

TRANSBOUNDARY WATERS: We all live downstream

Rivers know no boundaries. Their paths have been carved out through valleys and mountains over centuries, without thought of the political systems of the countries through which they flow or the international rules used to manage them.

Around the world, there are more than 260 river and lake systems shared by more than one country. Known as trans-boundary or international river systems, the basins from which these rivers and lakes draw their water are home to about 40% of the world's population. Less is known of the aquifers (under-ground reservoirs of water) shared between countries, however, to date, around 300 transboundary aquifers have been recorded.

While most transboundary rivers systems are shared between just two countries, there are many rivers where this number is much higher. There are 13 river systems worldwide that are shared between five to eight countries. Five river systems, the Congo, Nile, Rhine and Zambezi, are shared between nine to eleven countries. The river that flows through the most countries is the Danube, which passes through the territory of 18 countries.

This is significant because it means that the way we treat our water might also affect the water supplies of our neighbours.

Many people have spoken of so-called 'water wars' – conflicts over limited and shared water supplies – that might occur between countries in future as water resources become scarcer, and such shared waters might well hold potential for conflict. However, history has shown that transboundary waters are more likely to be catalysts of peace rather than conflict. Over the last 60 years, there have been more than 300 international water agreements, compared to less than 40 conflicts over water. We need to continue to nurture the opportunities for cooperation that transboundary water management can provide.

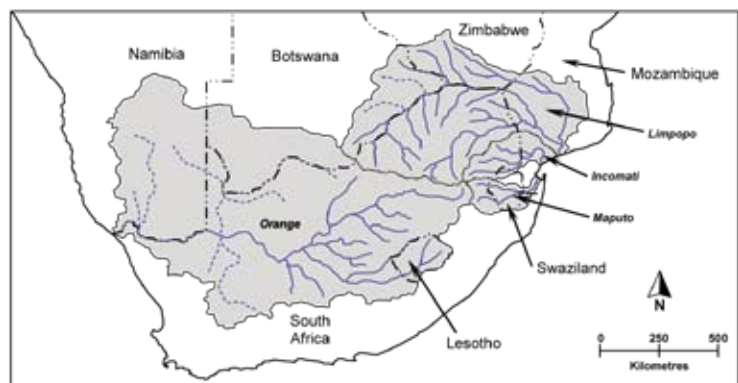
TRANSBOUNDARY WATERS IN AFRICA

In Africa, transboundary river systems provide 93% of the renewable surface water. There are 63 river systems that cross international borders, quite considerable when considering there are only 53 countries in Africa. The continent boasts a number of large river systems shared by quite a number of countries, for

SOUTHERN AFRICAN SHARED RIVER BASINS		
	Area of Basin in Country	
Countries	km ²	%
Incomati		
South Africa	29 200	62,47
Mozambique	14 600	31,20
Swaziland	3 000	6,33
Limpopo		
South Africa	183 500	44,25
Mozambique	87 200	21,02
Botswana	81 500	19,65
Zimbabwe	62 600	15,08
Maputo		
South Africa	18 500	60,31
Swaziland	10 600	34,71
Mozambique	1 500	4,98
Orange		
South Africa	563 900	59,65
Namibia	240 200	25,40
Botswana	121 400	12,85
Lesotho	19 900	2,10

Source: *Atlas of International Freshwater Agreements*

Right: The positions of the four river basins that South Africa shares with its six neighbours.



FACTS AND FIGURES ABOUT TRANSBOUNDARY WATERS

- ◆ Over 90% of people in the world live in countries that share river basins.
- ◆ About 40% of the world's people live in river and lake basins that are shared between two or more countries.
- ◆ There are about 300 transboundary aquifer systems in the world on which more than two billion people depend for water.
- ◆ There are 263 transboundary river and lake basins that cover nearly one half of the Earth's land surface.
- ◆ The Danube is the river system shared by most countries (18).
- ◆ More than 3 600 treaties have been identified relating to international water resources dating from AD 805 to 1984. The majority of these treaties are concerned with some aspect of navigation.

example, the Nile, which is shared between ten countries (Burundi, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Uganda, Tanzania, and the Democratic Republic of Congo).

South Africa shares four major river systems with neighbouring countries:

- The Orange-Senqu system is shared with Lesotho and Namibia
- The Limpopo River is shared with Botswana, Zimbabwe and Mozambique
- The Incomati system is shared with Swaziland
- The Usutu/Pongola-Maputo system is shared with Mozambique and Swaziland.

South Africa has signed and ratified the United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses, which promotes the principles of equitable and reasonable utilisation and the obligation not to cause significant harm (to downstream users). It also prescribes to the Southern African Development Community Protocol on Shared River Courses.

The management of internationally shared surface and

WHAT IS TRANSBOUNDARY WATER?

Transboundary water refers to lakes, rivers, and aquifers (groundwater) which are shared between more than one country.

groundwater resources is considered so important to South Africa that it has been taken up in the country's national laws (namely the National Water Act). This Act gives international requirements a priority that is second only to the basic human needs and the Ecological Reserve. This means that no infrastructure may be developed in any transboundary waters without considering the needs (or without the involvement) of the other countries involved.

WORLD WATER DAY

The theme 'Shared Water – Shared Opportunities' has been selected as the theme for this year's World Water Day, which is celebrated on 21 March. Special focus will be placed on transboundary waters. Nurturing the opportunities for cooperation in transboundary water management can help build mutual respect, understanding and trust among countries and promote peace, security and sustainable economic growth. For more information on World Water Day Visit: www.unwater.org/world-waterday/ or for South African National Water Week activities, Visit: www.dwaf.gov.za



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The Limpopo River forms the border between South Africa and Botswana.



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The Limpopo River flood plains near Xai-Xai in Mozambique and a bridge across the river.



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The Platjan border post between South Africa and Botswana.



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The Limpopo River mouth in Mozambique.