

Spatial Distribution of Groundwater Geosites in South Africa - Electrical Conductivity

JANUARY 2026

(Publication Date)

Description:

This map illustrates the spatial distribution of salinity as Electrical Conductivity (EC) from samples collected between the years 2021 and 2025. Samples were collected from the Department of Water and Sanitation's National Groundwater Quality Monitoring Programme and from non-monitoring once off samples. The samples from monitoring data were averaged to determine a representative concentration level of EC per Geosite. Each hexagon on the map represents 25km². This map illustrates the groundwater quality without considering fitness for any use.

Data Sources:

Water Management Areas: Department of Water & Sanitation (DWS), Directorate Catchment Management. Boundaries and towns: Chief Directorate National Geospatial Information (NGI), Department Agriculture, Land Reform and Rural Development (DALRRD). Groundwater data: Department of Water & Sanitation (DWS), Directorate National Hydrological Services. National Groundwater Archive (NGA); Directorate Resource Quality Information Services (RQIS); Water Management System (WMS). Transboundary Aquifers of the World [map]. Edition 2015. Delft, Netherlands: IGRAC (International Groundwater Resources Assessment Centre), 2015, UNESCO-IHP (UNESCO International Hydrological Programme), 2015.

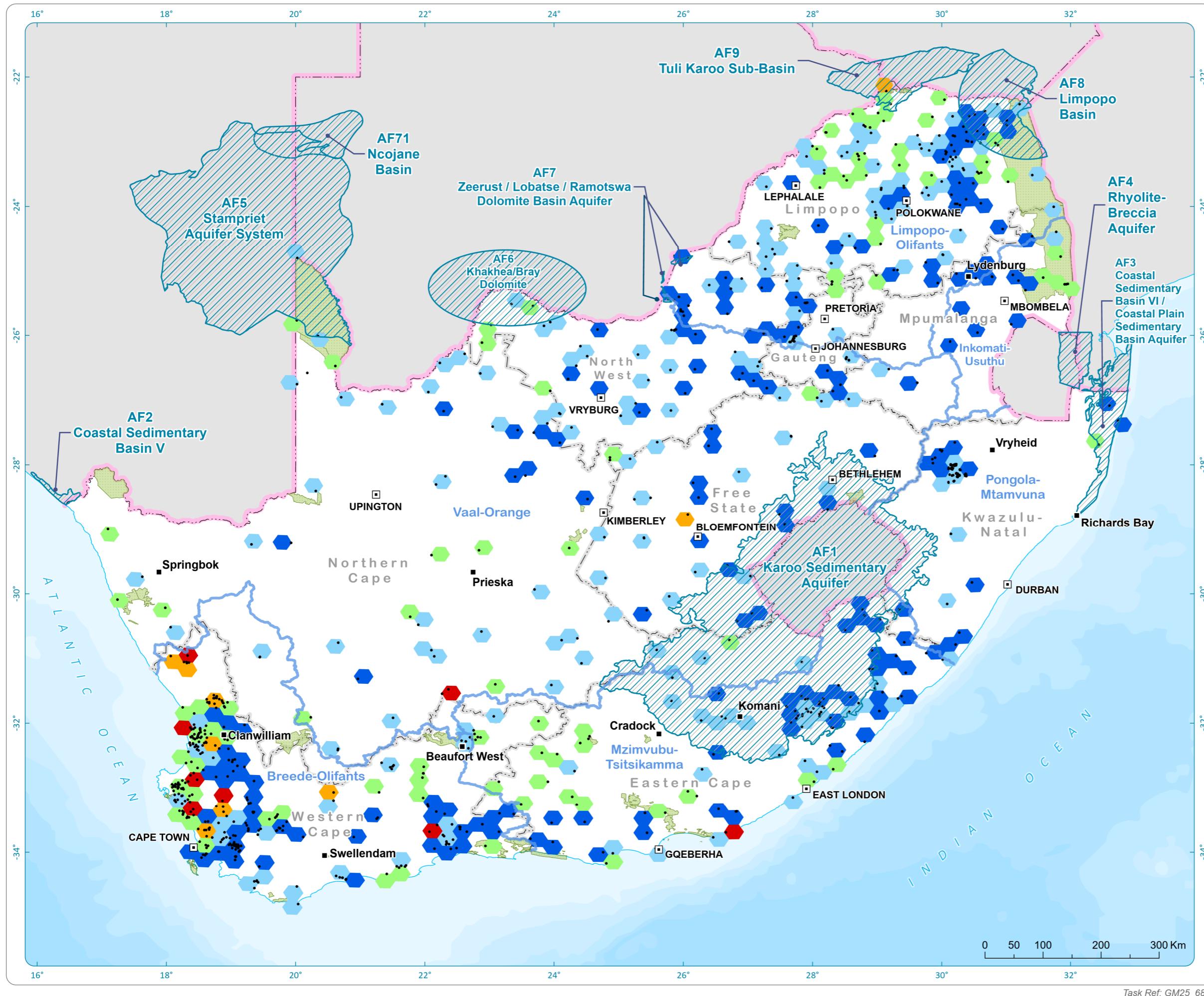
- 887 Geosites (Boreholes and Springs): 2021 - 2025

Mean Electrical Conductivity (mS/m)

- ≤ 70
- > 70 - 150
- > 150 - 370
- > 370 - 500
- > 500

MAP KEY

- Mayor City / Town
- 2023 Water Management Area Boundary
- Provincial Boundary
- International Boundary
- Transboundary Aquifers (TBA) 2015
- National Parks



Task Ref: GM25_681