

A watershed moment in resource management Heady

August 11, 2009

By Deon Nel

More than 20 years ago the world-renowned economist Kenneth Boulding said: "The only people who believe in infinite growth in a finite world are madmen and economists."

Water is perhaps the most limiting finite resource on this planet. All life, societies and economies are fundamentally dependent on clean water, but we only have a limited amount available.

Globally, it is estimated that about 2 billion people live in water-stressed catchments. By the 2020s this is expected to increase to more than 4 billion people, or some 60 percent of the world population, due to climate, socioeconomic and demographic changes.

At home in South Africa, this situation is even more greatly accentuated. South Africa is ranked 30th from the bottom of all nations in terms of water availability per capita. This is despite a massive investment in water infrastructure, such as dams and water transfer schemes that have virtually exhausted our surface water options. With more than 98 percent of our current water availability already allocated for use, the country's water balance is precariously poised, to say the very least.

Nevertheless, South Africa faces social and economic development challenges that will require significant amounts of new water to be made available for industry and jobs, for food production and a much needed improvement in social standards.

Over and above this, South Africa is facing other significant water challenges in the form of the effects of climate change as well as the degradation of water quality in some parts of the country. Predictions suggest that the Western Cape will see a reduction in run-off in rivers during the next decade, and reductions in water availability will move gradually eastwards.

The intensity of flood and drought events is also predicted to increase, especially in the east of the country. These will have direct economic impacts through flood damage and water shortages during drought periods.

A more pressing concern is a dramatic decline of water quality due to irresponsible mining practices and poor maintenance of water treatment infrastructure.

So is South Africa facing a "water-Eskom" where the signs of an impending crisis were patently apparent for many years but not heeded?

It is difficult to put a definitive answer to this. However, two things are certain: first, we are operating in a very delicately balanced supply and demand situation that is not being taken as seriously as it should, and second, the social and economic consequences of a "water-Eskom" will be far more disastrous than its electricity equivalent.

To put it simply, if we as South Africans wish to meet our common aspirations of social and economic development we will need to act decisively to prioritise the management of our water resources and the ecosystems that provide us with the liquid. In terms of the supply of water, we will need to embrace the fundamental concept that water does not come from a tap, nor even a dam; water is provided to us by healthy and functioning ecosystems.

To illustrate this, imagine the majestic Maloti-Drakensberg mountains.

What you are seeing is not just a picturesque mountain chain but South Africa's most important water factory, producing some 25 percent of our available water and supporting almost 50 percent of our gross domestic product. These water factories are not just confined to this range, they include the grasslands of our eastern escarpment and the Cape Fold

mountains.

Such areas need to be prioritised for our highest protection, purely for their water-producing capacity.

When these ecosystems are in a healthy state, they absorb, purify and release water in a regulated manner over time, sustaining rural communities and urban economies.

When these areas are in a degraded state - due to poor land use practices - they function more like dirty stormwater drains.

Water rushes off the hard, compacted and exposed surfaces, removing productive topsoil, silting up our rivers and dams, creating flood damage during wet periods and then leaving these same areas in intense drought during the interim dry periods.

So is this all scaremongering or are we seeing real evidence that may support this supposition? Some of the hard evidence we are seeing includes: cholera outbreaks in Limpopo; contaminated water leading to the deaths of babies in the Eastern Cape; crocodile and fish die-offs in the Lowveld; droughts ravaging the Eastern Cape; sewage spills in the Vaal Dam; massive flood damage to the KwaZulu-Natal south coast: and economic operations of large businesses such as SA Breweries interrupted due to water shortages. These are real impacts with dire social, environmental and economic consequences.

It is with this in mind that the WWF Sanlam Living Waters Partnership worked with its partners to develop a set of key action areas that should be the focus of the government, the private sector and civil society in order to move South Africa firmly on to the path of ecologically sustainable water management. Over the next 10 months, WWF and Business Report will examine these key areas in more depth. Join us on this journey of discovery and debate.

The series will run on the second Tuesday of every month. Deon Nel is the head of the WWF Sanlam Living Waters Partnership

<http://www.busrep.co.za/index.php?fSectionId=2515&fArticleId=5120663>