

*The mighty Orange-Senqu River*



# Finding Out More

**Enviro Fact: The Orange-Senqu River Basin**



# Geography

The Orange Senqu is the largest river basin south of the Zambezi, covering an area of approximately 1 000 000 km<sup>2</sup>. This trans-boundary river covers the entire area of Lesotho, a large part of South Africa and southern regions of Botswana and Namibia. The Senqu flows from its source near Thabana Ntlenyana (3 482 m) in the Lesotho highlands (the tenth highest peak in Africa), becomes the Orange River at the Lesotho border, travels through central and western South Africa, forms the southern border of Namibia, and finally joins the Atlantic Ocean near Alexander Bay.

The table below shows the land covered by the basin in the four riparian states of the Orange-Senqu River:

<b>Area and Percentage of the River Basin for the Four Riparian States</b>		
<b>Country</b>	<b>Area in each country(km<sup>2</sup>)</b>	<b>Percentage of Basin</b>
Botswana	79,000	7.9%
Lesotho	34,000	3.4%
Namibia	245,000	24.5%
South Africa	642,000	64.2%
Total	1,000,000	

*Orasecom, 2009*

The basin is the most developed trans-boundary river basin in southern Africa, having much of the industrially developed parts of the region, and includes approximately 27 storage dams. The wise management of water resources in the basin is needed to address many issues such as water quality, supply and pollution control

### **Basic Topography**

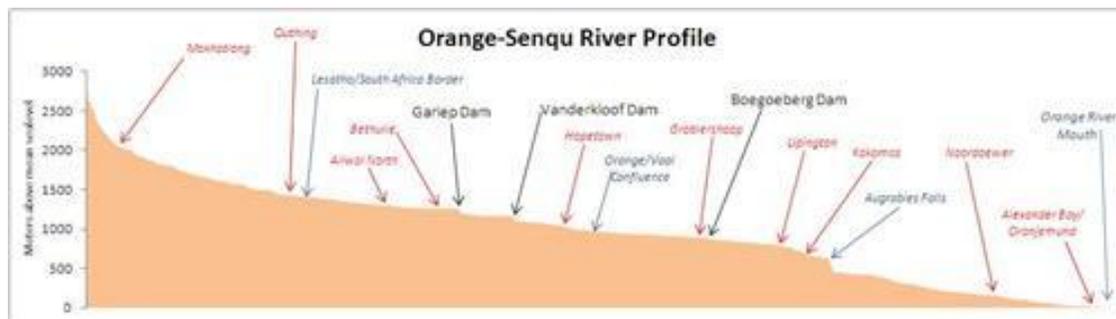
From its source in the Highlands of Lesotho, some 3 300m above mean sea level, to the border with South Africa, the topography of the Orange-Senqu River is steep. After reaching the border the landscape is more undulating.

In Botswana, where the river does not often actually flow regularly, the Molopo sub-basin is relatively flat, with gentle landscape throughout.

In Namibia, the major tributary of the Orange-Senqu is the non-perennial Fish River, which when flowing, passes through deep valleys before joining the main-stem Orange River close to the river mouth. Further upstream, are the Nossob and Auob Rivers that join close to the border with South Africa and Botswana, before they join the Molopo channel. Like the

Molopo, these rivers flow very infrequently and surface water does not actually reach the main river.

The downstream reaches of the river in South Africa, in the north western Karoo, Richtersveld and the area to the west of the Augrabies falls, often run through deep and steep valleys.



## Landforms

The basin incorporates the central part of South Africa, which represents nearly half its surface area, the whole of Lesotho (where the main river is known as the Senqu), the southern portion of Botswana, and drains most of the southern half of Namibia.

There are six main geographical regions covered by the Orange-Senqu River basin - these are the Great Escarpment Mountains; the Highveld; the Nama Karoo; the Southern Kalahari; the Namaqua Highlands; and, the Southern Namib desert.