

GROUNDWATER RESOURCE INFORMATION PROJECT KWAZULU NATAL

The Groundwater Resource Information Project (GRIP) was initiated to address a gap in groundwater data available for the management of groundwater resources. It is acknowledged that groundwater plays an extremely important role in water services especially in rural areas where it is nearly impossible to bring in surface water reticulation infrastructure due to the huge costs associated with it. Hence it is imperative that reliable and sustainable groundwater resources are developed so that rural groundwater communities may have access to water thus improving their quality of life and socio-economic stance. Reliable and sustainable resources can only be sourced if correct and reliable scientific and technical information is available.

In Kwa-Zulu Natal (KZN) several factors promoted the initiation of the GRIP. During the last ten years many water supply projects has been financed and executed by different spheres of government. A large portion of these projects involved groundwater exploration but very few reports containing borehole data has been submitted to the Department. The data contained in these reports are extremely valuable and need to be captured onto the relevant databases/information systems. It was also realized that although the Department of Water Affairs and Forestry (DWAF) is the lead regulator in the country's water resources, that groundwater development occurs in a fragmented manner with little or no coordination and co-operation with other organs of state, consultants and developers. This in turn meant that the gathering of all this groundwater data and population onto one centralized database was not occurring and the DWAF faced a great risk of valuable information loss.

Current data sets may be questionable and filled with gaps and hence does not allow for sound decision making by water resource managers. This data does not allow for timely identification of the possibility of failure of groundwater schemes, there was also insufficient data to indicate the firm aquifer yields. Data collected in this project would address these issues as well as help with identification of high yielding aquifers to support bigger municipal schemes for the augmentation to existing supplies. Once the primary objective of data collection and verification is completed, GRIP will proceed into assessment phases where the data will be translated into information. This information will include knowledge about groundwater abstractions, availability and vulnerability.