The Hydrogeology Branch of the Geological Survey Division is in-charge of water that is found underground in the cracks and spaces in soil, sand and the rocks. The branch’s task is to find this water, study and understand how it moves inside the ground, how much of it is there, its quality and then recommend how best this water can be brought out of the ground for use by human beings for a variety of reasons, such as drinking water supply, irrigation, stock feed and so forth.

Water from the underground has always been and is still considered to be the most reliable, cleanest and often the safest water that can be abstracted for a variety of uses. Groundwater can be abstracted from the ground by either drilling a borehole deep into the ground using mechanized drilling rig or digging a shallow well by hand.
WHAT ARE THE FUNCTIONS OF THE HYDROGEOLOGY BRANCH

The function of the Hydrogeology Branch is to investigate the occurrence, quantity, quality, distribution, use, and movement of groundwater in order to develop and disseminate scientific knowledge and understanding of the nation's groundwater resources. Its activities involve groundwater resource assessment, research, and coordinating the activities of numerous other entities involved in groundwater resources abstraction, management, research and data acquisition or information transfer in cooperation with state and private agencies.

Resource assessment activities of the Branch include collecting data on the quantity, quality, distribution and movement of ground water and the thickness, lithological composition, lateral extent and the hydraulic parameters of the water bearing subsurface material.

Research activities of the Section are envisaged to improve the overall understanding of the processes that affect the quantity and quality of water. These may include research on the pathways or flow directions and rates of movement of chemical and biological factors of natural and human origins that affect the groundwater resources.

RESPONSIBILITIES

• Undertake investigations into the nature, extent and dynamics of the nation's groundwater resources.
• To assess the impacts of groundwater developments and abstractions from them in order to develop an information and knowledge base that will enable the development of resource management plans and decisions to be made for the better management of the nation's groundwater resources.
• In the long term, develop and build a GIS compatible 'Groundwater Resources' database comprising well locations, logs, well performance tests, including complementary data on aquifer tests and spring locations, and characteristics that can be easily accessed by anyone seeking this information.
• Provide expert advice to internal and external clients such as the Mining Coordination Officers, Small Scale Mining Officers, Mining Engineers and Local and Regional Resources Planners on all matters relating to groundwater.
• Provide professional technical services to internal and external clients by participating in the assessment, planning and execution of groundwater projects for the clients.
• Develop technical guidelines in collaboration with other resource stakeholders as tools for the better management, controlled abstraction and development of the nations groundwater resources.

...HYDROGEOLOGY BRANCH'S INVOLVEMENT IN THE PAST............

The branch has been involved in many different kinds of projects ranging from village water supply, town water supplies, farm irrigation and stock feed to emergency and disaster rehabilitation centres water supply projects like that shown below.....