

Some features of GDAS

The system uses technology that enables the user to query spatial data stored in different databases, and to interactively view map data on the Internet.

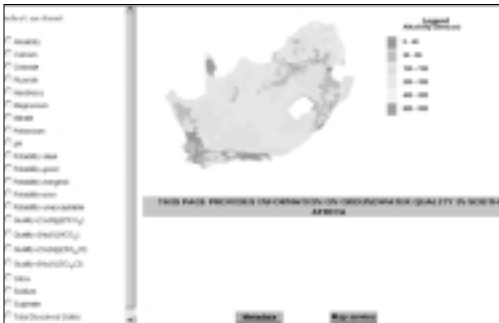
Using the available viewers, the user can:

- ◆ Pan and zoom the map extent
- ◆ Query spatial and attribute data
- ◆ Create a buffer around features
- ◆ Measure distances on a map

The system includes a map catalogue, where the user can see at a glance what topics are presented, and the data relating to each topic (metadata).

The map services and data are arranged thematically under the following topics:

- ◆ Geohydrology
- ◆ Hydrology
- ◆ Geology
- ◆ Geomorphology
- ◆ Land use
- ◆ Meteorology
- ◆ Administrative boundaries:
 - International
 - Provincial
 - Magisterial Districts
 - District and Local Municipalities
 - Communities
 - Towns
- ◆ Water Management Areas / Authorities
- ◆ Institutions
- ◆ Projects



**GDAS can be accessed from the
Department of Water Affairs and Forestry
(DWAF) website:
www.dwaf.gov.za**

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Department of Water Affairs and Forestry
Directorate: Information Programmes

Private Bag X313

PRETORIA 0001

Republic of South Africa

Tel: (012) 336 7500

For more information about GDAS, contact:

Dr HJ Brynard
Council for Geoscience
Private Bag X112
Pretoria, 0001
South Africa

Tel: +27 (0) 12 841 1038

Fax: +27 (0) 12 841 1100

Email: mbrynard@geoscience.org.za

or

Dr Jan Girman
Department of Water Affairs and Forestry
Private Bag X313
Pretoria, 0001
South Africa

Tel: +27 (0) 12 336 7500

Fax: +27 (0) 12 324 6592

Email: girman@dwaf.gov.za

GDAS

GEOHYDROLOGICAL DATA ACCESS SYSTEM

An Internet Gateway to Geohydrological Data



Produced under:
The NORAD-Assisted Programme for the Sustainable Development
of Groundwater Sources under the Community Water and Sanitation
Programme in South Africa

GDAS

The **Geohydrological Data Access System (GDAS)** provides easy and user-friendly access to groundwater-related data within the Department of Water Affairs and Forestry (DWA) and the Council for Geoscience (CGS).

The system unifies data that exist in different data management systems of DWA and CGS by providing a single Internet-based access point for users.

Who will find GDAS useful?

It is for use by:

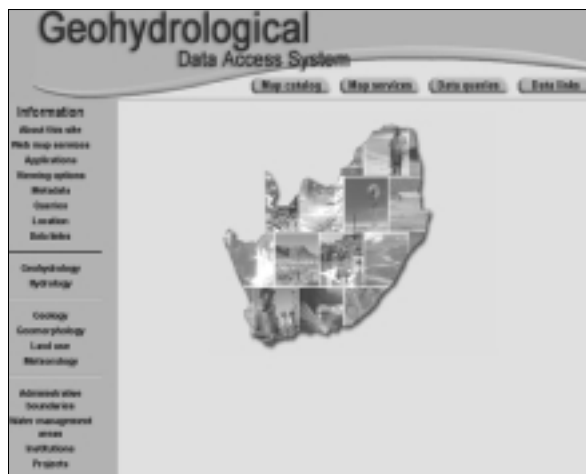
- Local and District Municipalities
- Water Services Providers (WSPs)
- Regional Water Authorities
- Catchment Management Agencies (CMAs)
- Water Boards
- Implementing agents responsible for providing water supply to rural areas in the Southern Africa region
- Researchers requiring water supply-related data

Viewing Options

The web site has been developed specifically for Internet Explorer. It is compatible with IE version 5.0, and is best viewed at a screen resolution of 1024 x 768.

A Quick Tour of the Geohydrological Data Access System

Home Page – provides access to all the available map services through the menu items in the table of contents, as well as through the buttons at the top of the page.



Information Page – provides information on the available map services, as well as some navigational links to other relevant pages.

Map Catalogue – provides quick access to individual thematic pages.

| | |
|----------------------------------|--|
| Administrative boundaries | <ul style="list-style-type: none"> <input type="checkbox"/> populated places <input type="checkbox"/> provincial boundaries <input type="checkbox"/> regional boundaries <input type="checkbox"/> local and district municipal boundaries |
| Geology | <ul style="list-style-type: none"> <input type="checkbox"/> boundary locations <input type="checkbox"/> borehole blow point <input type="checkbox"/> groundwater distribution <input type="checkbox"/> groundwater accessibility & exploitability (prospects) <input type="checkbox"/> groundwater base flow <input type="checkbox"/> groundwater saturated interflow <input type="checkbox"/> groundwater level <input type="checkbox"/> groundwater wave-of-drift (driftability) value <input type="checkbox"/> groundwater quality <input type="checkbox"/> groundwater storage resource value <input type="checkbox"/> groundwater supply dependency <input type="checkbox"/> groundwater supply potential <input type="checkbox"/> groundwater yield <input type="checkbox"/> groundwater zones <input type="checkbox"/> hydrogeological map of South Africa <input type="checkbox"/> mean annual recharge <input type="checkbox"/> simplified lithology <input type="checkbox"/> water bearing properties <input type="checkbox"/> weathering depth <input type="checkbox"/> groundwater quality as defined by veger with relevant other data including: <ul style="list-style-type: none"> ■ sandstone ■ topography ■ vegetation ■ simplified geology ■ climatic data |
| Soilage | different scales of geology and structure |

Map Themes – provides detailed views of some themes accessed from within the thematic pages. Various views of the data are possible, e.g. selecting Water Management Areas by either the name of the area, or by the names of the main rivers in that area. Further detail in tabular format is accessible in some of the themes.



Data Links – provides links to organisations of interest and relevant web sites.

Data Search and Queries – provides an easy-to-use query composer, to zoom to a particular location. Various levels of administrative boundaries are presented, from provincial to town and community levels. The query building facility allows for zooming into a particular feature based on locality, or an attribute value selected from the drop-down list provided within the web pages. It also allows interrogation of maps through the query facility within the map services.