

EXECUTIVE SUMMARY

Environment ACT manages a water monitoring and assessment program for the ACT that includes water quality, streamflow, and biological monitoring. This program is part of maintaining up to date information on the water resources of the ACT, a statutory requirement of the *Water Resource Act 1998*. Additionally this information is used to assist in determining 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 and quantity. The assessment approach adopted is designed to move towards a more holistic ecosystem health monitoring system as advocated by the Murray-Darling Basin Commission's Sustainable Rivers Audit. It uses biological data to ascertain ecosystem diversity, and 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 provides contextual information and 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 and streams. The individual data points and mean values for the year are considered with reference made to the standards set out in the Territory Plan and *Environment Protection Act 1997*.

Rainfall for the 12-month reporting period (July 2004–June 2005) was similar to the long-term average, an increase from last year's low total. However, streamflow was below the long-term average. Environmental conditions in urban waterways remain at the degraded condition of previous years and have not recovered from the added stresses brought on by drought and fire impacts. Environmental conditions in non-urban waterways reflect the ongoing impacts of the bushfires, with elevated sediment and turbidity levels in response to rain events. However, these waterways are showing increased resilience to rainfall events compared to immediately after the bushfires.

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 rivers and streams. Point Hut Pond and 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 continues to improve 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 applications to construct bores and an increase in applications for licences to take water, particularly in urban areas. Consequently many subcatchments have reached the limitation for licenced water abstraction. Licenced water use was previously given on a first in first served basis, however, given the limitations of the resource and demand across the community, a moratorium (effective 1 September 2005) on further access to water has been instigated. Options for an alternative approach that would ensure water realises the highest public benefit outcomes are being investigated.

Research into catchment processes and threatened fishes continues along with a number of community programs, such as Waterwatch (including the award winning *Campfire program*) and Frogwatch.