International Association of Hydrogeologists

IAH South Africa Chapter: summary of recent activities (2012/13)

The IAH South Africa chapter continues in good health. The chapter works closely with the Groundwater Division of the Geological Society of South Africa on local issues, whilst also providing an international perspective and the opportunity for South African hydrogeologists to stay in touch with events, publications and debates outside of the country. Some recent activities include:

2013 Conference

IAH RSA members are assisting in the organisation of the forthcoming 13th Biennial Groundwater Division Conference and Exhibition, to be held from Tuesday 17th to Thursday 19th September 2013 in Durban. This follows the successful 12th Conference held in Pretoria in 2011, and in which IAH International participated. More than eighty technical presentations and a number of posters have been accepted, and the conference will be preceded by a one-day field excursion and two short courses (see http://gwd.org.za/gwc2011/home for more information). This is the first time that the conference will be held in Kwa-Zulu Natal Province.

2011 Conference Book

The collection of conference papers arising from the 2011 GWD/IAH conference in Pretoria is nearing completion, and will shortly be published under the IAH "green book" series. Book chapters cover groundwater planning, assessment and management issues in a range of countries – particularly those where local groundwater capacity and funding exists but which confront problems ranging from complex urban pollution to basic water supply provision in rural areas. It is planned that copies of the book will be available at the 2013 Durban conference, where IAH RSA hopes to further increase membership.

Hydrogeological Heritage Overview

July 2013 saw the launch of IAH RSA secretary Mr Matthys Dippenaar's book "Pretoria's Fountains – Arteries of Life" at an event at the University of Pretoria. Speakers at the launch included Prof Louis van Rooy of the Department of Geology at UP, Mr Dhesigen Naidoo, CEO of the Water Research Commission and Prof Cheryl de la Rey, Vice-chancellor and Principal of the University of Pretoria.

This special publication of the Water Research Commission of South Africa is intended partly to raise awareness of groundwater in Pretoria, which is partly groundwater-dependent. Indeed, despite most terrestrial fresh water resources being groundwater, there still exists a public perception that the only source of potable water is from surface water bodies. Due to this misperception, the general public is often ignorant about the importance of groundwater as a resource. This is evident in the lack of appreciation for the Upper and Lower Fountains in Pretoria as the main reason for various historical events in and around Pretoria, leading to it eventually becoming the capital of

South Africa. Pretoria was founded due to two natural springs supplying in excess of 40 million litres of pristine water from the karst aquifer to the city until this day.

This project, which introduces a broader *Hydrogeological Heritage Overview* programme, is intended to create awareness regarding the history and importance in the development of South Africa, and to improve public understanding of the important role that hydrology and hydrogeology is playing in our day-to-day lives. Additionally, scientific appraisal of historical data will aid in better management of these valuable resources, while making interesting and important archived data available to the scientific community in the form of trend analyses and conceptual models.

Such an awareness programme will be beneficial in terms of community engagement and education in the long run, creating opportunity for educators and the general public to appreciate the importance of hydrogeology in South Africa. Public awareness is also essential in the long-term conservation of water resources. Significant interest was generated through six press releases during 2012, as well as two publications in popular science magazines and one international conference presentation.

The main objectives of the project are to:

- Create awareness of the importance of water and, notably, groundwater in the history of South Africa's major cities
- Document these cities' water-related history throughout the past with the emphasis on the groundwater supply
- Supply the general public with information regarding the occurrence of groundwater in these cities.

Two follow-up projects are presently being planned for the cities of Cape Town and Johannesburg.

Prof Cheryl de la Rey (Vice-chancellor and Principal, UP), Dr Shafick Adams (Research Manager, WRC), Mr Matthys Dippenaar (UP Project Leader) and Mr Dhesigen Naidoo (CEO, WRC) at the book launch in July

Mr Dippenaar stated: "Our aim with the project was to create awareness around the importance of groundwater and appreciation for our groundwater sources. We are thankful to the City of Tshwane who provided us with all the available historical data and maps required for the project. We hope to continue our work and do a series of projects on the main urban nodes, such as Cape Town and Johannesburg, in the future."

South African National Water Resource Strategy (2nd Edition)

The Department of Water Affairs has recently published the second edition of the National Water Resource Strategy, South Africa's water "blueprint" as mandated by the National Water Act. This follows a thorough public consultation exercise. Of particular interest to hydrogeologists is that the Strategy (http://www.dwaf.gov.za/nwrs/) endorses the 2011 National Groundwater Strategy which was produced by the Department of Water Affairs with assistance from IAH RSA members. The Groundwater Strategy aims to increase awareness of groundwater in South Africa, in particular of the potential of groundwater to provide safe water supplies, particularly in rural areas and small towns. Too many still see groundwater as a "second class" option, even though surface water resources are nearly fully allocated. The NWRS2 promises to maintain the momentum towards a wider appreciation of South Africa's groundwater resources.