



Groundwater in South Africa

Current situation and where to from here?

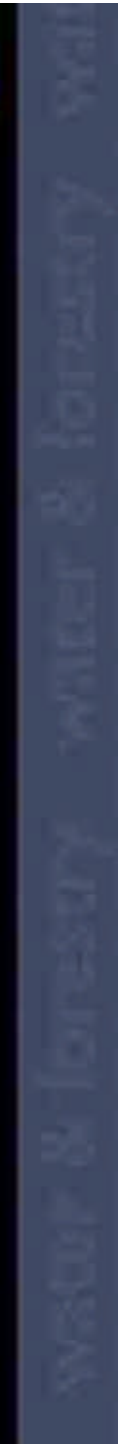
Dr FS Botha

Department of Water Affairs and Forestry



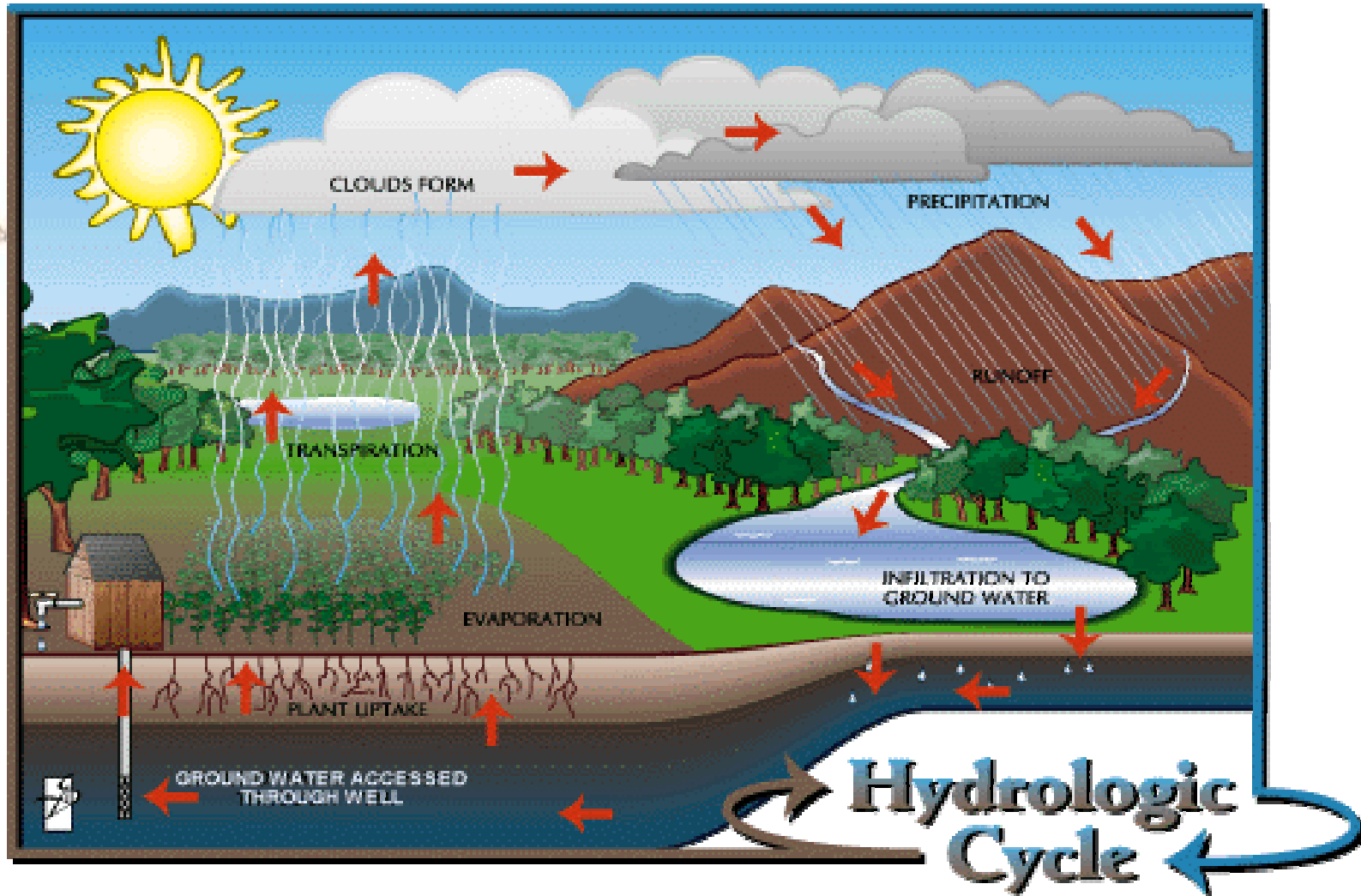
water & forestry

Department:
Water Affairs and Forestry
REPUBLIC OF SOUTH AFRICA



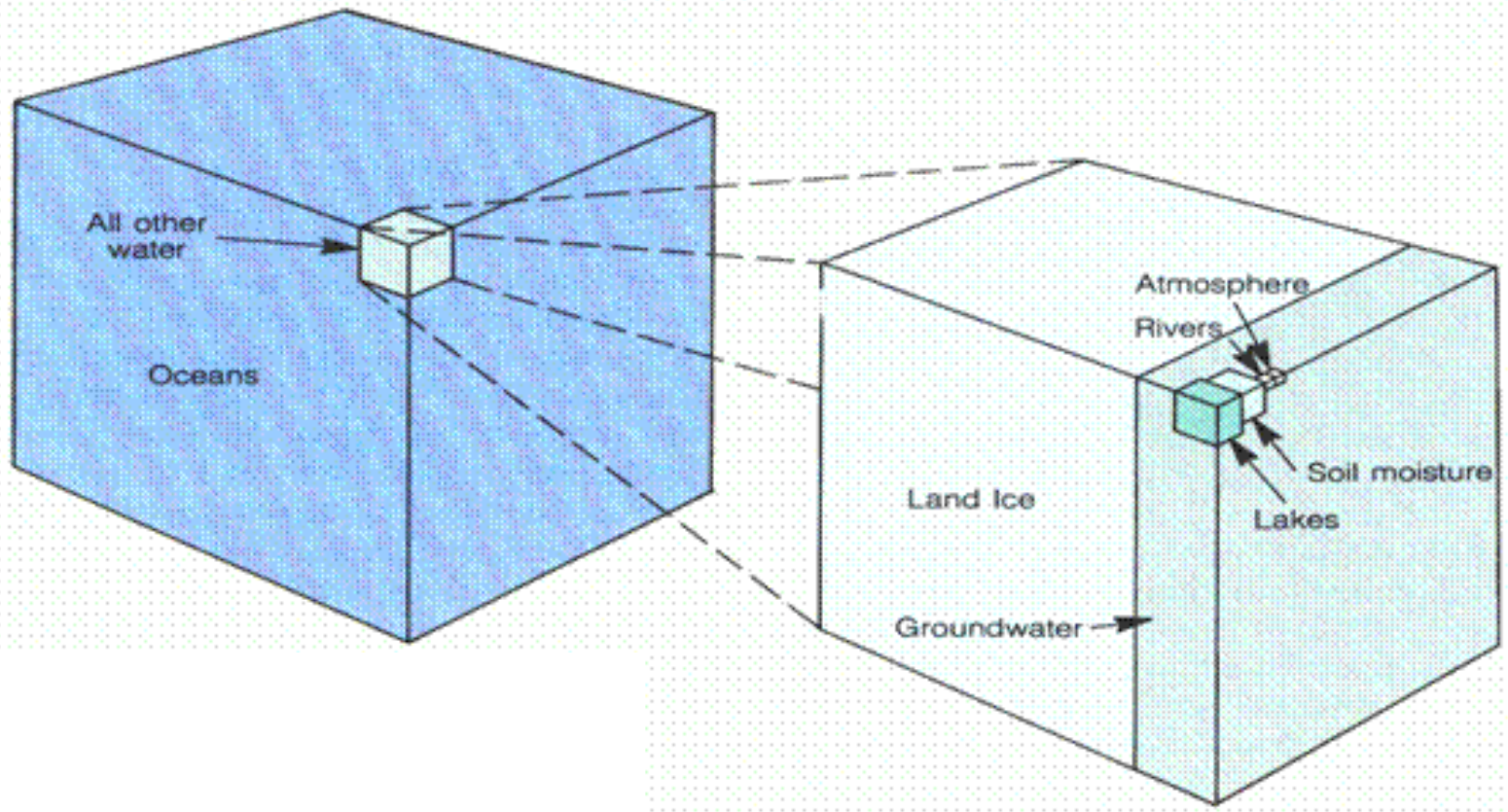


HYDROLOGICAL CYCLE





WATER BALANCE





STRATEGIC VALUE

- In South Africa only about 10% of all water use is from groundwater
- In the USA, for example groundwater makes up
 - 22% of all freshwater withdrawals
 - 37% of agricultural water use
 - 51% of all drinking water
 - 99% of rural drinking water
- A large amount of groundwater remains untapped
- Groundwater improves security of access to water during droughts
- Groundwater can be both convenient and cheap
- Groundwater is a feasible water supply option for many communities, and
- Groundwater is generally safe, clean and reliable.



PERCEIVED VALUE

- There are some strong negative perceptions about groundwater
- Unbalanced publicity between successes and failures
- Poor understanding of the groundwater resource
- Over-abstraction can result in irreversible damage to aquifers
- Investment in groundwater has been very low
- Data/Information of groundwater is neither as accurate nor adequate
- The research needs for groundwater are not loudly expressed.
- Groundwater is also susceptible to pollution
- Managing the decant of polluted mine water



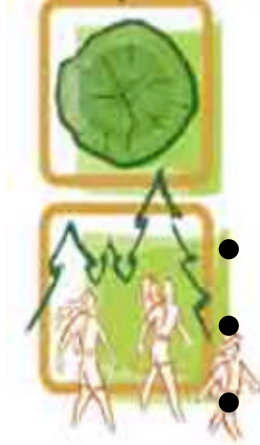
“WHY?”



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STRATEGIC PLANNING NEEDS

- 
- An integrated strategy
 - A campaign to alter attitudes
 - Awareness raising amongst role-players as to the role and importance of groundwater in meeting national need
 - Shifting the investment balance and investment into a better understanding of groundwater in SA
 - Improved assessment and proper development
 - Avoidance of failures
 - Improved Monitoring and Management
 - Groundwater Resource protection
 - Focused research
 - Managing mine-water decants

WHAT DO WE DO IN THE MEANTIME?

