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Transboundary Monitoring of International Waters: Critical Questions for Microbial Water Quality

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INTRODUCTION

Across the globe, there are 20 international lakes and 261 international river basins, which are also called watersheds in the US or catchments in Europe. These water resources are shared across political boundaries and include 71 basins in Europe, 60 in Africa, 53 in Asia, and 39 and 38 in North and South America, respectively. All of these basins are shared by two or more countries. Wolf et al. (1999) have done a superb job in summarizing and updating the international river basins of the world, updated with changing political boundaries. Some of the largest international river basins are the Niger, Nile, and Zaire in Africa; the Tigris-Euphrates/Shatt al Arab, Indus, Mekong, Ob in Asia; the Danube and Rhine in Europe; and the Amazon in South America. Flow from these rivers is equal to just below 50% of the total world's water runoff (total of 19, 200 km³ per day, Shiklomanov, 2000). The largest international lakes are found in Africa, Asia and North America; these include Lake Chad, Lake Victoria, the Caspian Sea and the Great Lakes. While there are a number of international lakes in Europe, they are all relatively small in size and typically involve two countries.

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