

The KZN Coastal Metropolitan Reconciliation Strategy

What is the Reconciliation Strategy?

- In 2008 the Water Reconciliation Strategy was developed to ensure adequate supply of water for the metropolitan areas in the central KZN region.
- The study area extends from the Thukela River Mouth on the North Coast to the uMthwale River on the South Coast, and from Howick in the west to Durban in the east.
- The purpose is to ensure we can meet future water requirements and minimise impacts and vulnerabilities to drought.
- The objective is to identify, evaluate and prioritise the interventions that should be implemented to meet future water requirements.

Why develop a Reconciliation Strategy?

- It takes between 8 and 25 years to plan, design and construct significant water resources infrastructure.
- If we do not plan for the future, we will limit growth and development through inadequate water supply and be in a state of emergency during times of drought.

What is being done (Interventions)?

- For all areas the first intervention is water conservation and water demand management (WC/WDM) which includes fixing leaks, replacing old pipes and using water more efficiently.

WC/WDM

Non-revenue water and water loss statistics (2013/2014):

- National Average = 37.2%
- KZN's average = 46.0%
- Ethekwini MM = 39.3%
- Ugu DM = 30.9%
- uMgungundlovu DM = 66.1%
- iLembe DM = 58.3%

North Coast Water Supply System

The following interventions are planned options to meet current and future water requirements on the North Coast:

- The 1st phase of the Lower Thukela Bulk Water Supply Scheme (BWSS) (nearing end of construction: completion mid 2016)
- Raising of Hazelmere Dam (completion 2018)
- The 2nd phase of Lower Thukela BWSS (still in planning)
- Then either:
 - The construction of Isithundu Dam
 - Indirect reuse of the water via Hazelmere Dam from effluent return flows generated.

Integrated Mgeni Water Supply System

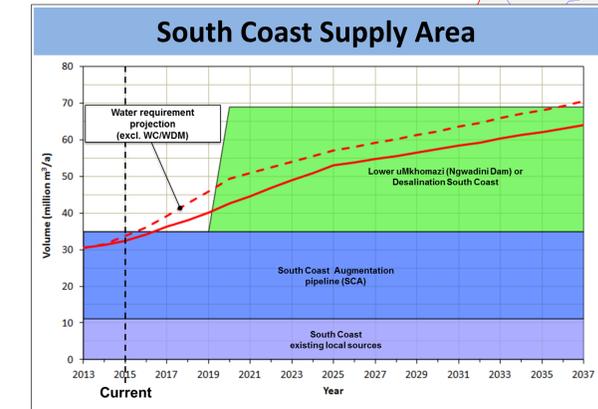
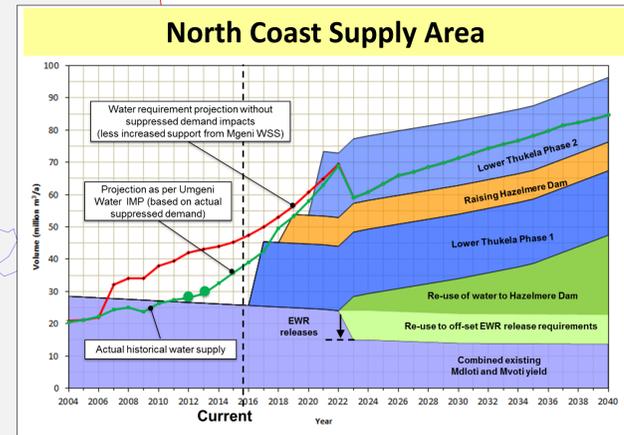
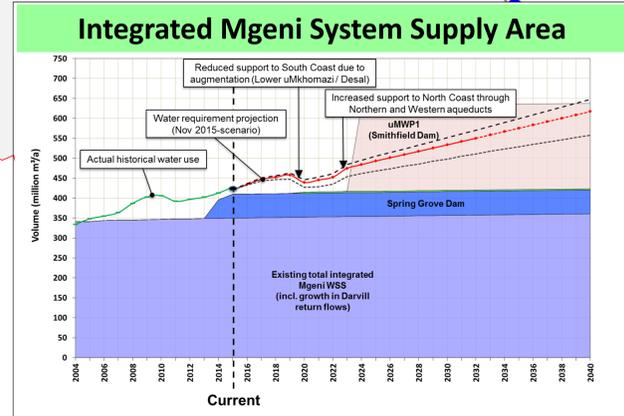
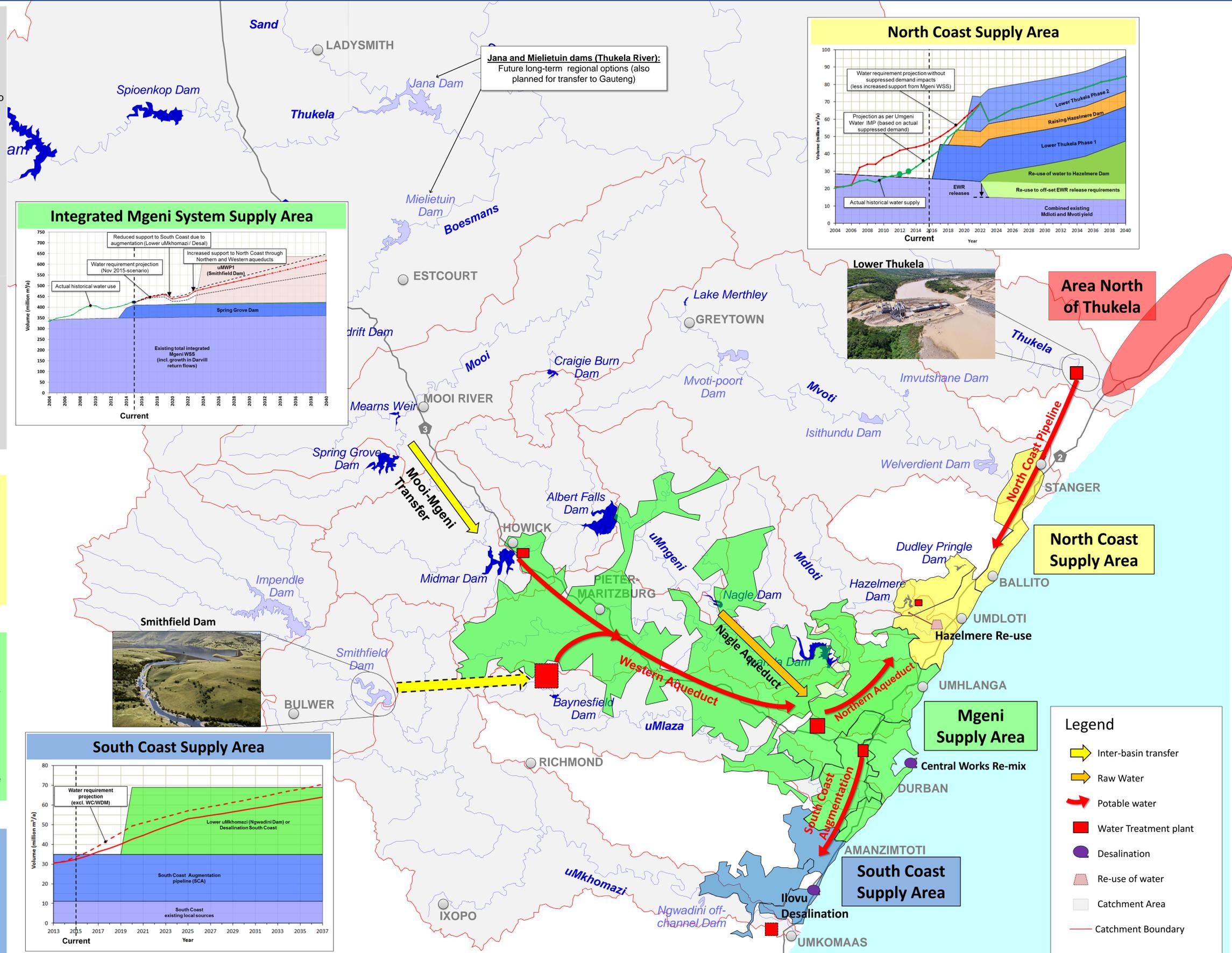
The Mgeni WSS was recently augmented by the completion of Spring Grove Dam on the neighbouring Mooi River. The WSS however needs further water sources. There are several options and combinations of interventions to augment the Mgeni WSS:

- Reduction in support from the Mgeni WSS to the South Coast (can be done once the South Coast is augmented).
- uMkhomazi Water Project - Phase 1. Comprises a new large dam at Smithfield on the uMkhomazi River and a 35 km tunnel to the Mgeni WSS (Earliest completion by 2024.) This is a key scheme for long-term supply.
- Direct re-use of water from the larger WWTTWs (this option is stalled due to concerns around public resistance).
- Desalination on the north coast (this option does not appear favourable due to high unit cost of water).

South Coast Water Supply System

The sources of water for the Upper and Middle South coast is a combination local dams and a small river abstraction, and support from the Mgeni WSS through the South Coast Augmentation Pipeline.

- Future augmentation of the South Coast will be by the implementation of either:
 - Desalination of seawater at Lovu; or
 - The Lower uMkhomazi Bulk Water Supply Scheme consisting of the Ngwadini off-channel storage dam to make up for shortages in flow during winter months.
- Neither scheme can be completed before the end of 2019



Legend

- Inter-basin transfer
- Raw Water
- Potable water
- Water Treatment plant
- Desalination
- Re-use of water
- Catchment Area
- Catchment Boundary

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Other Partners:
A number of other government, private, and non-profit organisations contribute as Strategy Steering Committee members