

# Theme: 1, 2 & 7

Funds Control  
 ↳ ? Municipality lost peoples trust  
 ↳ Managed by Trust for Municipality to build capacity and trust.

Elimination of poverty <sup>clear Death</sup>  
 How groundwater can play a role

Ernst

Groundwater Trust: Don't mention specific names of directorates (Learning Academy), just mention Department. There are various Directorates that can be play the role of a Trust.

The GWS need to fit in the NWRSI, Catchment Management Strategies and the Water Management Plans of the Water user Associations, water utilities and Municipalities  
 Nic SAAFWA

Financing of groundwater assessments - nationally can also be financed through Climate adaptation fund as groundwater is considered an adaptation to impacts of climate change. Department of Environmental Affairs facilitate this process of applying →

Local water Management Institutions and Local Government (Municipalities) will buy in if the National water Act is fully implemented so that groundwater can be managed on the three tiers of water management  
 Nic SAAFWA

# Theme: 3, 4, 5 & 6

**Theme 3-6**  
 \* RDM responsible for determining the Reserve, Class and RQOs but they are not responsible for monitoring & implementation of the results. It's the responsibility of CMAs.  
 - NWS needs to indicate the responsibility of CMA in implementing RDM results, and have guideline on how to address  
 \* RDM project on the Operationalisation of RDM methods is currently being conducted to review RDM methods.  
 \* A groundwater monitoring training programme for youth will help form groundwater use verification, aim at training community. Similar to the War on leaks project.  
 \* The need to drill boreholes to be able to do pollution assessments.

- Consideration for polluted aquifers to be adopted for treatment & development.

1. Emphasis be placed on the source of pollution priority so the local level also be contracted.
2. Establish regulation body for borehole drilling companies to ensure compliance

Involvement of Community Based Organisations & their roles in protection & use of groundwater  
 - Consolidation of existing documents & referencing them for use by the sector

CMS ARE INSTRUMENTS FOR INCORPORATING GROUNDWATER MANAGEMENT ISSUES AS A FOCUS FOR CMAs

Waste Water  
 ↳ Regulation from municipal authorities  
 ↳ Cost free assistance (advice)  
 ↳ Job creation incentives for cheap quality drinking quality

1. Financing on groundwater - main focus on the prevention of pollution of the underground water.
2. Geo-Hydrology services linked with Agriculture to prevent drilling boreholes at integrated water body (splitting of water)

G/Water Use Authorization by a Nancy's Initiative  
 How to incorporate GRDM & SPO into CMA

Ernst

Proper Groundwater Monitoring Network crucial for Information Management and hence Groundwater Sustainable Management.

Data Quality Issues - danger i.t.o. allowing everyone to capturing data

AMD management and utilisation as well as prevention of generation of new AMD particularly in new areas such as Waterberg Coalfields  
 \* Can this be an theme on its own?

Drought Management:  
 G/water level monitoring network to totally & completely made great  
 Ernst

Ernst

# 3, 4, 5 & 6 Cont...

The delegations to CMA's and WUAs by the Minister (DWS) will enable the Institutions to do compliance and monitoring on ground water

Use-Consideration in Res. protection  
- FSKOM - initiative  
- ~~State~~ regulation of std parameters to be monitored, captured & reported.  
Fornst

Regular Groundwater Resource Assessment on a national level eg. GRII, then trickle it down to local levels

Aquifer Management  
Rejuvenation of Aquifer of the Country  
Fornst

G/Water Protocol effectiveness where implemented - perhaps need to be revised  
Fornst

Water resource Management; including ground water will improve if DWS (The minister) insure that the regulatory tools within the Water Act is utilised by the three tierce of: Water management Institutions DWS, CMA and Local WMI.

Implementing regulation on management / monitoring / maintenance / ... should come with a reporting system adapted to the capacity of the controlling authorities.

Governance is needed to ensure the integrity of the water use. (quality)  
How will flooding be regulated to protect aquifers in the region?

Groundwater use verification crucial  
Clear roles & responsibilities by each relative sector

Groundwater resource vulnerability assessment to climate change based on the current and future projections - is DART method by Ingrid Dennis enough or is this part of the assessment of ground water

# Theme: 8, 9, 10 & 11

1. Link btw groundwater resource planning & Assessment  
\* Investing research on the ways to measure water table levels.  
\* Investing funds on the drilling depths, pumping rates & monitoring the recovery rate capacity gap in public sector  
\* Barometer compulsory for employees working with groundwater to attend programs @ various levels.

Collate information from private users/owners/drillers

On Regional and International Partnerships  
Strategic Actions:

• Bilateral cooperation - (should actively engage countries that utilise groundwater to continuously improve and enhance technology and expertise). FUNARI 012 336 7763

Return the Geohydrology Unit to the DWS.

INFORMATION MANAGEMENT  
↳ Controlled by skilled people  
↳ Guide Management Strategies  
↳ Water Balance - Surface water + Groundwater + Quality

Capacity Development  
SACNASP registration is a sham!

The groundwater information is not readily available proper  
A mentorship programme developed within the department will ease the capacity gap. This will involve the development of the PA of an intern and the movement from one section to understand the different roles of groundwater specialists in the future.

• Groundwater development should be done at CMA level (Integrated approach)  
• Who decides whether it is better to use groundwater or surface water? CMA, deciding this to source will not work! It will be reactive rather than proactive.

Data / Information Management - the role of the NGA in the cost-effective collection of data  
Fornst

Local Hydrologist - One-year trained observer - data collection, capturing & reporting  
Fornst

Enable local G/Water Development.

Promoting G/Water at school (sec) level

Naledi - schools

20-20 Vision  
Fornst

Council of Geoscience project for KZN - Ad-Hoc  
1:50 000 scale  
Fornst

# 5, 10, 11 Theme: 8, 9, 10 & 11

Information Management: - (Ernst)  
Total lack of an Information system to process the already large collection of data.

Cost-effective year-development -  
Clear policy in terms of the confidentiality of data and submission or cap during Ernst

Lack of knowledge about DWS - data bases capability.

Data Submission  
Registration of drillers / drilling companies Ernst.

Ernst.

There is a link between planning and assessment. You cannot plan without information on what you are planning for. Assessments needs to be carried out on the local level to understand the resources.

Yes National Government is important when it comes to leadership, but it all comes down to local government, implementing the plans for example. Local government (municipalities) do not always have the  
1) skills  
2) technology  
3) funds

What can we do to develop our local

→ Pro actively develop groundwater sources and help the water energy food nexus

## 12 (Local level action) & deliverables

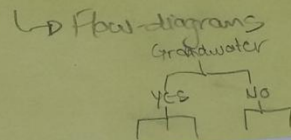
Strong Local leadership  
- WASSA - Eric Nealer  
MNW - ?  
Municipal Management  
Ernst

→ Timeframes on key issues or activities. reflected in the strategy

→ eg When will the Department build the required capacity to drive and promote groundwater

Need strong political leadership at local Gov't

Guidelines to be clear, simple  
≠ Bible



Clear Roles: Responsibilities on all levels of regulation; control?

↳ Accept responsibility

↳ All stakeholder buy in

How is LOCAL MUNICIPALITIES GOING TO BE INVOLVED TO ENSURE COMPLIANCE OF LOCAL GOVERNMENT WITH NGS