

Agnes Water/Seventeen Seventy Integrated Water Project

Without a reliable, long-term potable water supply, the townships of Agnes Water and Seventeen Seventy are faced with serious implications for community growth and development, employment, lifestyle and tourism. Gladstone Regional Council has placed a high priority on providing a long-term community water and sewerage management solution and has appointed contractor United Utilities Australia (UUA) to oversee the delivery of its Agnes Water/Seventeen Seventy Integrated Water Project.

What will the project involve?

The project involves the construction of a desalination plant, sewerage treatment plant upgrade, water and sewerage reticulation and a reservoir to Seventeen Seventy. The project is expected to be completed in mid 2011.

When is work expected to start?

Work on Stage One of the project started in January 2010. The project will be constructed in five stages, with Stage One involving the construction of a sealed road and pipeline from Springs Road to Chinaman's Beach. A car park will also be constructed 100m from Chinaman's Beach to provide safe, permanent beach access.

What is the cost of the project?

The capital cost of the project is \$41.5 million. The initial stages will be funded by a \$27 million allocation from the State Government's Smaller Communities Assistance Program and Water and Sewerage Program.

What is wrong with our current water supply?

Existing ground water supplies are not sufficient to meet expected growth in water demand in the areas of Agnes Water and Seventeen Seventy. Without a reliable, long-term potable water supply, the townships are faced with serious implications for community growth and development, employment, lifestyle and tourism. After extensive investigations by Council, desalination, together with waste water treatment, was agreed to as the best option for securing a long-term integrated water solution.

What happens in the desalination process?

The desalination process starts in the ocean and goes through several steps:

Step 1: Seawater enters the desalination plant through an intake system 750m offshore. Water enters at a low speed to avoid impacts on marine life.

Step 2: Seawater passes through an initial screening to remove fine particles and is then further filtered to remove all finer particles.

Step 3: Filtered seawater undergoes a reverse osmosis process where it passes through membranes and the salts are removed.

Step 4: Desalinated water is then treated to meet Australian Drinking Water Guidelines.

Will the discharge be monitored?

Yes and strictly. During the desalination plant's operation, there will be a brine discharge into the ocean from the off-take outlet. However, this discharge has been designed within stringent guidelines set by the Great Barrier Reef Marine Park Authority (GBRMPA) and will be monitored by the Department of Environment and Resource Management (DERM), formerly the Environmental Protection Authority (EPA).

Will there be any environmental impacts?

No long-term environmental impacts are anticipated. The GBRMPA and DERM have applied strict conditions of approval to ensure minimal impact on water quality, beach dunes and local flora and fauna. The plant is being designed to minimise environmental harm during construction, however minimal impacts may occur but these will be appropriately managed by the contractors during this

fact sheet

period. Land clearing and noise will be closely monitored by the GBRMPA and Council under very strict guidelines.

What about the turtles?

Construction timeframes and methodology have been planned to avoid any disturbance to the beach area during turtle nesting season.

Where is the desalination plant to be located and will it be visible?

The desalination plant will be located approximately 50 metres behind the existing water treatment plant on the western side of Springs Road. No piping or infrastructure will be visible from Springs Road to Chinaman's Beach. A pump station, measuring 5 metres by 7 metres, will be installed at the beach zone however, only 300mm of this structure will be elevated above the natural surface. Neither the pipeline or submerged structures will pose navigational or safety hazards for boating, swimming or beach goers.

Can we still access Chinaman's Beach?

Chinaman's Beach will continue to be open both during and after construction. To maximise safety, the construction area will be clearly signed, delineated and closed to the public, however, vehicular access to the beach and dune area will continue to be prohibited. Once the project is complete, residents and visitors will be able to access Chinaman's Beach via the newly sealed road and car park during daylight hours.

What about the noise from the plant?

The desalination plant will be designed to meet stringent noise levels and will be strictly monitored by DERM, but experience indicates minimal noise will be produced.

Will the water be safe to drink?

Yes, the potable water produced will be tested regularly and will meet the most stringent standards, of Australia and World Health Organisations.

Who will have access to the new water infrastructure?

At completion, all Seventeen Seventy properties will be provided with a connection to the new water supply. Water self-sufficient properties may continue to use rainwater tanks, however a connection will still be provided to each property for immediate or future use. Property owners will be charged an access fee for the connection but consumption fees will not apply if you do not use the new supply.

In Agnes Water, there will be no change to properties connected to the existing supply network, as the new desalinated water supply will connect into the existing network. New properties will be added to this network as development occurs. Rural-residential properties will not be affected, nor will private dams which will continue to be permitted.

Why is it necessary to also upgrade Council's waste water facilities?

The existing waste water treatment plant is currently operating at capacity. The construction of a new waste water treatment facility will enable Council to expand its treatment capacity from 300kL to 450kL of water per day, with the option of staged augmentation to accommodate future growth and development in the Agnes Water and Seventeen Seventy areas.

Who will benefit from the waste water upgrade?

The new waste water treatment plant offers property owners considerable advantages. On completion of the treatment plant, all existing properties in the Seventeen Seventy area will be connected to Council's sewerage reticulation service. This will not only eliminate the need for disposal trenches on private properties, which potentially could contaminate groundwater, but will also provide a safe and environmentally sustainable sewerage solution for residents.

For further information or enquiries please contact Council's Water and Sewerage Manager Phil Boshoff on 4975 8459 or email philb@gladstonerc.qld.gov.au.