



Advancing the ACT Basin Priority Project

The ACT Government secured \$80M of federal funds to understand, design and build new stormwater treatment infrastructure throughout the ACT. This investment is known as ACT Basin Priority Project, which aims to ensure Canberra residents and businesses, as well as visitors to the city, enjoy the benefits of healthy, functioning rivers and lakes. It also aims to significantly improve the quality of water leaving the ACT via the Murrumbidgee River, thus contributing to better water quality in the Murray Darling Basin.

As part of this process the Alluvium was commissioned to conduct a strategic review and analysis of urban water quality management infrastructure in Canberra. The review involves auditing and analysing existing water infrastructure to determine its effectiveness, and whether assets require replacement, retrofitting or improved maintenance.

Performance of assets

The role or function and appropriateness of individual water quality management assets was reviewed against the chain of related assets within the catchment, and their effectiveness against current ACT water sensitive urban design requirements. This work described the anticipated performance of the asset, as identified in the design specifications, against its current performance, and planned and recommended maintenance against actual maintenance carried out.

The review is also considering likely future pollutant demands on the assets and assessing their ability to meet future demands within the catchment in which they're located, conforming to relevant codes and water sensitive urban design requirements.

Organisational and operational perspective are also important

A critical element of the work is to understand the suite of treatment systems that are the subject of the review, not just from a technical perspective but also from an organisational and operational perspective. If performance is to be improved in these and future systems, it is important to understand not only *where* there are performance issues but *why*. Our work helped to describe the gap between what water quality management assets are currently achieving, or will likely achieve, and what is actually required now and into the future.

Strategic intervention advice

A key outcome for this project was advising the next phase of the ACT Basin Priority Project with regard to what are the optimum types of strategic intervention water infrastructure system designs and assets for Canberra catchments. This work has resulting in the identification of 23 new assets to the value of around \$60M.