

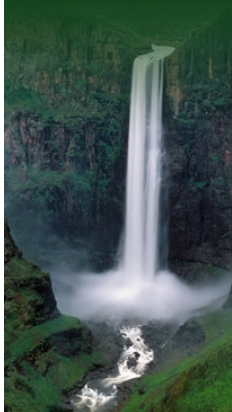


Orange-Senqu River Awareness Kit

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BASIN](#)[PEOPLE AND
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The River Basin → Water Quality

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Introduction

At a basin or sub-basin scale, particularly in semi-arid and arid areas, priority is often placed on monitoring and management of **water quantity**. However, the issue of monitoring and management of **water quality** is equally important. Issues surrounding water quality are particularly important given increasing pressure from legacy impacts of the mining industry; most specifically from Acid Mine Drainage.

Water quality is often characterised in terms of the concentration of different substances in water. Factors that determine "good" or "bad" water quality depend on the purpose of the assessment. For example, water with elevated concentrations of some metals may be unsafe to drink, but still suitable for industrial uses. Water quality assessments involve comparing measured concentrations with natural, background, or baseline concentrations, and with guidelines established to protect human health or ecological communities. This chapter defines physical, chemical, biological and spiritual water quality characteristics, and explains how [human activities](#) contribute to water quality problems in the basin.

Chapter Summary

This chapter covers the following concepts and material:

- [The principles and parameters of water quality](#)
- [The impact of human activities on water quality](#)
- [The impacts of mining on water quality](#)
- [The importance of groundwater quality in the basin](#)
- [The concept of fitness for use](#)



The Richtersveld region, South Africa/Namibia.

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[Next: Principles of Water Quality](#) ▶

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Interactive

Basin Map

Explore the sub-basins of the Orange-Senqu River

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Video Tour

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

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Geography Maps

Investigate land cover and terrestrial ecoregions in the basin

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Water Cycle

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

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Food Web

Explore the interactions of living organisms in aquatic environments

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