

Water Infrastructure Big Business for the North

2014 will be a big year for water infrastructure in Durban with construction of the second phase of the Western Aqueduct gathering momentum and the beginning of the first contract of the urgently Northern Aqueduct likely to begin.

Neil Macleod, head of eThekweni Water and Sanitation (EWS) said that the municipality had released a further R580 million over the next three years to accelerate the city's water infrastructure projects. This would not only ensure earlier completion of the Western Aqueduct but also bring forward the start of the Northern Aqueduct to ensure water was available for critical development projects such as Cornubia.

Project Manager, Martin Bright, said that the first contract of the Northern Aqueduct which starts at Phoenix Reservoir 2 and extends to the Waterloo Reservoir near Verulam, had already gone out to tender. This includes a link to the Umhlanga Reservoir in Umhlanga Rocks Drive. It was hoped that the tender would be awarded at the beginning of the fourth quarter of 2013, he said.

A tender to construct the new Blackburn Reservoir is also going through the tender evaluation process. This reservoir will play a crucial part in supplying water to Cornubia.

He said the second contract within the Northern Aqueduct project between Duffs Road and the Phoenix 2 Reservoir was currently undergoing an Environmental Impact Assessment (EIA). "Documentation is currently with the Department of Environmental Affairs. This is a very important link as it will boost water supply for the Cornubia development via the pipeline to be constructed under the first contract of the Northern Aqueduct."

The Northern Aqueduct project was designed and is being monitored by the Knight Piesold / Naidu Consulting Joint Venture.

Bright said that, unlike the Western Aqueduct, the Northern Aqueduct was not being constructed in linear fashion. Segments in areas of critical need would be put in place first which would allow water to be routed to important areas from reservoirs with spare capacity in order to guarantee an uninterrupted supply of water.

Macleod, who has long warned that Durban's demand for water outstripped demand which would entail severe water restrictions during the slightest drop in rainfall, says that the city is currently "in a honeymoon period."

With the new Springgrove Dam near Mooi River coming on stream and abnormally high rainfall ensuring that existing dams are full, he said that the balance between supply and demand had been restored for the time being.

"However, as new development continues, we will go back into deficit. So, each year going forward is critical. From 2014 onwards, we start slipping back to where the supply is not statistically able to meet the demand," he said.

He said that a tenuous water situation was acceptable whilst the northern regions of the city were filled with sugar cane. Massive development required not only an adequate but a reliable supply of water which could not be guaranteed at this stage.

Existing infrastructure provided no Plan B should a problem arise and water needed to be diverted from another part of the network to another.

“We may have enough water to meet the current demand but we don’t have the infrastructure to deliver it to where it is needed. We don’t have the network capacity,” he said, adding that this had led to the municipality holding back on future development plans.

The existing water network to the north of Durban is stretched to the limit. Macleod said that water outages in Ntuzuma and parts of Inanda were happening almost daily and said that the eThekweni Municipality had given permission for EWS to add a further 27 tankers to bring its fleet to 70. “These will be used for areas where supply is not adequate while we wait for the Northern and Western Aqueducts to be up and running,” he said.

Bright said that construction of the Western Aqueduct, which will ultimately feed water into the Northern Aqueduct, was gathering momentum. The first contract between Inchanga station and Alverston Nek was awarded to Cycad Pipelines in April and clearing of the pipe corridor and excavation of trenches has begun. The second contract which continues from Alverston Nek to Ashley Drive in Hillcrest was awarded to local company, WK SA Construction, this month.

He said the release of extra funds had enabled EWS to combine contracts for a 25km stretch between Ashley Drive and the NR5 Reservoir at Ntuzuma into one. As a result, a 39 kilometre stretch of pipeline between Inchanga station and Ntuzuma, which constitutes of the main spine of the Western Aqueduct, will be under construction by next year. This tender as well as one for a 20 mega litre break pressure tank at Ashley Drive is expected to be awarded towards the end of the year.