

CURRENT RESEARCH, DEVELOPMENTS, PROJECTS AND PROGRAMMES FOR EASTERN CAPE REGIONAL OFFICE

Title	Aim	Contact	Role-Players	Time Frames	Comments / Notes
Flow Conceptualisation, Recharge and Storativity Determination in Karoo Aquifers, with special emphasis on Mzimvubu - Keiskamma and Mvoti to Umzimkulu Water Management Areas in the Eastern Cape and KwaZulu-Natal Provinces of South Africa	Develop a better understanding of groundwater resources in the eastern parts of the EC Province. The project involves developing a better understanding of the geology and the factors that affect the groundwater potential of the area. DWA contribution: Support for drilling, test pumping and water quality analyses	J. Baron R. Murray	Groundwater Africa Specialist Groundwater Solutions Council for Geoscience CGS Rhodes University Project supported by Department Water Affairs (DWA) Eastern Cape Client: WRC	2005–2009	Study is completed and final report has been received.
The delineation of high-yielding well field areas in Karoo Aquifers as future water supply options to local authorities	This project involves developing a way of quantifying groundwater resources by providing an assurance of supply – i.e. in a similar way that surface water resources are given “assured yields”; and identifying high groundwater potential areas that could be used for bulk supplies. DWA contribution: Support in Data Sets	J. Baron R. Murray	Groundwater Africa Specialist Groundwater Solutions Council for Geoscience (CGS) Maluti GSM Project supported by Department Water Affairs (DWA) Eastern Cape Client: WRC	2007 - 2010	

Title	Aim	Contact	Role-Players	Time Frames	Comments / Notes
Water Reconciliation Strategy Study for the Algoa Water Supply Area	List and quantify water supply options for the Algoa Water Supply Area. GWA's role is to consider the groundwater options DWA contribution: Groundwater options are derived from a study by GWA, CGS and DWA	I. Thompson (D:NWRP) S. Mullineux	Ninham Shand (Pty) Ltd Groundwater Africa AfriCoast Engineers SA (Pty) Ltd PDG MGP Consulting cc Project supported by Department Water Affairs (DWA) Directorate: National Water Resource Planning (D:NWRP) (South) and Eastern Cape Regional Office Client: DWA	2008 – 2009	
<u>Groundwater Resource Information Project (GRIP)</u> - Eastern Cape - Provincial Study	Groundwater Resource Information Project (GRIP) Hydrocensus of EC Province	I.M. Viljoen J.A. Myburgh	Department Water Affairs (DWA) Eastern Cape Regional Office AGES SA (PTY) LTD	2007 – Mar/2010	The project is in the second phase but due to insufficient funds the project has been placed on hold indefinitely. The hydrocensus data is available and additional information can be accessed on the GRIP-EC website. The Regional Office welcomes any requests for information.
Middelburg Groundwater Investigation	Hydrogeological Investigation Regional aquifer characterisation	I.M. Viljoen F. De Jager J.A. Myburgh	Department Water Affairs (DWA) Eastern Cape Regional Office AGES SA (PTY) LTD	2007 - 2010	The project is near completion. An updated report is available from the regional office which includes the hydrocensus, groundwater potential and groundwater model for the town of Middelburg. The project will be complete by March 2010.

Title	Aim	Contact	Role-Players	Time Frames	Comments / Notes
Groundwater Contamination Project: Swine Fever and ostrich burial sites as well as selected waste sites.	Monitoring groundwater contamination in the EC District Municipalities.	I.M Viljoen P. Sekoateng H. Goossens R. Mpe	Department Water Affairs (DWA) Eastern Cape Regional Office	2010-2013	The project is in the initial stage and progress is limited due to unforeseen factors. The vandalism of boreholes in a various areas is a great challenge.
Eastern Cape Monitoring Project	The phased establishment of a groundwater monitoring network and groundwater management strategy for the Eastern Cape with emphasis on water level monitoring, water quality monitoring and compliance. This includes the drilling of additional monitoring boreholes.	I.M Viljoen H. Goossens	Department Water Affairs (DWA) Eastern Cape Regional Office	2010-2012	Due to insufficient funds the scope of the project has been minimized. The number of target sites has been reduced over the entire province due to the high cost of drilling.
ROOIHOOGTE Geohydrological exploration study	Investigating the current water sources (hydrocensus) and propose new drilling targets for groundwater sources for the Rooihoogte-Rocklands area. Drilling of about 10 groundwater targets, test pumping high yielding boreholes and proposing a groundwater management plan that will include guidelines on the volume of water to be abstracted by the municipality.	I.M Viljoen G. Nel	Department Water Affairs (DWA) Eastern Cape Regional Office SRK Consulting	2007-2011	The study is 10% complete with the drilling and pump testing of five boreholes being outstanding. Insufficient funding is delaying the completion of the project.

Title	Aim	Contact	Role-Players	Time Frames	Comments / Notes
CANNON ROCKS Geohydrological exploration study	Hydrogeological investigation in and around the town of Canon Rocks to determine the extent of salt water intrusion in land. The effect on other boreholes will be determined as well as aquifer characterisation.	I.M Viljoen Mrs. E. Goossens	Department Water Affairs (DWA) Eastern Cape Regional Office SRK Consulting	2007-2011	The study is 60% near completion. The pump testing of the newly drilled boreholes are outstanding. Insufficient funding is delaying the project.
BATHURST Geohydrological exploration study	Hydrogeological investigation in and around the town of Bathurst.	I.M Viljoen Mrs. E. Goossens	Department Water Affairs (DWA) Eastern Cape Regional Office SRK Consulting	2007-2011	The study is in the initial phase. Insufficient funding is delaying the project.
UITENHAGE Geohydrological Aquifer study and modelling	Determining the groundwater characteristics of the groundwater aquifer in the Uitenhage Water Control Area near the town of Uitenhage. Suggest water quality treatment requirements on abstracted groundwater from the Uitenhage Aquifer based on the water quality characteristics of the aquifer both spatially and with depth in order to minimise treatment costs. Managing the use of the Uitenhage springs Set up a groundwater management and monitoring programme including monitoring boreholes, frequency and parameters for monitoring purposes	I.M Viljoen Mrs. E. Goossens	Department Water Affairs (DWA) Eastern Cape Regional Office SRK Consulting	2007-2011	Due to insufficient funds the project has been placed on hold.