

New BNR facility for Watercare's Mangere Plant

February 2014



An aerial view of the current Mangere Wastewater Treatment Plant – part of the project site is outlined in red.

What's involved

- Watercare is preparing to expand the processing facilities at the Mangere Wastewater Treatment Plant by building an additional Biological Nutrient Removal (BNR) facility.
- Preliminary earthworks are currently under way; construction is scheduled to start in March 2015 and finish in December 2017. Total cost of the project is forecast to be \$136 million.
- The project also includes the construction of a new road linking Ascot Road and Puketutu Island, and an embankment to the south of the new facility. The embankment and associated landscaping will enhance the appearance of the plant, minimise any impact the expansion will have on our neighbours, and provide a pathway between the Watercare Coastal Walkway and the Greenwood Road Park.
- The new facility will sit to the south of the existing plant. As this will mean Island Road will run through the middle of the expanded plant, Watercare is building a replacement road to ensure continued public access to Puketutu Island.

Why it's needed

- High levels of nutrients (nitrogen and phosphorus) in waterways can affect oxygen levels in the water, reducing water quality and environmental diversity, and harming marine life. Sources of nutrients include farm run-off, industrial discharges, stormwater run-off, and human and animal waste. Biological nutrient removal is a process which uses bacteria to remove nitrogen and phosphorus from the wastewater stream.

(continued overleaf)

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Under construction – looking north, an embankment for a new link road to Puketutu Island, mid February 2014.

- The consents governing Watercare's operations set strict conditions on the make-up of the treated wastewater we discharge from all our plants; the new facilities will ensure we continue to meet those conditions and operate in an environmentally sustainable fashion now and into the future.
- The Mangere plant currently treats considerably less wastewater than is provided for in its operating consents; this new facility, combined with planned upgrades elsewhere in the network that will allow wastewater streams currently treated at Mangere to be diverted to Rosedale, will ensure our wastewater system is able to cater for expected increases in the region's population over the next few decades.