

## GROUNDWATER RESERVE STATUS DASHBOARD:

- **What does this dashboard relate to : general description**
  - Information on the types or level of Reserve determined (Desktop; Rapid; Intermediate; Comprehensive) nationally and locally (per quaternary catchment)
  - Information on the number of Reserves determined per WMA
  - Information on the number of Reserves determined nationally
  - Information on the groundwater Reserve Quality Class per Quaternary
- **Contact details of person/s who championed this dashboard**
  - Mr Stanley Nzama (012-336 6501)
- **What type/s of questions does the information product aim to answer:**
  - How many groundwater Reserves completed per WMA?
  - At what level (Desktop; Rapid; Intermediate; Comprehensive) were those groundwater Reserves conducted?
  - Which quaternary catchments have available (determined) groundwater reserves?
  - What is the groundwater Reserve Quality Class determined per Quaternary catchment?
- **Data / Information discussion:**
  - **Data used to generate the information**
    - **What data is used?**
      - Recharge volumes of groundwater provided by Head Office (GWRD)
      - Groundwater baseflow volumes provided by Head Office (GWRD)
      - Ecological Water Requirements for Maintenance Low Flows (EWR\_MLF) volumes provided by Head Office (GWRD)
      - Basic Human Needs (BHN) volumes from groundwater provided by Head Office (GWRD)
      - Groundwater Reserve volumes provided by Head Office (GWRD)
      - Groundwater Quality Reserve provided by Head Office (GWRD)
    - **How is extracted and from where?**

Excel spreadsheets provided by the business unit is uploaded to N-drive. NIWIS is extracting data from the spreadsheet saved on the N-drive and then export it directly for display on the NIWIS.

- **How often is it extracted?**
  - Business unit (GWRD) provides Excel spreadsheets bi-annually
  
- **Business processes related to the data**
  - N-Drive
  - Groundwater Tracking System (Spreadsheet)
  - NGIS/ NGAWMS
  - WRPS
  
- **The algorithms / equations used to convert data into information**
  - **Reserve Level=**
    - (a) Desktop Level
    - (b) Rapid Level
    - (c) Intermediate Level
    - (d) Comprehensive Level
  
  - **Reserve Quality Class= Water quality Reserve**
    - Class 0 (Ideal for domestic use – complies with the standard limits of SANS 241:2011/2015)
    - Class I (Acceptable for domestic use – complies with the standard limits of SANS 241:2011/2015)
    - Class II (Tolerable for domestic use – does not comply with the standard limits of SANS 241:2011/2015)
    - Class III (Unacceptable for domestic use – does not comply with the standard limits of SANS 241:2011/2015)
  
- *The reserve quality class and reserve levels are shown in the picture below.*

### Water Quality Class

- Class 0 (Ideal)
- Class I (Acceptable)
- Class II (Tolerable)
- Class III (Unacceptable)
- No Water Quality Reserve Done

### Reserve Level

- Desktop
- Rapid
- Intermediate
- Comprehensive

- **Key assumptions made:**

- Map Legend
- Shows quaternary catchments with Groundwater Reserve completed
- Summaries Groundwater Reserve completed nationally
- Summaries Groundwater Reserve completed per WMA and per quaternary catchment.
- Shows Level of groundwater Reserve conducted in a quaternary catchment & nationally
- Shows groundwater Reserve Quality Class per quaternary catchment

- **Links to other sources of related information**

- D:RD - <https://www.dwa.gov.za/rdm/RR.aspx>
- NGIS CHART- <https://www.dwa.gov.za/chart/default.aspx>
- NGA - <http://www3.dwa.gov.za/NGANet/Security/WebLoginForm.aspx>
- NGIS - <https://www.dwa.gov.za/Groundwater/NGIS.aspx>
- IWRP – <http://www.6.dwa.gov.za/iwrrp/>

- **Are there any limitations / cautions related to using this information?**

Yes, please refer to the below:

*Only the Dashboard champions have access rights to the spreadsheets for updating of information.*

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