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**MOMENTUM**

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### ***A Project to Deliver Citywide Stormwater Quality Improvement***

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Inland waterways are under increasing pressure from urban development, past land and water management regimes and limited community awareness of what activities affect local stormwater quality. Nutrients in local stormwater lead to eutrophication resulting in algal blooms in inland waterways. The accumulation of sediment (*containing nutrients*) in aquatic systems leads to degraded physical water properties and altered biochemical conditions threatening native fauna communities. Cumulatively these affect the ecological, recreational and economic values of our waterways.

Poor-quality stormwater from Canberra affects waters in the Molonglo and Murrumbidgee Rivers and the downstream Murray-Darling system.

A joint initiative of the Australian and ACT governments, ACT Healthy Waterways is investing \$93.5M in stormwater quality infrastructure as well as in-lake research, new education, monitoring and management systems across the Canberra region. The outcome will be reduced nutrient and sediment loads in our waterways and lakes as well as in downstream river systems and improved water quality. This project is a once-in-a-generation opportunity to significantly improve water quality in the ACT's lakes, the Molonglo, the Murrumbidgee and the Murray-Darling system.

Delivery of the Project posed a broad range of policy, technical and program challenges. These related to constraints such as a tight project timeframe, the appropriateness of infrastructure for inland conditions, the cost effectiveness of options and the need for broad community ownership.

From the outset the project team took a holistic approach, working with engineers, scientists and urban designers as well as the community to select sites that would deliver the best water quality outcomes and social benefits. To better understand the challenges an event-based monitoring regime was implemented, the effectiveness of existing infrastructure was investigated and a community survey on social values and expectations around stormwater was undertaken. Consultation and collaboration were paramount. Project Advisory Groups were established comprising technical experts, asset managers, academics and representatives from the community bringing a broad range of perspectives to the decision making process.

A catchment-wide approach was adopted when considering the sites and treatment options. This looked beyond construction costs and considered wider environmental and social values, as well as the life-cycle financial implications of each asset. It

enabled the team to apply appropriate weighted criteria to an initial list of over 500 potential sites and identify the best-outcome 25 to move forward into final design.

This same process can now be applied to catchment scale evaluations of urban stormwater treatment options across the Murray-Darling Basin.