



Conservation Corner

Callum Clark is a third year Nature Conservation student from Nelson Mandela University. He is currently interning at the Wolwekraal Nature Reserve in order to complete the work-integrated learning component of his Diploma. He is interested in how conservation and sustainability can help further social justice and enrich people's lives.

Prince Albert's Water (In)Security

The karoo gets its name from an old Khoisan word meaning 'land of great thirst'. To understand why the karoo's first people chose this name, walk to the top of Robert Gordon Koppie and look to the north. From there you will witness the vast dusty plains stretching out as far as the eye can see. When compared to this Prince Albert stands out in leafy green contrast. What makes this oasis in the desert possible?

The *Dorpsrivier* which flows out from the Swartberg mountains has been the lifeblood of this town before it was a town. The Wolwekraal Nature Reserve, which lies on Prince Albert's outskirts, not only conserves the area's rich natural heritage. But also hosts a wealth of archaeological evidence proving that people have been living here for thousands of years alongside the river that has flowed for millennia. However, after the river's course passes through Prince Albert water has not run through the riverbed for more than a few of days since 2014. While the ongoing drought is a major contributing factor, Prince Albert is literally sucking the very life out the *Dorpsrivier*.

This is in direct violation of the South African National Water Act of 1998. The act introduces the concept of The Ecological Reserve: a minimum amount of water that must be set aside before any other water usage is allowed. The Reserve is divided into two parts: (1) The Basic Human Needs Reserve, which secures the right of everyone to access water to meet their daily needs such as drinking, washing, cooking etc, and (2) The Ecological Reserve, which is a minimum amount of water required to maintain the aquatic ecosystems from which all our water is derived. The main culprits singled out by scientists for causing this collapse in insect populations are habitat loss and the prolific use of pesticides and synthetic fertilizers in intensive modern agricultural practices. So it is vital we start demanding from our elected representatives and food suppliers that more sustainable agricultural systems are adopted.

The current failure to secure the Ecological Reserve of the *Dorpsrivier* is not only devastating for all the plants and animals that it used to sustain, but has potentially far reaching consequences for the town's residents.

For example, the river running dry has resulted in a massive die back of trees growing along its banks, quite evident in the death of the gumtrees near the water purification plant, for example. As the winter cold begins to bite, many of Prince Albert's most vulnerable turn to collecting wood to heat their homes and families. This puts further pressure on the already dwindling

number of trees. And as the trees begin to disappear from the veld what will the residents of Prince Albert turn to in order to keep the winter chill at bay? For example, the river running dry has resulted in a massive die back of trees growing along its banks, quite evident in the death of the gumtrees near the water purification plant, for example. As the winter cold begins to bite, many of Prince Albert's most vulnerable turn to collecting wood to heat their homes and families. This puts further pressure on the already dwindling number of trees. And as the trees begin to disappear from the veld what will the residents of Prince Albert turn to in order to keep the winter chill at bay?

What can be done? One glaringly obvious problem is with Prince Alberts current leiwater system. I am not advocating the complete scrapping of the system. But in such a water scarce region can the watering of lush, drought intolerant gardens still be justified? A culture of water scarcity needs to be urgently adopted. With the harvesting of rainwater from roofs and the recycling of greywater being the norm. Most importantly, the residents of Prince Albert and its elected officials need to proactively engage with the town's water security issues and begin searching for solutions.

While there are no easy answers, preventative and collective action is the best chance Prince Albert has in securing its water resources as well as preventing any future conflict. Climate change is predicted to increase the aridity of our region. Coupled with an increasing population. It would be wise to assume that pressure on Prince Albert's water supplies will increase in the future. Even though most of Prince Albert's water is derived from boreholes, these too are a finite resource and susceptible to over-exploitation. The dry riverbanks of the *Dorpsrivier* are sending out a clear warning that Prince Albert's water security- is anything but secure. ■



Under South African law Prince Albert's current consumption of all of the *Dorpsrivier's* water is illegal. Photo: Sue Dean