

FAQ

Frequently asked questions

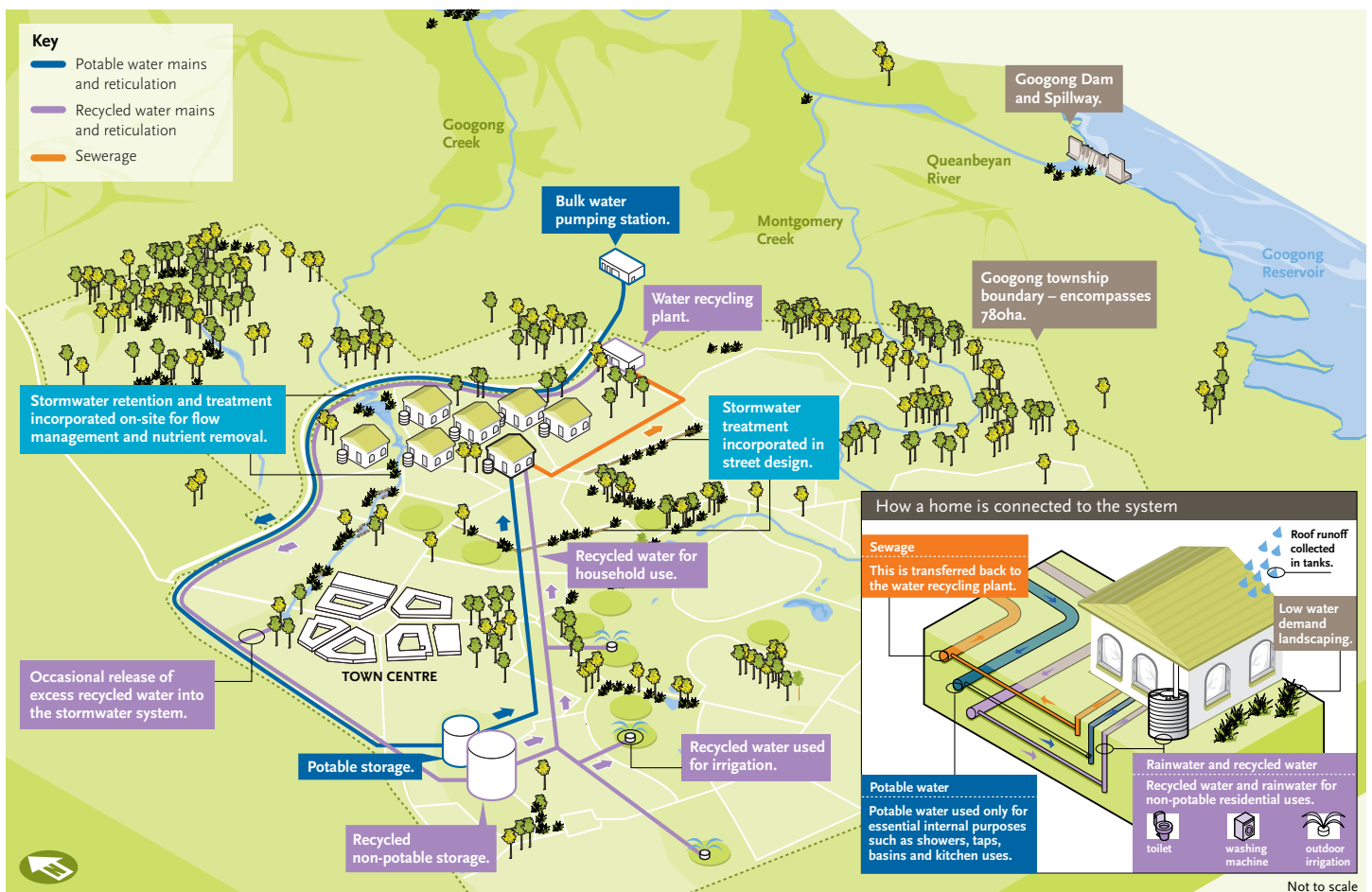
What is the Googong Integrated Water Cycle Project?

The Integrated Water Cycle Project provides the infrastructure to deliver water and wastewater services to the Googong township in the form of; supplying potable water, capturing and recycling wastewater, and in turn supplying recycled water throughout the township.

The recycled water system will store and distribute very high quality recycled water for reuse for domestic non-potable purposes (external taps, toilet flushing, clothes washing), plus non-residential toilet flushing, public open space irrigation. In summer almost all recycled water is expected to be used, and if needed the system will be supplemented by collected rainwater at households and, when necessary, potable water. In wetter months, excess high quality recycled water will be discharged via the stormwater system to the Queanbeyan River, under the strict provisions of the Water Recycling Plant's operating licence.

How does the Integrated Water Cycle Project fit into the Googong township?

The Googong township will be built on 780 hectares of former grazing land and will be a new, self-contained, residential community which will have about 5,500 dwellings and be home to an estimated 16,000 people. Water has been a particularly important element in the planning of Googong, as the vision for the township is to achieve high levels of water sensitive urban planning and design. The Integrated Water Cycle Project will deliver the water and wastewater services to the township.





How much water does this system save?

The Integrated Water Cycle Project will reduce potable water consumption by at least 60 per cent and approximately 62 per cent of the recycled water will be reused within the Googong township. To give an example, it will allow the township's population of 16,000 to use the same amount of drinking water that in a "traditional" development will normally sustain only 6,400 people.

Who will approve the Googong Integrated Water Cycle Project?

The Minister for Planning will determine whether or not to approve the project, and the conditions to be attached to any approval.

Who will be building it?

CIC Australia will oversee the building and development of the Googong Integrated Water Cycle Project, as well as the overall Googong township. The company has local roots and understands the area well. By applying its business and planning philosophy of 'Communities in the making', CIC has become well known for the quality of its residential developments in the Canberra region.

CIC Australia is part of the Guinness Peat Group, and is listed on the Australian Stock Exchange. Our head office is in Canberra, with other offices in Adelaide and Darwin. For further information see www.cicaustralia.com.au

When will it be built?

The Googong township will be progressively developed over a 25 year period, with construction planned to commence in mid 2011. The Integrated Water Cycle – as part of the overall development – will commence in parallel with general subdivision construction.

Because the population at Googong will grow over such a long period, the Integrated Water Cycle will be progressively developed in five stages, the intent being that the capacity of the system keeps pace with the progressive growth of the township.

How much will it cost, and how many jobs will the project create?

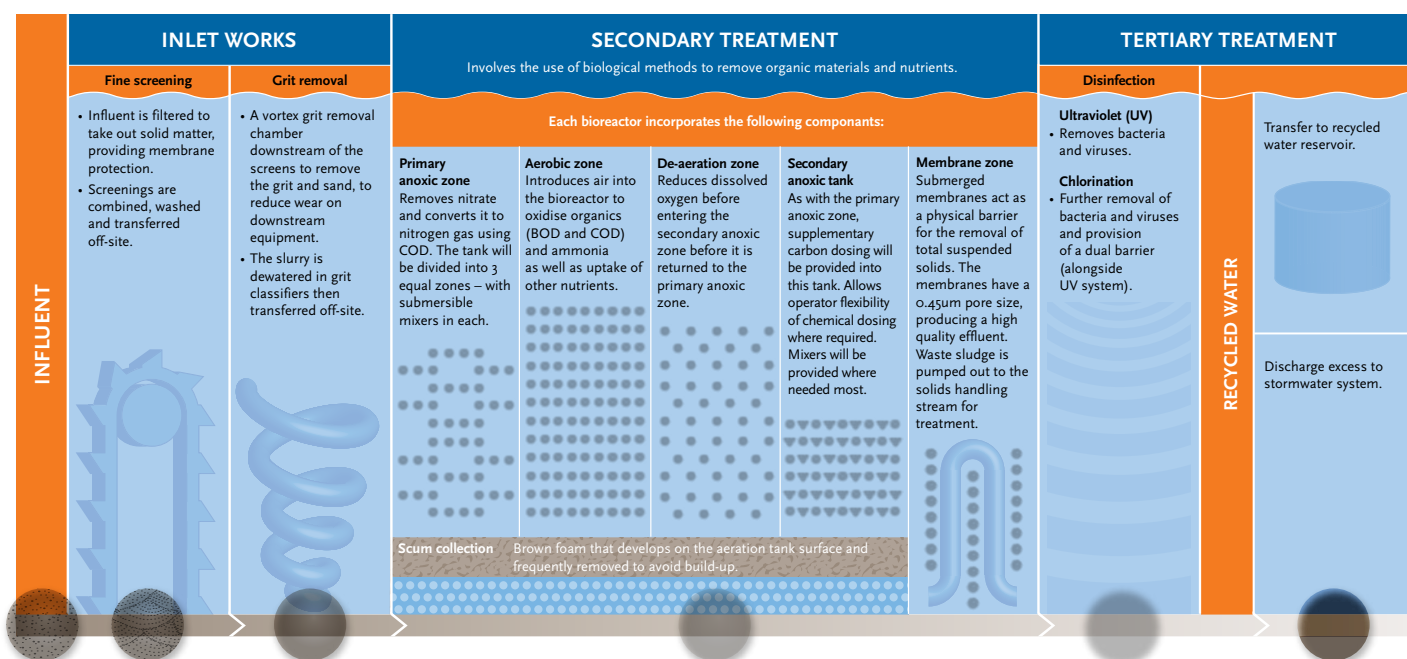
At completion, the Googong Integrated Water Cycle Project is expected to cost \$85.7 Million. The Googong Integrated Water Cycle Project will create around 300 jobs during it's construction phase.

How does the Water Recycling Plant work?

The Water Recycling Plant will treat the sewage to a quality suitable for non-potable urban reuse within the Googong township. The water recycling process involves three key steps:

- › **First step** – Sewage will flow into the Water Recycling Plant and will go through fine mesh screens and a vortex chamber to remove the grit.
- › **Second step** - The flow will then pass through a number of barriers (made up of fine membranes) – a proven filtration technology widely in use, which will remove organic material, nutrients and suspended solids using a membrane filtration.
- › **Third step** – The flow will then be disinfected with ultraviolet radiation followed by chlorination. It will then be transferred to the recycled water reservoir for reticulation throughout the township, in parallel with – but separate to – the potable water.

Water recycling plant process:



What will the recycled water be used for?

At Googong recycled water will be used for:

- › Irrigation of public spaces, such as sporting fields, recreational areas and streetscapes.
- › Watering of household gardens.
- › Non-potable uses, such as toilet flushing and clothes washing within the household.

The integrated nature of water management proposed at Googong is one of it's key features. For example, household garden watering will use a combination of recycled water and rainwater, stored in tanks at each property.

What are the health implications with using the recycled water?

The recycled water will be treated to a very high standard and will comply with the requirements of NSW Health. The recycled water will be suitable for “unrestricted non-potable reuse”. Recycled water is used at many locations around the world and in Australia, such as at Rouse Hill in Sydney. As discussed above, recycled water at Googong will be disinfected using a two-stage process of ultraviolet radiation and chlorination to reduce potential risks to human health. As such, people at Googong can safely use the recycled water in the township for non-potable purposes.

Where will our drinking water come from?

The potable water supply for the Googong township will come from the existing Queanbeyan and ACT bulk water network. A pipeline will connect to the existing bulk water network and be transferred to a new bulk water pumping station, which will then transfer potable water to the Googong township.

Is the potable water network separated from the recycled water network?

Potable water and recycled water delivery networks are completely separated, so there can be no cross-connection between them. Relevant guidelines and standards will be adhered to during construction, management of the system and when installing plumbing, including how pipelines are laid, what materials are used, colour coding of pipes, signage and community education.

What environmental studies have been done for this project?

An environmental assessment has been prepared under Part 3A of the NSW Environmental Planning and Assessment Act 1979 and meets the requirements of NSW Department of Planning. Specialist assessments for the project included groundwater, contaminated land, land capability assessment (salinity), aquatic ecology and water quality, terrestrial flora and fauna, human amenity (traffic, odour, noise, aboriginal and historical, and visual).

How is the environment being protected?

The Googong Integrated Water Cycle environmental assessment finds that the Project will have no significant impacts on the environment, provided the mitigation measures identified are implemented. The environmental assessment includes a statement of commitments which incorporates a comprehensive suite of measures to mitigate any potentially significant impacts arising from the Project. Detailed construction and operational environmental management plans will be prepared to implement these measures.

What effect will there be on the Queanbeyan River?

The environmental assessment has assessed water quality impacts arising from the construction and operation of the IWC project. The assessment shows that the existing waters of the Queanbeyan River are already slightly disturbed, so the IWC project is unlikely to have any significant impacts on the ambient quality in the river. However, maintaining this standard is considered very important to project team, as such, a monitoring program will be conducted during pre-construction, construction, commissioning and operation to ensure that ambient water quality is maintained, or improved. The project will not affect downstream users of the Queanbeyan River and people who currently swim in the river at locations such as White Rocks can safely continue to do so.

How is the Googong Dam and Foreshores being protected?

The Googong Integrated Water Cycle Project will protect the Googong Dam and Foreshores area by avoiding any construction within the dam catchment. This also includes avoiding the use of recycled water within the dam catchment, and avoiding any groundwater impacts on the dam.

The dam and waterways will be monitored as part of licence conditions.

How do I find out more information?

- › The complete environmental assessment can be downloaded for free via the NSW Department of Planning website. Click here: <http://majorprojects.planning.nsw.gov.au>
Click on the link "on exhibition" then "view projects currently on exhibition". The Googong water cycle project is in the lower third of the list.
- › The environmental assessment can also be viewed at Queanbeyan City Council, the Queanbeyan Visitor Information Centre, the Queanbeyan City Library, the Googong Foreshores Ranger Station and several other locations in Sydney – details are on the NSW Department of Planning website.
- › Contact the project team (Paul Keighley or Emily Moore) on 02 9248 9800 or e-mail cic@cicaustralia.com.au