



ACT HEALTHY WATERWAYS (BASIN PROJECT)

Improving long-term water
quality in the ACT and
the Murrumbidgee
River System



ACT Healthy Waterways (Basin Project) is a joint initiative of the Australian and ACT governments to protect and improve long-term water quality in the ACT and the Murrumbidgee River System. The project will reduce the level of nutrients and sediment entering our lakes and waterways that, in turn, have an impact on Australia's iconic Murray–Darling Basin.

The first phase of the five-year project was completed in February 2016. Detailed information and community feedback about our waterways was gathered and assessed and a wide range of potential water management options developed.

The second and final phase has commenced. Over \$80 million will be invested in up to 25 new infrastructure and water management projects, as well as programs to raise awareness about water quality issues and how residents, businesses and visitors can help look after our waterways.

The project covers six priority catchments—the established catchments of Lake Tuggeranong and Yarralumla Creek, the developing catchments of Upper Molonglo, Lower Molonglo and West Belconnen, and the industrialised Fyshwick catchment.

WHY WE NEED THE PROJECT

Canberra's lakes and waterways are under increasing pressure, largely due to urban development, past land and water management regimes, climate change, and a general lack of awareness about the kinds of activities that affect water quality.

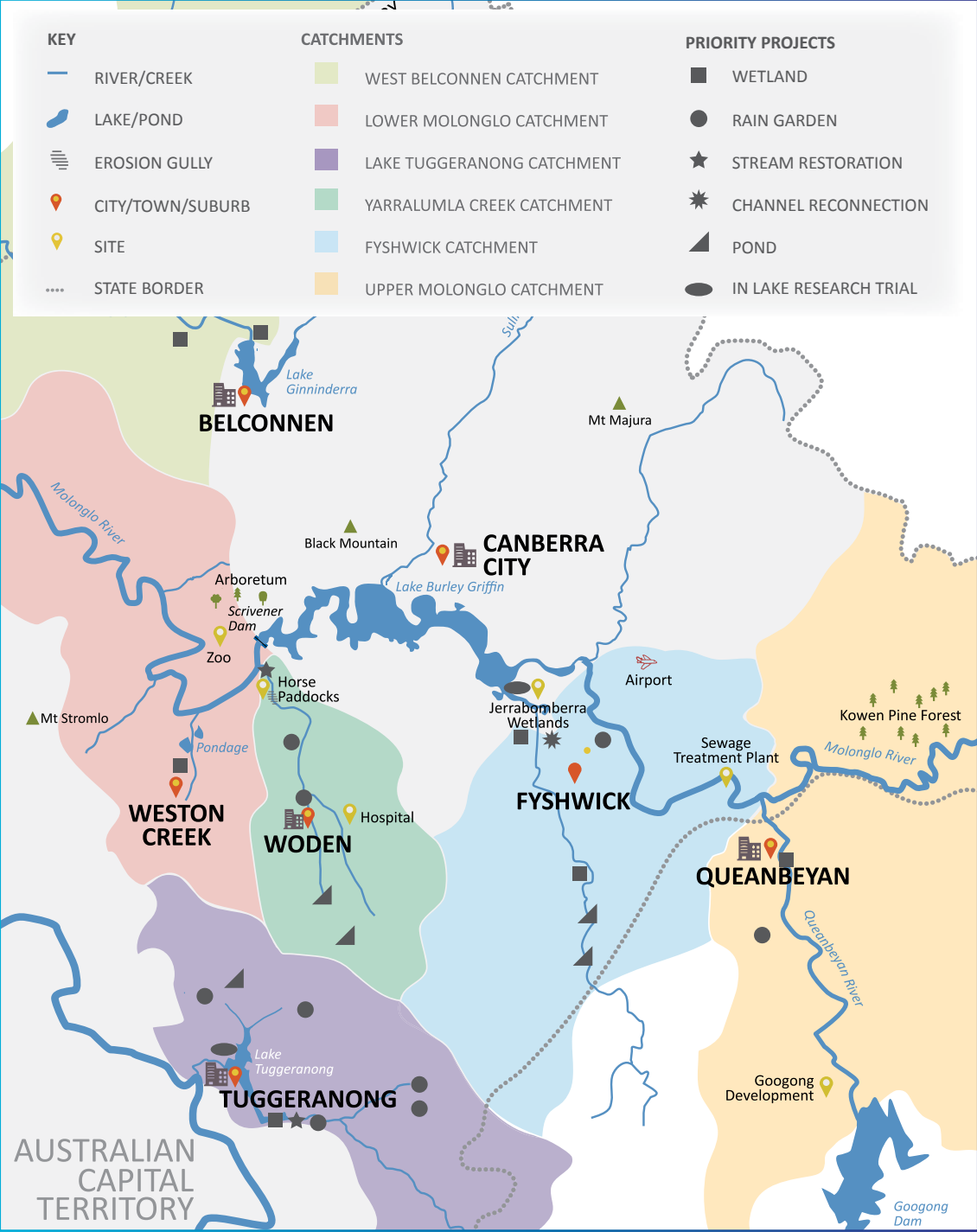
Stormwater pollution affects water quality, posing risks to public health and aquatic life. It also threatens the many social, economic and environmental benefits our lakes and waterways generate.

Our stormwater also causes problems beyond our borders. It has an impact on water quality downstream in the Murrumbidgee River system and, more broadly, in the Murray–Darling Basin.

ACT Healthy Waterways plays an important role in achieving targets included in the ACT's Water Strategy, announced in 2014. The strategy sets out how the ACT Government will manage the Territory's water resources over the next 30 years.



PRIORITY PROJECTS



TWENTY-FIVE PRIORITY PROJECTS HAVE BEEN SELECTED IN THE ACT'S SIX PRIORITY CATCHMENTS.

A carefully balanced combination of factors were considered in selecting the projects, underpinned by thorough scientific research and consultation with technical experts, government and the broader community.

Factors included the predicted water quality outcomes each option would generate, the cost of both building and maintaining infrastructure over its lifetime, potential environmental impacts and site-specific practical constraints. Broader economic costs and benefits, social values and community preferences were also considered.

The projects incorporate the following eight types of infrastructure and water treatment options.

PONDS

Ponds help to settle fine sediment by reducing the speed of water flows caused by run-off. They can also provide temporary storage so stormwater can be re-used. They enhance an urban environment by helping to attract birdlife, reducing water-borne pathogens through UV sterilisation and providing recreational amenity. They work best towards the end of a catchment, after coarse sediment and gross pollutants (litter) have been removed.



WETLANDS

Wetlands help remove nutrients from stormwater by providing a habitat for water-loving reeds, grasses and trees which use the nutrients to grow. They help remove sediment by reducing the speed of water flows caused by run-off. Wetlands can attract a diversity of wildlife, such as birds and frogs, as well as providing the community with opportunities for recreation and to enjoy nature.

CHANNEL RECONNECTION

Channel reconnection involves reconnecting part of a creek that has become disconnected from the primary creek line, either naturally by flood or by engineered drainage works. The disconnection may form a wetland. Reconnecting the channel to the creek allows more water to be diverted into and treated by the wetland.

RAIN GARDENS

Also known as bio-retention systems, rain gardens look like a garden on the surface but have a storage and filtration structure underground that reduces nutrients from stormwater before it enters the drainage system. They are suited to highly urbanised environments and smaller catchment areas.



STORMWATER

Recycling stormwater for irrigation puts nutrients contained in stormwater run-off back into the soil, benefiting plant life. It reduces the demand on high quality mains water supplies which can save on costs.

CREEK RESTORATION

When waterways are revegetated they filter run-off and reduce the amount of nutrients and sediment that would otherwise enter them. This approach also reduces erosion, creates habitats for native plants and animals and improves local aesthetics.



SWALES

These are shallow elongated depressions that collect and convey stormwater. Swales are lined with grass or other plants that trap and remove sediment as the stormwater passes through them.



GROSS POLLUTANT TRAPS (GPT)

GPTs are designed to remove a range of pollutants from waterways, including rubbish, coarse sediment, litter and some types of oil. They are often the important 'first line of defence' in treating stormwater, particularly in areas of high litter. Designed well, they can also be quite attractive. For example, a GPT can incorporate a fountain in the centre of a pond.





RESERVE WATER QUALITY PROJECTS

In each catchment reserve projects have been identified to allow for contingencies that may emerge during design or construction. They will go ahead if any of the priority options are no longer considered viable or unexpected savings are made in completing the priority projects.

WHAT HAPPENS NEXT?

Further work still needs to be carried out to develop detailed designs and costings for each project and gain development approval from the planning and land authority.

Construction of the first projects is expected to begin in 2017. The order in which they unfold will depend on opportunities to generate greater value and efficiencies by combining work on various projects and site and seasonal constraints.

HAVE YOUR SAY

Community consultation in each catchment will provide more information on the specific designs for each project and offer opportunities to comment. Feedback will be taken into account in the final detailed plans.

To find out more about the project:

Visit: www.yoursay.act.gov.au

Phone: 13 22 81

Email: epd.basinproject@act.gov.au

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Write: ACT Healthy Waterways (Basin Project)
Environment and Planning Directorate, GPO Box 158, Canberra City ACT 2601