

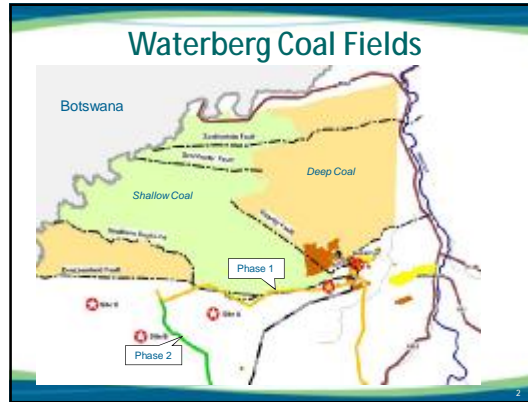

water affairs
 Department of Water Affairs
 REPUBLIC OF SOUTH AFRICA

MOKOLO & CROCODILE WATER AUGMENTATION PROJECT (MCWAP)

Crocodile West Water Supply System Maintenance of the Reconciliation Strategy

29 September 2011

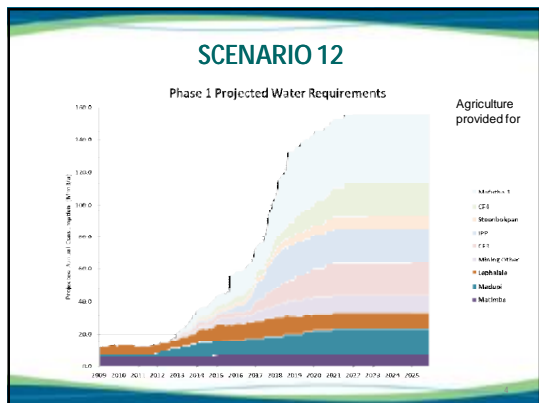
Ockie van den Berg
 Chief Engineer: Options Analysis North



Demand Changes

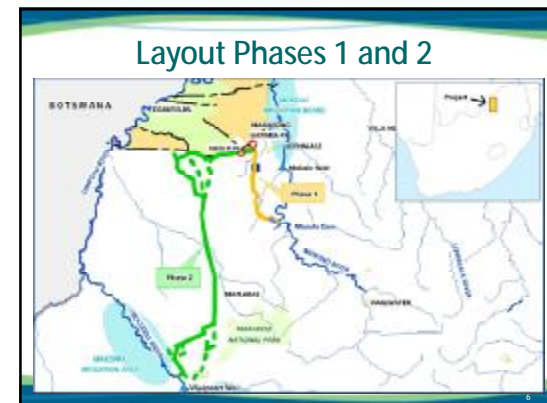
- Currently uncertainty re extent and timing of further developments due to delays in Government (DoE, DPE and DMR) decisions
- Planning performed on basis of up to 4 Eskom power stations (incl Matimba and Medupi) plus IDP & Sasol's Mafutha 1
- Dept of Energy's Integrated Resource Plan
 - Focus initially on renewable energy sources and nuclear power
 - Next coal power station probably only in 2022,
- Sasol's development plan delayed,
- This impact on extent & timing of the proposed 2nd phase of augmentation,
- Inter-department discussions initiated to resolve issue

Emphasis shifted from securing long term water supply to securing water supply to meet Medupi water requirements – hence initial focus on upgrading of water supply from Mokolo Dam (proposed 1st phase of augmentation)



Sources of Water

- Mokolo Dam (Existing supply)
 - Yield increased due to switch from irrigation to game and cattle farming
 - Raising not considered at this stage
- Return Flows in Crocodile West River (Future supply - indirectly imported via Vaal River system) – **not possible to proceed with transfer scheme at this stage due to insufficient commitment of users**
- Augmentation from the Vaal River
- Further options (important but limited)
 - Groundwater
 - Water conservation & demand management
 - Re-use of local return flows



PROJECT STATUS

- **Phase 1**
 - Environmental Authorisation granted in December 2010
 - Water use licences (Sect 21(a) – abstraction of water) issued for Matimba, Medupi and Grootegeluk
 - Contractor appointed
 - Construction to start October 2011
 - Medupi first unit operational by September 2012

PROJECT STATUS Cont

- **Phase 2**
 - EIA put on hold pending clarity on scope and timing of phase 2
 - Strategic considerations
 - Considered as required, irrespective of future developments
 - Necessary to supply strategic industries from multiple sources
 - Funding approach under review by inter-departmental forum
 - Required capacity & timing to be reviewed
 - River management system to be implemented jointly with Water User Association
- **Phase 4**
 - Delayed / required at all?

Thank you