water affairs
Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

Aquifer Vulnerability of South Africa

Background:
Implementation of the Reconstruction and Development Programme (RDP) in South Africa has highlighted the importance of groundwater resources in the country as the role they will play in satisfying the targets of the RDP. As a result, exploration, development and protection of aquifers is receiving unprecedented attention. Provision of the appropriate information to national water resource managers and planners is a critical part of the process which aims to provide a further twelve million people with adequate access to potable water.

Data Sources:
This map is based on the Borehole Prospects map provided by JR Vegter, Hydrogeological Consultant and AJ Seymour, DWA.

Description:
This map indicates the tendency or likelihood for contamination to reach a specified position in the groundwater system after introduction at some location above the uppermost aquifer. Green represents the least vulnerable region that is only vulnerable to conservative pollutants in the long term when continuously discharged or leached. Yellow represents the moderately vulnerable region which is vulnerable to some pollutants, but only when continuously discharged or leached. Red represents the most vulnerable aquifer region, which is vulnerable to many pollutants except those strongly absorbed or readily transformed in many pollution scenarios.

LEGEND

Water Source

- Groundwater
- Combination (Ground and surface water)
- Surface water

DURBAN Major Towns/Cities

Vulnerability Ratings

- Least
- Moderate
- Most

- Province
- International boundary
- Dams
- Special aquifer regions

Coordinate System: Clarke 1880 Albers Projection: Albers
(Standard Parallel 1: 19 Standard Parallel 2: 27 Central Meridian)
Datum: Clarke 1880

Original Map Compilation: Andiswa Matoti, Julian Conrad and Susan Jones, CSIR, 22 March 1999.

Recompiled: July 2013
Directorate: Hydrological Services
Sub-Directorate: Groundwater Information