

Water on the table

Eight large projects are planned to address present and future challenges.



Multi-million-rand Mzimkulu augmentation

Work under way on the 870 000 kℓ Mzimkulu Dam is part of the larger Mzimkulu water-augmentation project, which has a total value of R245-million.

Of the plethora of projects identified by Ugu District Municipality, *Water Sewage & Effluent* takes a look at specific water-related projects that are on the table, and progressing towards execution and completion.

Ugu District Municipality has 19 water-treatment plants under its jurisdiction. In terms of bulk-water facilities, many large plants in the district are at or beyond design capacity. The Ugu municipality has about 40 000 water meters in the ground and estimates that about 10% of water connections are illegal. The projects in the district include:

Project 1 – Mzimkulu water-augmentation project, which has a total value R245-million; financed by a combination of a municipal infrastructure grant (MIG) and a loan from the Development Bank of Southern Africa (DBSA).

Project 2 – Mtamvuna, Ugu's second biggest bulk water-supply system, where

demand outstrips capacity and water has to be provided by road tanker at times. This area is at the southern end of the district near Port Edward. A total of R34-million is being spent on new extraction works, pumps and bulk pipelines but the municipality has not yet raised enough money to upgrade the water works.

Project 3 – Mhlabatshane Dam and rural, integrated water scheme – an ambitious R140-million project to integrate and expand existing rural water schemes. The dam is situated inland of Umzinto and is a joint project with Umgeni Water Board.

Project 4 – Mtwalume extraction plant and waterworks – a R20-million expansion to provide water to a former rural area now classified as peri-urban.

Project 5 – Harding/Wesa Dam feasibility study aimed at establishing whether or not a new dam on the Wesa River can



Photographs by Blake Wilkins

Dealing with pressure

Manholes, tucked away neatly, provide access to pressure-release valves being installed on a project-by-project basis in coastal-strip suburbs to ensure that high water pressures do not burst aging low-pressure pipes serving households.

be developed to serve the town and an extended rural area with a total population of 108 000.

Project 6 – Water conservation, pipe replacement and management of water pressures on the coastal strip. Old asbestos and cast-iron pipes in the 4 000 km water-reticulation network are being replaced in the areas worst hit by ongoing pipe bursts. Corroded pipes on road and rail bridges along the coast are also being replaced. The pipe-replacement budget is an estimated R15-million a year, which the municipality considers too low. Areas with high water pressure are being targeted for replacement while pressure-reducing valves are being installed in the water-reticulation system of various towns, such as Marina Beach, to hydraulically reduce pressure on the downward site of the valve to between 2,5 kPa and 3 kPa from the 6 kPa entering the valve.