

1. Theme 1, 2 & 7

F.F. De Vos SEDBERG WATER. MANAGER OPS & MAINTENANCE

1. POLITICAL INTERFERENCES IN SUPPLY OF WATER NOT ENOUGH
2. SHARING WATER WITH LIVESTOCK.
3. MONITORING OF GROUNDWATER USE
4. PROPER MAINTENANCE PLANS.
5. MUNICIPALITIES DON'T MAINTAIN THEIR SYSTEMS. (NOT SKILLED) NOT COMMITTED.
6. CONTAMINATION OF GROUNDWATER (TO EXTENT NOT USEABLE ANY MORE).
7. PROPER GROUNDWATER STUDIES TO BE CONDUCTED TO DETERMINE AVAILABILITY AND LOCATION.
8. MONEY NOT AVAILABLE TO DEVELOP THE GROUNDWATER SCHEMES.
9. INTERVENTION IS NOT ALWAYS FOLLOWED WITH FUNDING.
10. BUSINESS PLANS TAKING TOO LONG TO BE APPROVED. (TIME LEFT TO SPEND MONEY IS THEN TOO SHORT).
11. LACK OF DEPARTMENTAL COMMUNICATION TO DETERMINE AVAILABILITY OF SERVICES.

Platinum Mining

1. MUNICIPALITY IS NOT TAKING RESPONSIBILITY FOR INFRASTRUCTURE - MOOIMOOI TOWN, WOODBEEK VILLAGE, SEGWAGANE VILLAGE, BAFONG AREA IS PROVIDED WITH WATER FROM THE MINE SYSTEM 14 ml/day @ 2 DWA & MUNICIPALITY DON'T CARE TO FIX SEWER RUNNING INTO STREAMS AT MAREKA RD & HALLIE, MAREKA NEAR HOSE DEVELOPMENT. HOW SEWER RUNNING IN THE STREETS?
2. MAJOR CONTAMINATION OF LIMITED GROUNDWATER - COMPLIANCE ONLY APPLICABLE TO MINES

1. Please include stakeholder engagement and communication as a theme on Provincial level

Move from Reactive Culture around water planning & management to a Pro-Active Culture

Platinum Mining

- A ANOTHER SESSION WITH NO RESULTS
- B WHAT IS THE PURPOSE OF AGAIN PROVIDING THE DEPARTMENT WITH CONCERNS WITH NO ACTION BY THE DEPARTMENT OF WATER & SANITATION?
- C WHAT IS THE DWA'S DOING ABOUT THE LACK OF IMPLEMENTATION OF ALL THE GOOD STRATEGIES AND PLANS

Enabling legislation

Agriculture is the biggest water user. The present legislation doesn't instruct agricultural water users to practice appropriate monitoring of abstraction. Without such legislation compliance is rather non-effective. Most agricultural water users are registered under ELLs, wherein most quantities are projected and not relative to the actual use. V and V is taking place to verify use, which can assist in redirecting unused water to needy sectors

2. Theme 1, 2 & 7

The Department of Water and Sanitation is usually asked to be part of these intervention projects. But the challenge that we encounter is that - there is no drilling and pump test data that municipalities have in their archives and it makes it difficult for the department to assist in the management of water resources.

Theme: Groundwater Resource Protection

5. Sustainable GW resource utilization. In Municipality their Bhs are not well equipped with GW management tools such as piezometric tubes, etc. Therefore it is difficult to manage quantity & quality.

Some borehole in Municipality have no pump test data, these boreholes are pumped but the yield is unknown.

Nat G/water Leadership

- ▷ ENFORCEMENT should be EQUAL across all sectors NOT JUST focused on private/industry/mining which (5%) mining/industry
- ▷ 40%+ LEAKS in Rustenburg / Brits, on average all munic's (40%+) FIX THIS FIRST.
- ▷ Hold councils accountable!!!! They are destroying air & water quality daily & inefficiently pulling on water resources due to inefficiencies

- Limpopo Muthi Venter Prof. Chris Sewby drilling sector & how to manage political influence on groundwater.
- 2. Increase & enforce water use on paper groundwater use to water users.
- 3. Set farmers on board with monitoring of boreholes on their property.
- 4. Stop the act of people equipping monitoring boreholes through get drilling boreholes for them for supplying water.

ISSUES

- Resource Planning & infrastructure match. (water) surface & upground
- Ability to Map (MAP) groundwater across SA.
- Audits & oversight of its groundwater use (responsible use)
- Maintenance. FIRST curb/prevent/correct waste of water (LEAKS)
- * (water balances of munic's)

- (Guidelines) Regulation of groundwater related activities e.g
- * Construction of Septic Tanks at different areas in terms of sensitivity/distance between Septic Tanks
 - * Construction of Pit latrines on shallow aquifer or dolomitic areas
 - * Development of Cemeteries next to the River or wetlands which eventually recharge Groundwater

Theme 3, 4, 5, 6 & 8

1.

Forum De Vos - Spoorboek Water

- ① Separation of Domestic & High-Pressure Water.
- ② Involvement of Agriculture in our Decisions.
- ③ No Monitoring of Groundwater Use.
- ④ No Maintenance (Qualified Skilled Staff, No Material)
- ⑤ No Financing of Funds for Operation & Maintenance of Water Systems.
- ⑥ Hydrologist to be Qualified in Field.
- ⑦ Qualified Engineers to be Responsible & Accountable for System.
- ⑧ Systems in Place to Control Flow (Inflow) from To Supply System.

Establish capacity building & empowerment with @ DWS to drive awareness campaigns for skills transfer (with specific reference to municipalities)

- ⑩ BMs to monitor closely especially during dry periods (Virus is dropping - equipment needs to be adjusted not to over utilize the BM)
- ⑪ How are you going to enforce compliance?
- ⑫ Asset Registers How?
- ⑬ Appointment of Technical Staff (Look at Skills to Regulations of Plant Operators) (Process Controlled)
- ⑭ BYLAWS MUST BE INCLUDE DEDICATED OF BM CONTROL.
- ⑮ PRIVATE BM'S MUST BE REGULATED IN TERMS OF QUALITY & QUANTITY (WHO'S RESPONSIBLE IF SOME BODY DIES DUE TO QUALITY PROBLEMS (NO PERSONAL LIABILITY)

▷ No Developments or extensions to Towns/cities without proper infrastructure study & sign off (approval) for WATER / Power / services

▷ Establishment of an Accounting culture for Councils/Provinces, same Std. as applied for mining & industry. Ifd people accountable too

▷ Employing Young Engineers across councils & districts to assist to get technical standards in place & put systems in place based on government standards ...

▷ Need to work with Mining/industry to help develop BEST groundwater strategy for the sector. Will always be well covered & managed

▷ "Self Created" aquifers in mining - extract & rehabilitated areas to be exploited. Need Quality licensing & auth.

▷ (4) IF groundwater source you need to quantify quality/volume & limits cross management plans as part of WUL (mining)

Theme 8:

Integrated GW resource planning

By Law

- * System to drill private Bm Municipalities must enforce
- * Registering of private boreholes will assist in quantifying the abstraction in that particular area.
- * Reporting/communicating the response of the aquifer to the community by the Municipalities.

1. NO UPWARD FROM MUM'S & DWS TO ACT ON DEFECTS
2. ENACTING LAW FOR ACTION PLANS, COMPLIANCE ETC.
3. VALUE OF BLUE DWS CERTIFICATION IS IN QUESTION - IN-LITTLE VALUE TO WATER SECURITY, BUT WITH A HIGH DWS CERTIFICATION.
4. KEMPEL'S BOOK AVAILABLE WITH FET'S AND RESOURCES PROVIDED
5. NO PUBLIC INFORMATION REPORT MUM'S FUND AND GOVERNMENT TO HANDLE WITH

▷ Act Industry/Mining to get involved in assisting to fix up maintenance, infrastructure challenges & monitoring/conditioning of local councils & Mum's

▷ (DWS) I've seen the success of the "DCA" the "DCA" part needs!!

▷ "Strategy without process is little more than a wish list"

Robert Fitch

3, 4, 5, 6 & 8

2

If the Municipalities cannot provide the basic services to the people how do we then control a fault - be individuals from drilling private boreholes

- Getting a buy in from communities at Rural Areas in terms of groundwater quality and quantity

- Exploitation of ground water by big industries such as mines and Agricultural sectors

Include the methods to prevent the pollution of aquifers esp @ local level.

Municipalities should somehow be forced to hire a

Theme 3

Aquifer Mgt

GW protection

The guidelines will improve the effectiveness of GW Mgmt. It will help to protect aquifer from being over abstracted & polluted

- Water Resources Management must be taken to school as part of Curriculum (Home Plan). Most of forums (consists of people who are educated and don't need capacity. Communities were real poles (over abstraction) are left out.

Water Sector Skills and Capacity

Groundwater resource protection

Educators and awareness of groundwater use relating to water abstraction is essential. The public including operators should know that over abstraction introduces in parts water of different quality from neighbouring aquifers and undermines themselves compromising the aquifer water quality and other related infrastructure (pipelines)



Themes 3, 6, & 8 (Mining)

▷ All be part of WULA

▷ Linked to Water Balance & long term prod. plans as part of WULA.

▷ Reporting to DWS its WUL

▷ Groundwater ONE of sources

▷ >>> Pollution linked to sewage to rivers, streams, dams as to Councils that are Diligent.

▷ ENGINEERS. Lack who place as a minimum to ensure compliance.

▷ Metering of water to monitor usage/leakage & maintenance of infrastructure to supply water (Pump/pipeline/meter/safety reservoirs etc etc).

CRITICAL to make groundwater resource management sustainable!

▷ (6) Educating our communities/industry on groundwater & its importance of sustaining like WASTE NOT, POLLUTE NOT, POWER & CLEAN

Theme 9-11

▷ (8) Access for industry (7) to database linked to your area of operations.

▷ (10-11) The **BIG** picture fast into water.

▷ Then go deeper & lower

▷ Understand what needs to be done & link up with Vansity's its research & M-degrees, D-degrees.

⊕ **POLICY** - exporting water **SA** (187)!!!! **BS**

↓ CAPACITY TO MAINTAIN JM SYSTEM IS LACKING - HOW WILL THIS CHANGE CAPACITY?

GROUNDWATER INFORMATION MANAGEMENT

Regions must be forced to report on what they are doing to ensure that they make effort to collect groundwater information

Local Level Action

To quickly introduce the Strategy, you need to liaise with Regional Institution Oversight in terms of being given a slot to continuously present to strategy at the Catchment management forums which some takes place on a Monthly basis

Sustainable groundwater resource utilization

The strategy to be made mandatory through Water Use licence authorization by developing guideline on Geohydrological Study, Specifically on groundwater abstraction and groundwater related activity Management.

- FEARS DO US SUFFER WATER
1. SCARCITY OF WATER FOR AGRICULTURE. TALKS OF CHANGES TO THE CAPTURED FROM CATCHMENT DIVIDING. IMPACT PAYMENT SCHEME WITH NOB UNTIL PROOF IS DEMONSTRATED.
 2. HOW ARE WE SUPPLYING WATER TO NEIGHBORING COUNTRIES IF WE ARE WATER SCARCITY PROBLEMS.
 3. NO FORMAL TREATMENT COUNCILS AVAILABLE FOR GROUNDWATER PROTECTION (SOME ARE BEING ESTABLISHED).
 - 4.

1.

Local action - Theme 12

There must be Regional Champions to support and report to National Champion. The functions for Regional Champion can be developed from the functions of National Champion.

Water Resource Classification and Resource Quality objectives for Priority Aquifers, should be included in the NGS.

Groundwater Management Units have already been developed in some parts of NW and NGS must also take

Theme 12 protection of Municipal boreholes from vandalism (pumps being stolen, Electric/power cables) The solution is to have armed response for those Borehole house/zone or pumps can/may be equipped with trackers.

▷ Just focus same attention & effort to govern & manage G/water being accessed by Councils & others outside mining.

▷ **ACCOUNTABILITY** Shared equally for success. Don't just pick off easy targets. Government to do their part & be accountable w/ their own areas!!!

FEARS DO US SUFFER WATER

1. COMMUNITY GARDENS? GOVERNMENT DO NOT MAKE PROVISION FOR THAT IN ACT.
2. STATISTICS. NEED TO CATER FOR ALL (POPULATION GROWTH, INFLEX FROM AFRICA, INFLEX FROM MINES THAT CLOSE DOWN AND MOVE TO OTHER AREAS FOR SURVIVAL)

▷ Government's role in **R&D** around more efficient ways to use water & access groundwater.

With instant water use applicants to look into and implement new technologies & using water efficiently and conduct awareness relating to water use and **water management**. The private sector seems to go the distance in complying with this, like being using water in a closed circuit (re-use) and water treatment plants. Unfortunately local / local government are not implementing these things through the **design and control** of storage facilities.

2. Theme 12 - Local action

- Most governments DEACTIVATE
LACK IMPLEMENTATION

EISH

- No MONEY
- Good plans
- No URGENCY
- No IMPLEMENTATION
- TOO LATE

Norms and standards for
irrigation of crops, i.e.
times & methods of
irrigation ^{must be developed} (if not any) →
monitoring & evaluation is
critical

▷ Capacity !!!!!
Again strategy left
to dysfunctional local
government to implement
& Integrate.....
NEED more clear
direction & processes to
enable this. DON'T
leave it to local
government PSE !!
▷ AGAIN ruining
ONLY 39% of total
H₂O use in SA