



ACT Healthy Waterways – A program to deliver citywide stormwater quality improvements

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Increased pollutant loads generated by urban development, past land and water management regimes and poor community awareness around behaviours are placing the ACT's rivers and lakes under increasing pressure and affecting water quality. In turn, this is affecting the quality of water flowing out of the ACT and into the Murrumbidgee River.

A joint initiative of the Australian and ACT governments, ACT Healthy Waterways is investing \$93.5M in infrastructure, in-lake research, education and monitoring across the Canberra region. This Project represents an opportunity to reduce nutrient and sediment loads and improve water quality in the ACT's lakes, the Molonglo and Murrumbidgee rivers and the Murray-Darling system.

The Project posed a range of policy, technical and program challenges including a tight project timeframe, the appropriateness of infrastructure for inland conditions, the cost effectiveness of options and the need for broad community ownership.

The first phase of the Project involved comprehensive investigations and was completed in February 2016. To better understand the delivery challenges, the team implemented an event-based monitoring regime, evaluated the effectiveness of existing infrastructure, and undertook a community survey on social values and expectations around water. Project Advisory Groups - comprising technical experts, asset managers, academics and representatives from the community – were established, bringing a broad range of perspectives to the decision-making process. This approach resulted in:

- refinement of treatment locations and the development of option concept designs for each site
- an improved water quality monitoring framework for the ACT
- a legacy package of works – infrastructure and broader management - that could, subject to normal government processes and budget priorities, be funded by the ACT Government in the longer term.

Most importantly, Phase 1 adopted a catchment-wide approach. It looked beyond construction costs and considered wider environmental and social values, as well as the life-cycle financial implications of each infrastructure project. It enabled the team to apply appropriate weighted criteria to an initial list of over 500 potential sites and identify the best 19 projects to move forward into detailed design.

Designs were interrogated through a value-for-money process. A two gateway approach was used - an initial assessment (VM1) to understand opportunities followed by a more detailed (VM2) workshop to resolve design

changes. This approach reduces the scope of key risks such as earthworks, rock excavation and spoil disposal during construction and provide the design sub-consultants with direction for design development

The water quality infrastructure and behaviour change options will lead to long term improvements to environmental condition, urban landscapes, liveability, amenity and recreation. It has also created exemplar “best practice” templates for a range of catchment types - the solutions can be applied in similar catchments across the Murray- Darling Basin.

The second and final phase of the Project has commenced. Capital investment of over \$83 million will build up to 19 new infrastructure projects, as well as implementing programs to raise awareness about water quality issues and how residents, businesses and visitors can help look after and improve our waterways.

Construction has now commenced on six infrastructure projects, with 13 more to be rolled out by the end of the year. The Project is expected to play an important role in reducing nutrient and sediment loads and improving water quality in the ACT’s lakes, the Molonglo and Murrumbidgee rivers and the Murray-Darling system.