



Dirk van Rensburg

LOWER ORANGE RIVER FORUM – Maintaining South Africa’s largest river

The Lower Orange River Forum (LORF) is a working example of how citizens are working together with government and non-government organisations to protect South Africa’s valuable water resources. Article submitted by Peter Ramollo of the Northern Cape Department of Environment and Nature Conservation.

Originating in the Kingdom of Lesotho, the Orange River is the longest river in South Africa, and is shared among four countries, namely South Africa, Lesotho, Botswana and Namibia. It

is a source of water for agricultural and domestic use, while the river itself supports various aquatic organisms both within its own catchment and those of other catchments in the Eastern Cape through inter-basin transfer schemes.

For the arid Northern Cape the Orange River, along with its main tributary, the Vaal River, is an artery of life. However, urbanisation, industrial and mining developments as well as pollution are placing increasing strain on this important resource.

The Orange River is regulated through several weirs and some of the country’s largest dams, including the Gariiep and Vanderkloof

dams, which are used for electricity generation, flood regulation and agricultural activities. As a result, the former variable river flow has become more regulated. This has facilitated the establishment of breeding sites for the agricultural pest black fly, which causes great economic losses to livestock farming and tourism in the Northern Cape.

The LORF was established in 2003 after an outbreak of toxic blue-green algae (cyanobacteria) that resulted in massive fish kills in the Orange River. The initial objective of the forum was to engage with water users along the river and provide them with relevant information

regarding issues affecting the river system. Since then the forum has grown, attracting various stakeholders and specialists on water management and conservation.

Last year, an event was held in October in Upington, where several scientists and other specialists presented information on various topics, such as biomonitoring and water resource planning. This forum gives a platform to communities, farmers and scientists dependent on the river to develop measures together to safeguard the river.

There are various developments underway in the province, such as renewable energy plants, which are expected to place an even bigger pressure on water supply. All the weirs are earmarked for hydropower energy generation, and there are also plans to build more weirs for hydropower stations within the river system.

Due to existing river regulation less water is reaching the Orange River Mouth estuary, a wetland of international importance. This is because the water released from the Vanderkloof Dam takes up to six weeks to reach the mouth. Due to

this and other environmental factors, the saltmarshes that harboured the bird populations for which the mouth was awarded Ramsard status, have collapsed.

If the custodian of South Africa's water resources, namely the Department of Water Affairs, is to succumb to pressures to approve water use for the increasing developments underway in the province, it might lead to a water shortage within the Northern Cape or lead to extreme capital expenses to ensure that the available water can be cleared from pollution.

The riparian zone of the Orange River is dominated by mixed woody vegetation, such as buffalo thorn, wild olive, indigenous wild tamarisk, sweet thorn, cape willow, karee trees and reeds that stabilise the bank and prevent bank erosion and degradation. On the other hand, invasive alien vegetation, such as wild tobacco, castor oil bush, Mexican poppy and mesquite has created impenetrable thickets along the Orange River banks in areas like Onseepkans, Pelladrift, Goodhouse and Vioolsdrift.

The mesquite especially grows faster than indigenous vegetation,

therefore using more water, which ultimately leads to groundwater depletion. Though it is difficult to completely eradicate invasive alien plants, LORF calls on communities to assist the government in controlling these invasive species as water availability is everybody's concern.

Though the LORF is committed to ensuring that South Africa's main artery of life does not get reduced into a vein the reality is that the Orange River will remain stressed in the foreseeable future, driven by anthropogenic impacts such as urbanisation, increasing agricultural and mining activities, and pollution from various sources.

Without water all forms of life is threatened so it is up to the residents living adjacent to the Orange River to help protect it. Citizens are asked to report any pollution, such as sewage running into the river, to relevant local and government authorities. If the authorities fail to act, communities should consider taking legal action against the polluters. In this way, they will be protecting their health and well-being as outlined in section 24 of the Bill of Rights. □

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