

Projects 2, 3, 4, 5

2. Mtamvuna water scheme

The second largest water-supply system in Ugu is at Port Edward where the district municipality has embarked on a R34-million project to improve the pumping capacity of the extraction plant and to install new bulk water pipelines. This system supplies water to consumers from Ramsgate to Port Edward and inland. A technical survey of the pumps by specialists indicated that the rate of wear was excessive so the pumping capacity had been comprised at a rate far quicker than anticipated. The replacement of pumps is being undertaken by Pattison & Candy and the project is due for completion in December. "Work has started on the design of an upgrade of the existing waterworks but a source of funding has not been identified for that project yet," says Van der Walt. "An additional R14-million is required for the upgrade. An alternative approach is to undertake the upgrade in

phases using Ugu's own limited funding. The existing plant is designed to handle 20 Mℓ/day but it is processing about 14 Mℓ/day, which is below demand. When necessary, we augment water supply by road tanker. The installation of more powerful pumps will enable us to fill the 500 Mℓ off-storage dam to enable us to gravity feed the waterworks and improve the volume of potable water that we process."

Work is proceeding on augmentation of the abstraction works as well as the installation of the bulk pipeline to the nearby dam. An 800 mm-diameter steel pipeline of 2,1 km in length is being installed to carry water from the pump station to the dam. The project should be completed by February. "Eventually, the whole system will be able to provide 36 Mℓ/day to 40 Mℓ/day of water, which will be more than sufficient for the next 10 to 15 years," says Van der Walt.

3. Mtwalume waterworks expansion

This bulk water works is managed by Umgeni Water and originally supplied rural consumers with about 4 Mℓ/day. Population has now increased to the point where the area is considered peri-urban and demand for water is about 6 Mℓ/day to 7 Mℓ/day. Abstraction from the Mtwalume River is being compromised by a sand-winning operation and a study is under way to establish how both needs can co-exist in the most environment-friendly manner.

Meanwhile the R20-million project to improve the capacity of the works, and to provide reservoirs to improve storage capacity, is in the planning stages. The appointed consulting engineer is CBI Consulting Engineers.