

Photo: Ross Canter



# The Ecological Reserve: For People or for Insects and Fish?

What is the motivation for enforcing an Ecological Reserve? Who benefits?  
And whose interests was this new legislation designed to serve?

It seems that recent policy implementation processes may have been sending mixed messages. A variety of role-players - stakeholders, specialists, engineering and social consultants - have been heard to offer some of the following interpretations:

"The Reserve is water for 'goggas'."

"We can only use the water that is left over after we have allocated some for the ecology."

"(A higher Management Class means) more water for the Reserve means less water in your stomach."

"How can you tell people they can't have water because the fish need it?"

"Ecologists keep telling us about how the river ecosystem is the resource, and not just the water it provides. But what is a river except water?"

"The Reserve is just there to give consultants jobs."

"All we really need is sustainability. Why don't we just make all rivers Class D then we can get maximal use out of them while still ensuring a sustainable resource?"

"If 10% of the money already spent on Reserve determinations had been spent on supplying water to rural areas, we'd have done more good."

"How did ecologists in South Africa manage to negotiate so much power for protecting Nature in the new water policy?"

All of these quotes would suggest that South Africa is employing an approach to resource protection that values insects and fish more than people - and that the 'luxury' cause of biodiversity is diverting funds from much needed rural





*Fishing for food and fun - KZN (photo: Umgeni Water)*

development. But these are not the messages to be found in either the spirit or letter of the Water Act. Our new water policy is unashamedly anthropocentric. "The objective of managing the quantity, quality and reliability of the nation's water resources is to achieve optimum, long term, environmentally sustainable social and economic benefit for society from their use (White Paper, Principle 7) (DWAF 1997, p.35). "Reserve' means the quantity and quality of water required... to protect aquatic ecosystems in order to secure ecologically sustainable development and use of the relevant water resource" (National Water Act, Ch I, para. 1.(xviii)). Principle 9 of the White Paper gives the purpose of the Reserve as "to maintain the ecological functions on which humans depend" (DWAF, 1997 p. 35). Our national government and all of its departments subscribe to a policy of "Batho pele" – people first.

How then does the Ecological Reserve serve 'people'? A principle often quoted by ecologists, which has been embraced in the new water policy (in direct opposition

to previous legislation) is that the environment is not a competing water user. This does not mean that the environment has been declared a privileged consumer because the needs of plants and animals take priority over humans! It simply means that one can't actually think of the environment as a water user, when really the environment (in this case the aquatic ecosystem) IS the water resource. If the necessary ecological functions are not maintained then the quality of the resource – the water, the fish, the trees and grazing on the banks, the attractiveness to tourists etc. – will deteriorate. It is like trying to sustain output from a factory while denying one's workers sustenance or one's machinery maintenance! You very rapidly cease to function and produce your product and the service you are providing to society.

### PURPOSE

The purpose of the Ecological Reserve is to make the necessary requirements for maintaining a particular status of the resource (ecosystem) both explicit, and legally defensible, so that it can

deliver to society the services they desire. Obviously then there is no absolute or ultimate value of the 'Reserve' that could be objectively determined by engineers or scientists. The Reserve is linked to the achievement of a particular state of an ecosystem, and will depend on what state of the resource will benefit stakeholders most. This is a value-based decision that must reflect the full spectrum of societal needs and values. The Act has expressed this decision as a choice between different Management Classes, and Ecological Management Categories. Yes, all of these are defined as 'sustainable' – but we have the option as to what we would like to 'sustain'. What type and level of goods and services do we want our water resources to deliver?

This is not simply a decision about how much water we would like to abstract and use, versus how much we can afford to leave in the river to keep the conservationists happy. Water is just one good in the basket of goods and services that river ecosystems provide. When we think of the resource as simply a provider of water for industry, irrigation or domestic use, management decisions will always favour those who benefit from using the resource in this way. Abstracting water and returning wastes however reduces the ecosystem's ability to provide other goods and services, to other users. These include goods such as fish, and the numerous food, craft and medicinal plants provided by riparian vegetation, and services such as waste assimilation, recreation, aesthetics, tourism and various religious and cultural activities.

Deciding what particular state of the resource a Reserve must be set to maintain requires explicit recognition of the goods and services



that stakeholders wish to have delivered. This must aim to achieve equity in the distribution of the costs and benefits of different types of resource use, between the various sectors and regions in a catchment. Often it is the rural poor who rely most directly on a wide variety of ecosystem goods and services to meet their most basic needs. Taking care of ecosystems so that they can continue to provide this variety of benefits is thus a livelihood issue for these people.

Who then is responsible for creating negative impressions of the Reserve? Or is it simply that we are failing to communicate a sufficient understanding of its purpose and importance, and people (both stakeholders and specialists) are then free to draw their own, often erroneous, conclusions?

We need to be aware that in South Africa perceptions of conservation as a source of dispossession and inequality already exist, and with good reason. It is very easy to inadvertently reinforce these, particularly where applicants for new allocations are being asked to wait an unspecified but usually substantial period of time 'for the Reserve'. We also need to make sure that it is not these same people, who were disadvantaged or dispossessed by previous legislation, who are made to bear the cost of protecting a resource they are presently still not allowed to benefit from. Issues of allocations for emerging farmers and ensuring domestic supply must be seen to be addressed with the same urgency and commitment as the cause of resource protection is currently being afforded.

Correcting these impressions is crucial to achieving greater equity and sustainability of water resource use. Changing people's behaviour



*Laundry day at the river - Hazyview, Mpumalanga (photo: E. van Wyk)*

requires 'buy-in' to the intentions of this change. The Reserve, though protected by law, will be extremely difficult to police and enforce, and will need to rely to a large extent on voluntary compliance.

As long as these negative sentiments and incorrect perceptions persist, the Reserve will only be considered in terms of a wasteful amount of water instead of the state of the resource needed to serve the people. There will be little commitment to implementation and equity will remain a pipe dream.

## REFERENCES

**DWAF (Department of Water Affairs and Forestry) (1997).** *White Paper on a National Water Policy for South Africa.* Department of Water Affairs and Forestry. Directorate Communication Services, Pretoria.

**National Water Act (Act no. 36 of 1998).** DWAF, South Africa, Government Gazette no. 19182. Government Printers. Pretoria.



*Reeds for craft and building - KZN (photo: Umgeni Water)*

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