

# Water for Growth and Sustainable Development

## Infrastructure Capital Expenditure Programme 2013 – 2017

TODAY Umgeni Water unveils, in this advertising feature, its Capital Expenditure Programme for the next five financial years, beginning July 1, 2012. The articles on these two pages tell their own story:

□ Of Umgeni Water's commitment to the provision of vital infrastructure required to enhance assurance of water supply in the future;

□ Of Umgeni Water's commitment to providing capacity that will enable municipalities to continue to deliver excellent quality drinking water to consumers; and

□ Of Umgeni Water's commitment to ensuring that Water Service Authorities are able to extend access to water to vulnerable communities.

Umgeni Water's Capex Programme for 2013-2017 has been crafted to ensure that there will be both adequate and effective water impoundment, treatment and supply infrastructure (dams, pipelines, reservoirs and water purification plants) available to meet future demands. Every effort has been made in this Capex Programme to support the economic growth projections of Umgeni Water's customers and to also ensure alignment to the growth strategies of the Province of KwaZulu-Natal.

For the next five years an amount of R4.22 billion has been budgeted to be spent on the construction and commissioning of infrastructure within

the Umgeni Water operational area and, in some instances, outside of it. This planned expenditure represents an increase of 36 percent over the previous five-year Capex Business Plan.

At a glance, the Capex budget for 2013-2017 is made up as:

□ R2.07b to be spent on the augmentation of water services, which will have the effect of enhancing assurance of supply in the future

□ R1.84b to be spent on infrastructure that will enable Water Service Authorities to extend water services to communities in backlog areas

□ R160 million has been allocated to asset management and maintenance, which will enable Umgeni Water to refurbish its infrastructure and ensure that they remain in excellent condition

□ R149m has been allocated to movable assets.

A total of 30 major projects are to be constructed under this programme, comprising, among others, dams, pipelines, water treatment plants and ancillary infrastructure. All the Water Service Authorities that are customers of Umgeni Water will benefit from these projects.

During the rollout of projects, an estimated amount of R200m will be spent on small and emerging contractors and businesses, thereby contributing to Black Economic Empowerment. During the construction phase, an estimated 8 000 casual,

temporary and permanent jobs are expected to be created for local communities, while approximately R150m will be spent on salaries and wages. It is also anticipated that there will be skills transfer and reskilling of workers employed for certain projects. This will have the effect of improving their chances of finding employment elsewhere, once their tenure on Umgeni Water's projects has ended.

An analysis of the Capex Programme for 2013-2017 produces two fundamental outcomes, namely the tremendous value of the planned projects – both from humanitarian and socio-economic perspectives – and their intrinsic importance as a catalyst for economic development and growth.

As an entity of State, Umgeni Water has a responsibility to ensure that it is able to respond to the needs of its Water Service Authority customers and the consumers of water.

In order to reach this state of readiness, a great deal of infrastructure and water resource planning has to take place, and in Umgeni Water's case, the planning horizon is for a 30-year period. This means the organisation has to be in a position to predict the water resource and infrastructure requirements for the next three decades and encapsulate it in an Infrastructure Master Plan. Umgeni Water is well placed to meet the needs of its customers, now and in well into the future.

For an organisation to effectively achieve its objectives, it needs to have, among others, a clearly defined plan of what is required in the future so that it can be addressed in the present. To this end, Umgeni Water has a 30-year planning horizon to ensure the needs of the future are identified and planned. The focus of the first five-year window is on implementation. Currently there are 100 projects in Umgeni Water's Capital Infrastructure Programme, which fall within the following classifications: augmentation, development, rehabilitation and upgrade. The total Capex budget of Umgeni Water amounts to R4.22 billion. Some of the larger projects in Umgeni Water's Capital Infrastructure Programme 2013 – 2017 are the following:

Name of Project	Number of people to be served
Mhlabatshane Bulk Water Supply Scheme	The initial capacity of Phase 1 will be 4MI/day. The anticipated number of people to be served is approximately 101,062.
Maphumulo Bulk Water Supply Scheme	The capacity of Phase 1 will be 6MI/day and the capacity of Phase 2 will be 12MI/day. The anticipated number of people to be served is approximately 149,756.
Lower Thukela Bulk Water Supply Scheme	The initial capacity will be 55MI/day with an ultimate capacity of 110MI/day. The beneficiaries of this scheme will be the town of KwaDukuza and the areas of the Upper North Coast region as well as areas of the Mandini Municipality. The scheme will also supply the rural areas of Bulwer, San Soucci and St Christopher and the towns of Darnall, Zinkwazi and Blythedale in the KwaDukuza Municipality. Assuming a consumption of 200l/c/day, the anticipated number of people to be ultimately served is 550,000.
'61 Pipeline: ED2 to Richmond Off-Take	The capacity of this pipeline will be 164MI/day. Whilst housing developments in Edendale will be the immediate direct beneficiaries, the extension also forms part of the upgrade of the entire '61 pipeline which will ensure that the maximum flow available can pass through Umlaas Road. The beneficiaries from this are primarily the Msunduzi and eThekweni municipalities, but also include consumers within the Mkhambathini municipal area of uMgungundlovu District Municipality. The Richmond Municipality will also benefit through increased supply to the Richmond Pipeline and associated bulk infrastructure. Assuming a consumption of 200l/c/day, the anticipated number of people to be served is 820,000.
'61 Pipeline: Richmond Off-Take to Umlaas Road Pipeline	The capacity of this pipeline will be 164MI/day. The augmentation will primarily benefit the eThekweni Municipality and will allow for a partial load shift to the Western Aqueduct. Consumers within the Msunduzi and the Mkhambathini municipal area of uMgungundlovu District Municipality will also derive benefit through increased flow reliability to their off-takes. Assuming a consumption of 200l/c/day, the anticipated number of people to be served is 820,000.
Maphephethwa WTW Upgrade	The capacity of this WTP will be 5MI/day. The upgrade of the Maphephethwa WTP will benefit the Maphephethwa community and surrounding areas in eThekweni Municipality by ensuring a sustainable supply of potable water. Assuming a consumption of 75l/c/day, the anticipated number of people to be served is 66,667.
Hazelmere WTW upgrade	The capacity will be 75MI/day. Both eThekweni and Ilembe municipalities will benefit from this project. New developments on the KwaZulu-Natal North Coast will eventually demand upwards of 100 MI/day. These developments include the new Dube Trade Port and King Shaka International Airport, and high and low income housing developments planned for the coastal area extending from Ballito to Zinkwazi. With an upgrade of the Hazelmere WTP planned to the 98% assured yield of the raised Hazelmere Dam, the Hazelmere System will be able to supply these proposed developments in the short to medium-term. Assuming a consumption of 200l/c/day, the anticipated number of people to be served is 375,000.
Hazelmere to Bifurcation Pipeline	The capacity will be 60MI/day. Both eThekweni and Ilembe municipalities will benefit from this project. New developments on the KwaZulu-Natal North Coast will eventually push demand upwards of 100 MI/day. These developments include the new Dube Trade Port and King Shaka International Airport, and high and low income housing schemes planned for the coastal area extending from Ballito to Zinkwazi. With an upgrade of the Hazelmere WTP planned to the 98% assured yield of the raised Hazelmere Dam, the Hazelmere System will be able to supply these proposed developments in the short to medium-term. Assuming a consumption of 200l/c/day, the anticipated number of people to be served is 375,000 (the WTP will be 75MI/day).
South Coast Augmentation Booster Pump Station	The capacity will be 120MI/day. The commissioning of the South Coast Augmentation Booster Pump Station will benefit the residents of the Upper and Middle South Coast regions.
Greater Eston Bulk Water Supply Scheme	This scheme will accommodate an ultimate demand of 4.4MI/day. The beneficiaries of this scheme are anticipated to be as follows: <ul style="list-style-type: none"> <li>Ward 4 – Mkhambathini: 1,544 people</li> <li>Ward 5 – Mkhambathini: 5,912 people</li> <li>Ward 6 – Mkhambathini: 7,400 people</li> <li>Ward 7 – Mkhambathini: 9,448 people</li> <li>Ward 5 &amp; 7 – Richmond: 16,936 people</li> </ul> Therefore the total number of beneficiaries of this scheme is anticipated to be 41,240 people. Using an allocation of 60 l/c/day, with a population growth of 0.5% to 2.5% over the 30-year planning horizon, the long-term demand is estimated to be 4.4MI/day.

