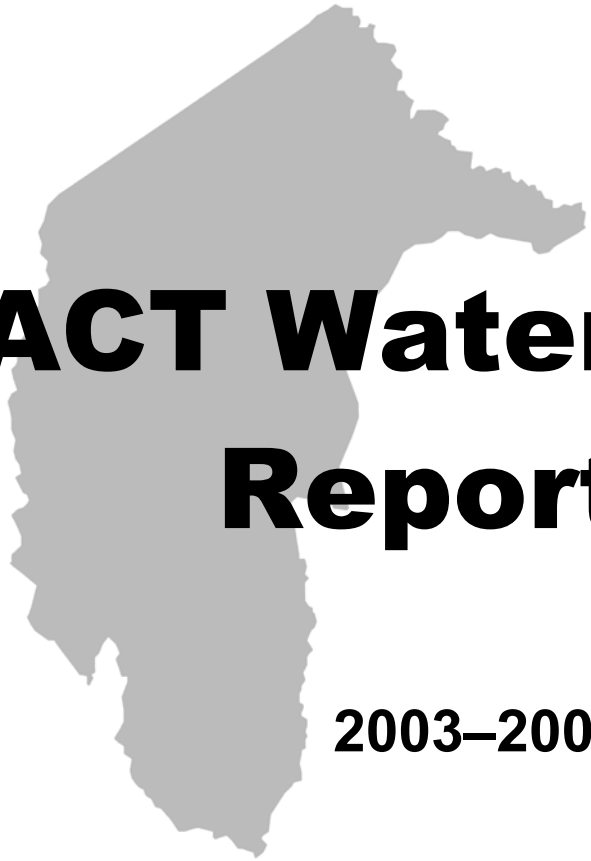
building our city
building our community

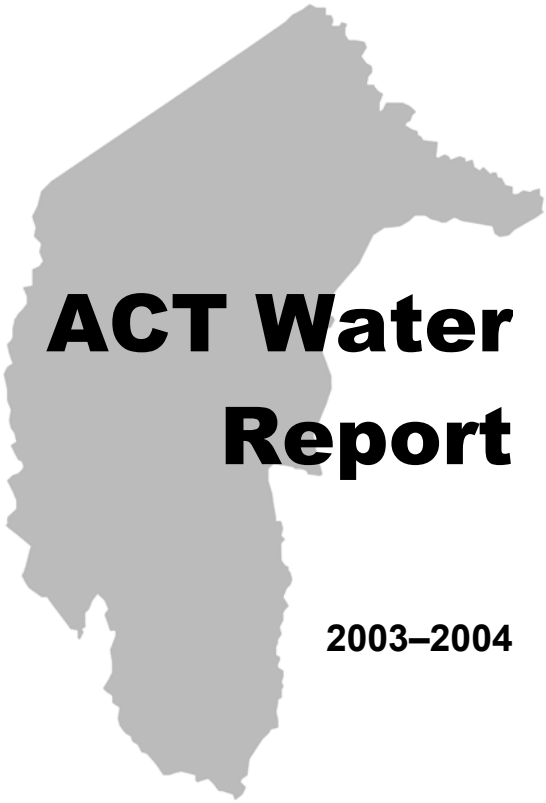
ACT Government



ACT Water Report

2003–2004

environment ACT
CHIEF MINISTER'S DEPARTMENT



ACT Water Report

2003–2004

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MINISTERIAL FOREWORD

The successful management of the water resources in the ACT is vital for the sustainability of the ACT's waterways and the prosperity of the Canberra region.

The ***ACT Water Report 2003–2004*** provides important information about our waterways and the impact of the urban, rural, forestry and conservation land practices in the ACT.

The report provides comment on the way in which we use our waterways, from recreation to irrigation, including references to the increased demand for alternate water sources following the introduction of restrictions on potable water use.

This year, the report continues an examination of the way our catchments and waterways are responding to the ongoing impacts of drought and fire.

Water quality and biological monitoring indicates the health of streams is affected by the concentration of pollutants and nutrients, particularly in urban areas, resulting from low rainfall and low flows. In non-urban areas, streams that deteriorated post-bushfire due to sedimentation are showing signs of improvement.

Recent collaboration between water resource managers and scientists has shown that the aquatic health of our waterways can be improved with adaptive management regimes. This approach will be continued into the future.

In addition to the monitoring undertaken by the government, many community organisations are making a significant contribution to care for our waterways through comprehensive community monitoring programs, which not only focus on water quality itself, but also monitor aquatic fauna such as frogs and macroinvertebrates. Such community groups should be commended for their ongoing dedication to our precious waterways.

This report also follows the inauguration of *Think water, act water*, our water resources strategy that provides long-term guidance to the management of water resources for Canberra and the region, and demonstrates the commitment of the ACT Government to sustainable water management.

In future years, *Think water, act water* will shape the format of this report to allow for progress reporting not only on water quality and resource management, but also on water use efficiency, water sensitive urban design, catchment management, riparian zone management and the combined efforts of the ACT government and community to reach the targets for reduction in potable water use and an increase in water reuse.

I welcome this report and look forward to following the improvement of our catchments and waterways as they recover from the difficulties of drought and fire.

Jon Stanhope MLA
Chief Minister and Minister for the Environment

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EXECUTIVE SUMMARY

Environment ACT manages a water monitoring and assessment program for the ACT that includes water quality, streamflow, and biological monitoring. This information is used to determine whether management strategies used to achieve or maintain the aquatic values set for ACT waters are appropriate.

The report is intended to provide the community with information regarding the state of water resource management in the ACT, including quality, quantity and implementation of water use efficiency programs. The assessment approach adopted is designed to move towards a more holistic ecosystem health monitoring system as prescribed by the Murray-Darling Basin Commission's Sustainable Rivers Audit. It uses biological data to ascertain ecosystem diversity, water quality data to determine trends that may be present and compares these results with the designated environmental and use values and standards set in the Territory Plan and *Environment Protection Act 1997* and its regulations. Streamflow monitoring is used to gauge the impact of removing water from the environment for other uses.

Water quality is monitored in the major urban lakes (with the exception of Lake Burley Griffin, a Commonwealth responsibility) and Burrinjuck Reservoir, which is immediately downstream of the ACT. The major rivers and some urban streams are also monitored. River flow is measured at a number of sites throughout the ACT.

The report uses the biological information to report the biodiversity in the rivers. The sampling data is analysed, determining any trends that may be present for the period 1992-2004. The individual data points and median values for the year are considered with reference made to the standards set out in the Territory Plan and *Environment Protection Act 1997*.

Rainfall and streamflow for the 2003-2004 15-month reporting period were below the long-term average, but had increased from last year's low annual totals. This reporting year has seen environmental conditions in urban water bodies deteriorate due to the compounding effects caused by very low rainfall during the reporting period. Environmental conditions in non-urban waterways reflect the ongoing impacts of the bushfires, with elevated sediment levels, although these waterways are showing increased resilience to rainfall events.

Canberra's lakes, Lake Ginninderra and Lake Tuggeranong, have fair water quality with an overall improvement in water quality conditions throughout both lakes, and thus in the water that flows out into our creeks and rivers. Point Hut Pond, Gungahlin Pond have comparatively poor water quality with elevated levels of turbidity and suspended solids. Runoff from upstream residential developments is the most probable cause. Water quality in Gungahlin Pond improved from last year, and should continue to do so as the catchment stabilises following extensive development.

The *Water Resources Act 1998* came into full effect in December 1999 and requires assessment of river flows, and licensing of water abstractions. Since that time considerable progress has been made implementing the provisions of the Act, most notably the licensing provisions for groundwater and surface water. The pressure on these resources has increased during the reporting period, with an increase in the application to construct bores and an increase in applications for licences to take water, particularly in urban areas. This increased demand for groundwater can be directly attributed to the implementation of water restrictions on potable water use.

This is the first time that the water resources strategy, *Think water, act water*, has been included in the annual water report. As the strategy has only been finalised towards the end of the reporting period of this report strategy results, reporting on the strategy has been limited to details of the reporting framework and of use efficiency programs that have been implemented to date. Next year's report will include a more comprehensive reporting on the strategy.

Last, but by no means least, this report recognises the contribution community groups make to sustainable water resource management, and provides a summary of a number of community programs, such as Waterwatch and Frogwatch.