

Sustainable water supply for Nelson Mandela Bay Municipality and surrounding areas

Media Release

The second biannual meeting of the Algoa Reconciliation Strategy Steering Committee (SSC) was held on 28 March 2012 in Port Elizabeth. It was confirmed that the most important measures to ensure water security over the short to medium term for this important area are to intensify implementation of further water conservation and water demand management measures to ensure efficient use of water, as well as the implementation of the Nooitgedagt Low-level scheme to supplement the water supply from the Orange River transfer scheme.

The Algoa Water Supply Strategy and its Strategy Steering Committee

The purpose of the Strategy is to annually determine the current water balance and to develop possible future water balance scenarios for a 25-year planning horizon. The Strategy describes the actions, responsibilities and timing of actions that are needed to reconcile available water supplies and requirements. This will ensure that interventions to augment the water supply will be implemented in time to prevent unacceptable risks of water restrictions. The Strategy Steering Committee monitors the implementation of the agreed strategies/actions, updates the strategy as it becomes necessary, and informs all stakeholders and the public of progress with the implementation of the Strategy and the situation in the system.

Water Requirements

There is uncertainty about the expected uptake of industrial standard water, resulting from future investment in the Coega IDZ. This is as result of the uncertain economic climate as well as uncertainty regarding the availability of water and power for investors. A meeting has been arranged with the Provincial Department of Environmental Affairs, to table the NMBM Water Master Plan which is currently being finalised and to discuss the plan to supply water to Coega.

Indications are that the growth in water requirements in the Kouga Local Municipality has been significant in recent years. This trend will be investigated, to better understand how this increase in water requirements is impacting on water supply to NMBM.

Water Conservation and Water Demand Management

Water Conservation and Water Demand Management (WC/WDM) is a corner-stone strategy for this area and NMBM and other municipalities must continue and enhance the programmes that were already embarked upon. NMBM is running a programme with the objective to reduce water use by a minimum of 25 MI/d (10 million m³/a) by undertaking repairs to water leaks on municipal water mains and leaks on properties. Further WC/WDM initiatives include an awareness campaign, zone metering, remote sensing data transfer, non-revenue water management, and promoting the use of rainwater tanks. Three pilot schemes for pressure management systems have been identified, with the intent to lower water pressure in times of lower use, and so reduce leakage.

The NMBM year-on-year real water losses has dropped from 26.3% in 2009/10 to 23% in 2010/11, which indicates a saving of 13 MI/day, bringing about a saving of R45.5 million for the year. The saving target of real losses is 37 MI/day in 5 years, so a 33% saving has been realised in the first year, which is quite an achievement.

There is further significant potential for water savings if water leaks at schools in the Metro are repaired. A Memorandum of Understanding is in place between the Department of Education and NMBM which states that NMBM will determine the costs of repairs in the schools and that the Department of Education will pay for making such repairs. The Department of Education has been approached to provide such funding, based on quotes obtained. Savings of 10-15 MI/day could be realised by repairing water leaks at the schools in the Metro. With an investment of R50 million, it is estimated that water wastage to the value of R150 million could be avoided. NMBM has called for tenders for repairs at these schools, and the tenders have been awarded. As soon as the funds become available, repairs will start.

Nooitgedagt Low Level Scheme (NLLS) Implementation

Even with WC/WDM fully successful it is anticipated that the water requirement will increase in this economically active area with its growing population. NMBM is constructing the Nooitgedagt Low-Level Scheme as an extension to the existing High Level Scheme that will treat Orange River water, delivered through the Orange-Fish-Sunday's system, to drinking water standard for supply into the NMBM water supply system. Some of the funding required for this project was obtained under the emergency drought funding and NMBM is still in the process to obtain the outstanding balance of the funds required to complete the scheme. Construction should be completed by October 2013, depending on the availability of funding.

Other interventions

Other interventions that would ensure water security over the longer term are:

- *Groundwater development:* groundwater can provide an affordable, dependable supply. The final borehole siting along the Coega Kop area and the Uitenhage areas is planned for May 2012, after which drilling can start. Two drilling tender processes failed as the tenderers were unfortunately deemed non-responsive on both occasions. The existing DWA regional drilling contracts are considered as a potential means to undertake some of the drilling.
- *Water re-use:* A study was done by the NMBM to determine the feasibility of the large-scale use of treated water from the Fishwater Flats Waste Water Treatment Plant to supply industries in Port Elizabeth and Coega with industrial standard water. Funding will have to be sought to finance the scheme.
- *Desalination of seawater:* The emergency seawater desalination plant, located at the old Swartkops Power Station near the Swartkops Estuary has been put on hold since the drought has been broken. NMBM has initiated a reconnaissance-level investigation into a larger 60 MI/d desalination plant located on the coast to the west of the city.

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