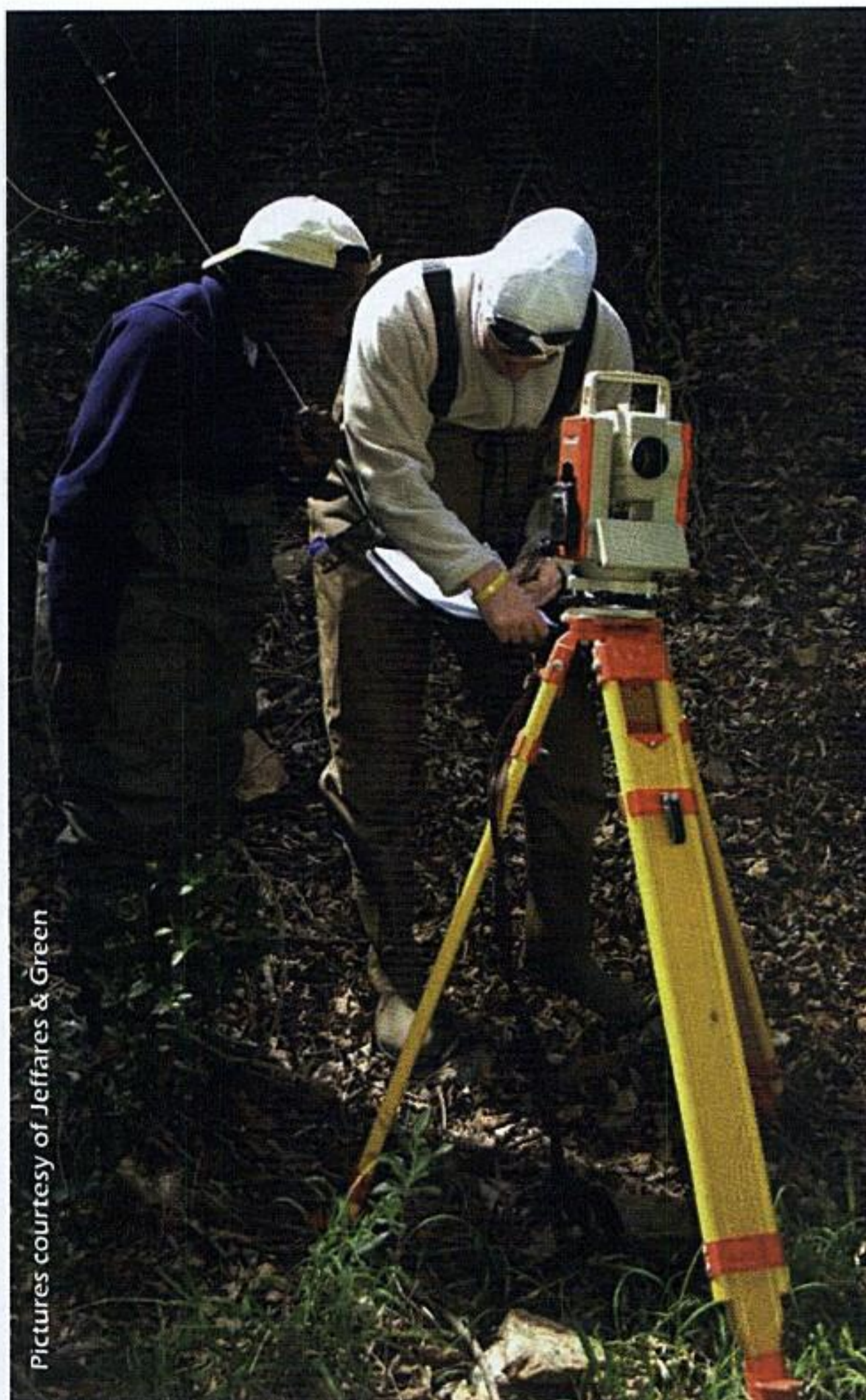


Managing the environment

THE ENVIRONMENTAL department of Jeffares and Green consulting engineers has undertaken numerous projects in recent months. In this issue of **Water&Sanitation Africa**, we give an insight into the projects that are currently in progress.

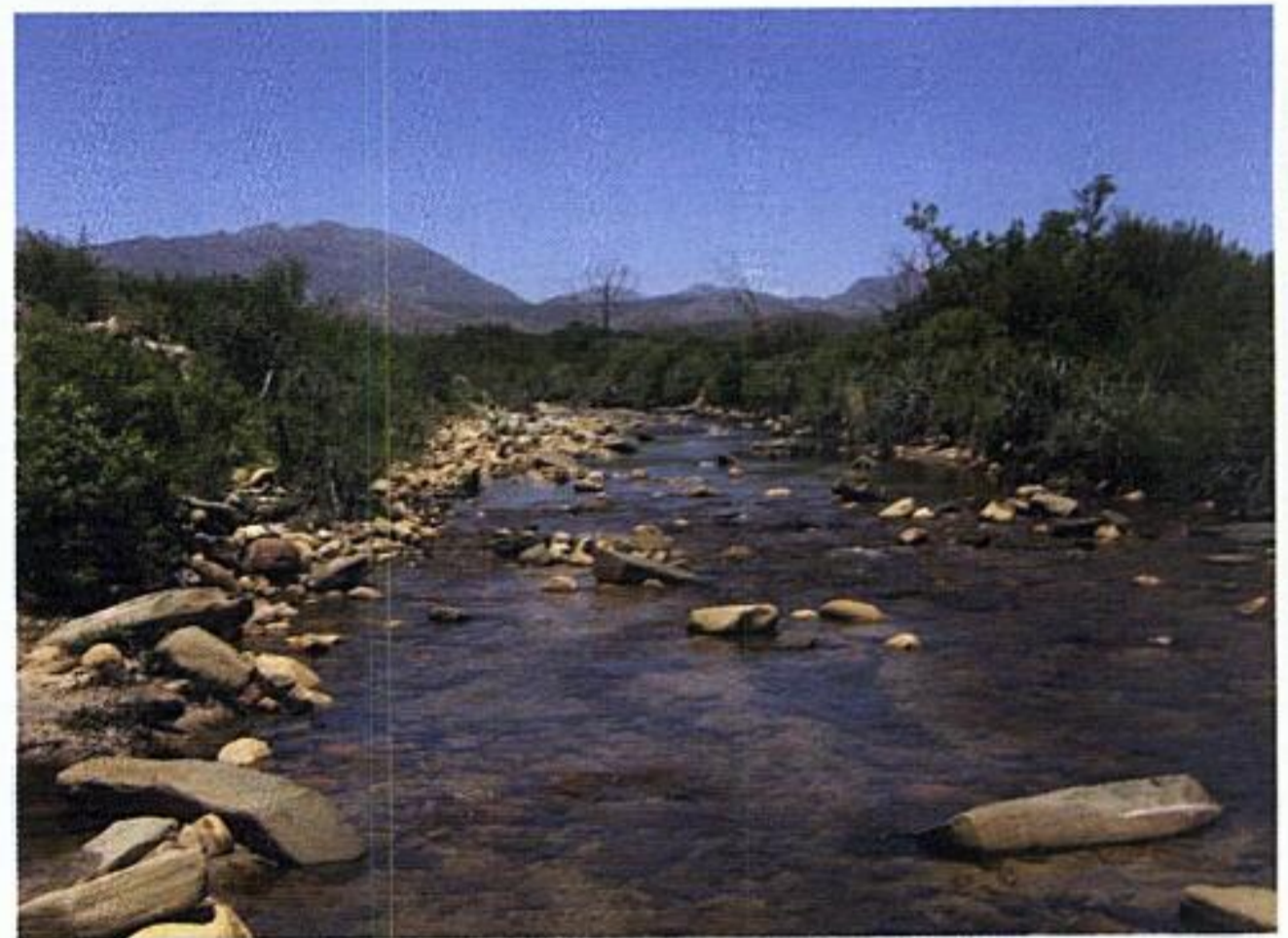
Baviaanskloof Mega Reserve Project

In August 2008, the Johannesburg Environmental Section of Jeffares & Green was commissioned to conduct a river ecosystem monitoring and ecological reserve determination assessment on the Baviaanskloof and associated rivers (Eastern Cape) within the Baviaanskloof Mega Reserve. The project was commissioned by Cape Action for People and the Environment (CAPE). A rapid ecological reserve assessment was undertaken of the Baviaanskloof and associated river systems to assess the current status of the river ecosystem and compile a long-term river health monitoring programme for the Baviaanskloof Mega Reserve. The sampling trip took place in October 2008 with the completion date set for the end of April 2008.

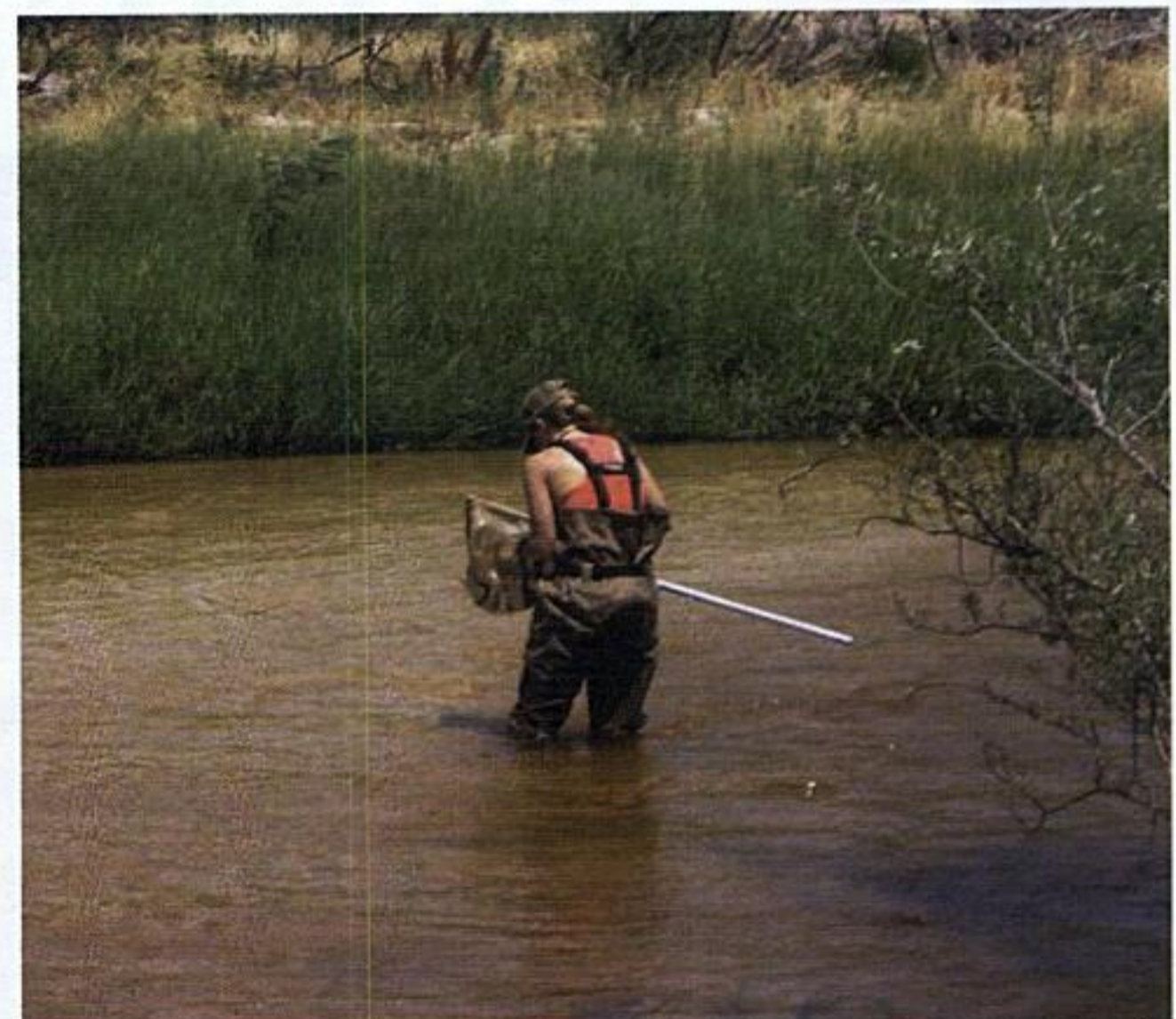


Pictures courtesy of Jeffares & Green

Citrusdal Wastewater Treatment Works Aquatic Impact Assessment



The department was commissioned by ASLA Devco to undertake an aquatic impact assessment for the proposed Citrusdal Wastewater Treatment Works (Western Cape) during December 2008. The aim of the assessment was to determine the state of the aquatic ecosystem of the Olifants and associated rivers and how the proposed project would affect these aquatic ecosystems.



Bulwer Dam Aquatic Specialist Study

In December 2008, an aquatic specialist study for the proposed Bulwer Storage Dam in KwaZulu-Natal was undertaken as the construction and operation of the proposed dam will have an effect on the aquatic ecosystem downstream of the dam site. Sisonke District Municipality identified that there are several communities in the Bulwer Town and Donnybrook areas that currently do not have reliable portable water sources. Sisonke District Municipality and Umgeni Water therefore decided that



a regional bulk water scheme is a suitable long-term solution to this problem. This led to the Great Bulwer Donnybrook Regional Bulk Water Supply Project being undertaken by Umgeni Water through the Sisonke District Municipality. The proposed Bulwer Storage Dam forms part of this project. The purpose of the study was to determine the potential impact that the proposed dam will have on aquatic ecology of the Luhane River, which will be utilised to provide the scheme with water.



Johannesburg Water: Biomonitoring and Toxicity-Testing Project

A biomonitoring and toxicity testing project has been undertaken at four of its wastewater treatment plants. The project commenced in January 2009 and will take place over a two-year period.

The toxicity testing will be done by Dr Amina Nel and her team from the Zoology Department at the University of Johannesburg. **35**