

WATER & SANITATION VALUE CHAIN

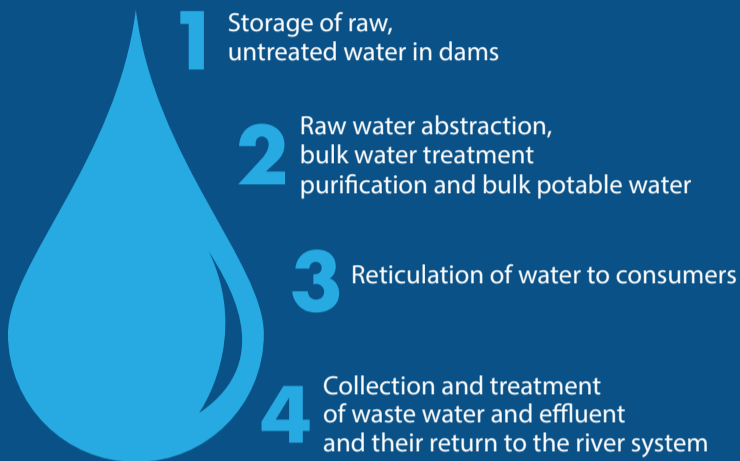
2013/14

BACKGROUND


- The flow of water is negotiated through the **Department of Water Affairs** trading account, **15** water boards, district municipalities and local municipalities.

INSTITUTIONAL FRAMEWORK

THE WATER SERVICES DELIVERY CYCLE CONSISTS OF **FOUR** MAIN PHASES



SOUTH AFRICA'S WATER SERVICES INFRASTRUCTURE INCLUDES

35,000km OF BULK PIPELINES 

200,000km OF RETICULATION PIPELINES

1,028 water treatment works

1,174 waste water treatment works of which **821** are municipal works

3,802 pump stations

987 ^{2013/14} NEW WATER INFRASTRUCTURE PROJECTS WERE BEING IMPLEMENTED ACROSS THE 9 PROVINCES **78%** (OR 723) WERE NEW WATER SERVICES PROJECTS

A 2012 report by the Department of Water and Sanitation estimated **R400BILLION** IS REQUIRED OVER THE NEXT **10 YEARS** TO ADDRESS NEEDS

EXPENDITURE TRENDS

 REPAIR AND MAINTENANCE SPENDING VARIED BETWEEN **4% & 23%** OF TOTAL EXPENDITURE IN SAMPLED MUNICIPALITIES

BULK PURCHASES ACCOUNT FOR NEARLY **50%** OF MUNICIPAL WATER SERVICES COSTS

WATER SERVICES TARIFFS ACROSS 4 MUNICIPAL ENTITIES AVERAGED ABOUT **69%** OF THE ACTUAL COST OF PROVIDING WATER

EXPENDITURE BY WATER BOARDS CONSISTS PRIMARILY **(50%)** OF RAW WATER AND EMPLOYMENT COSTS

WEAK REVENUE MANAGEMENT UNDERMINES SUSTAINABILITY

THE TARIFFS SET BY THE **FOUR MUNICIPALITIES** SHOWED A SHORTFALL AVERAGED ABOUT **30%** OF TOTAL COSTS PER CUBIC METRE

THIS IMPLIES A LOSS OF **R2.5BILLION** IN 2013/14 FOR ALL MUNICIPALITIES

COSTING MODEL

- The costing model for water services, relates operational expenditure to performance and calculates the financial implications of various policy options.
 - water differ significantly, based on factors such as topography and population density.
- The model includes standardised historical expenditure;
 - the volumes of water procured, managed and sold by each water entity and their associated tariffs.
 - It provides a matrix of the unit costs of water per cubic metre across the water services delivery chain, which allows the unit costs to be forecasted over a five-year horizon as policy parameters are altered.