



**water affairs**

Department:  
Water Affairs  
**REPUBLIC OF SOUTH AFRICA**

# The State of Hydrology (Research) in South Africa: towards a 10-year science plan

31 March 2014

# Structure of presentation

- Legal Mandate-NWA ( Act 36 of 1998)
- NWRS2-Chp 14
- Areas of research

# Legal Mandate

- NWA, Act 36 of 1998
- Review of the Act – informed by water policy position
- Water value chain

## Chapter 14-Section 14.1.2

- ✓ Sustainable utilization of groundwater resources
- ✓ Development of human research capacity
- ✓ Degradation of water quality and ecosystems
- ✓ Increased health risks to human and animals as a result of contamination of water by hazardous pollutants
- ✓ Uncertain impacts of climate change on the availability of water

# NWRS2 -Key Issues Requiring attention (2)

## Chapter 14-Section 14.1.2

- ✓ Insufficient provision of basic water supply and sanitation in some rural areas
- ✓ Lack of alignment of water research objectives, thrusts and programmes with the broader national policies and strategies relating to water resources management and water use
- ✓ Limited participation of sector wide stakeholders in the setting and execution of the water related research and innovation agenda for the country

# Proposed key areas for research (1)

- ✓ Hydrological extremes (drought and flood
- ✓ Water quality monitoring and assessment
- ✓ Sustainable maintenance and calibration of equipment for hydrology and water resources
- ✓ Best practices on the adaptation to Climate change.
- ✓ Water resources monitoring-remote sensing

## Proposed key areas for research (2)

- ✓ Water Isotopes – understanding of how water moves throughout the region
- ✓ Modelling - fate and transport of water for improved prediction of hydrological processes
- ✓ Modelling – how disturbances (both anthropogenic and natural) affect water flux.



Thank you