



Orange-Senqu River Awareness Kit



The River Basin

Introduction

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PEOPLE AND THE RIVER

GOVERNANCE

RESOURCE MANAGEMENT

Water Quality: Principles of Water Quality: Salinity



Salinity refers to the saltiness of water caused by the dissolution of minerals in rocks, soils and decomposing plant material. The level of salinity in a river, for instance, depends on the geological and climatic environments through which the river flows. Salinity increases downstream, as salts are continuously added through natural and anthropogenic processes such as mining, industry and agriculture, but are only minimally removed through technological interventions or diluted by precipitation.

High levels of salinity can lead to the "salinisation of irrigated soils, diminished crop yields, increased scale formation and corrosion in domestic and industrial water pipes, and changes in the biotic communities." 1 000 mg/L is considered moderate salinity and is generally tolerated by humans; however, at levels above 3 000 mg/L (high salinity) fatal intestinal damage and renal damage can occur (DEAT 2009).



Salt encrusted soil in the Kalahari

Source: Reed 2009
(click to enlarge)

[Next: Water Hardness](#) ▶

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Basin Map



Explore the sub-basins of the Orange-Senqu River



Video Tour



Tour video scenes along the Orange-Senqu River related to the River Basin



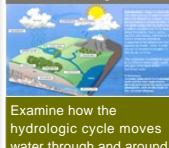
Geography Maps



Investigate land cover and terrestrial ecoregions in the basin



Water Cycle



Examine how the hydrologic cycle moves water through and around the earth



Food Web



Explore the interactions of living organisms in aquatic environments

