

Spatial Distribution of Groundwater Geosites in South Africa - Nitrate

October 2024  
(Publication Date)

Description:  
This map indicates spatial distribution of Nitrate (NO<sub>3</sub>-) from samples collected from 1 449 Geosites between the years 2014 and 2024. 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 Nitrate per Geosite. Each hexagon on the map represents 25km<sup>2</sup>. 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, rivers and towns: Chief Directorate National Geospatial Information (NGI), Department Agriculture, Land Reform and Rural Development. 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.

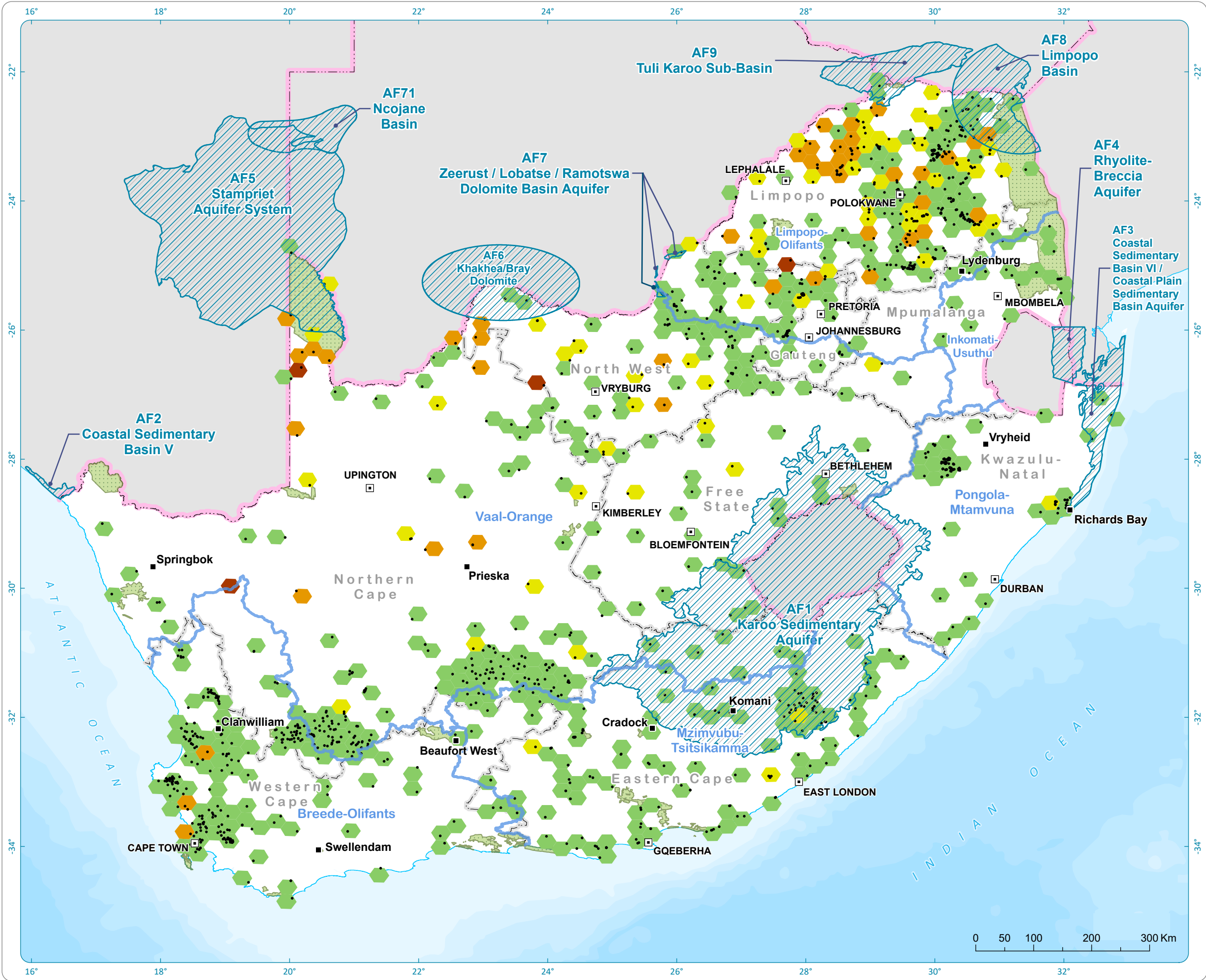
1 449 Geosites  
(Borehole and Springs): 2014- 2024

Mean Nitrate (mg/L)

≤ 11
> 11 - 20
> 20 - 50
> 50

MAP KEY

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



Task Ref: GM24\_477