

# Atlas of International Freshwater Agreements



OREGON STATE  
UNIVERSITY



TRANSBOUNDARY FRESHWATER DISPUTE DATABASE  
[www.transboundarywaters.orst.edu](http://www.transboundarywaters.orst.edu)



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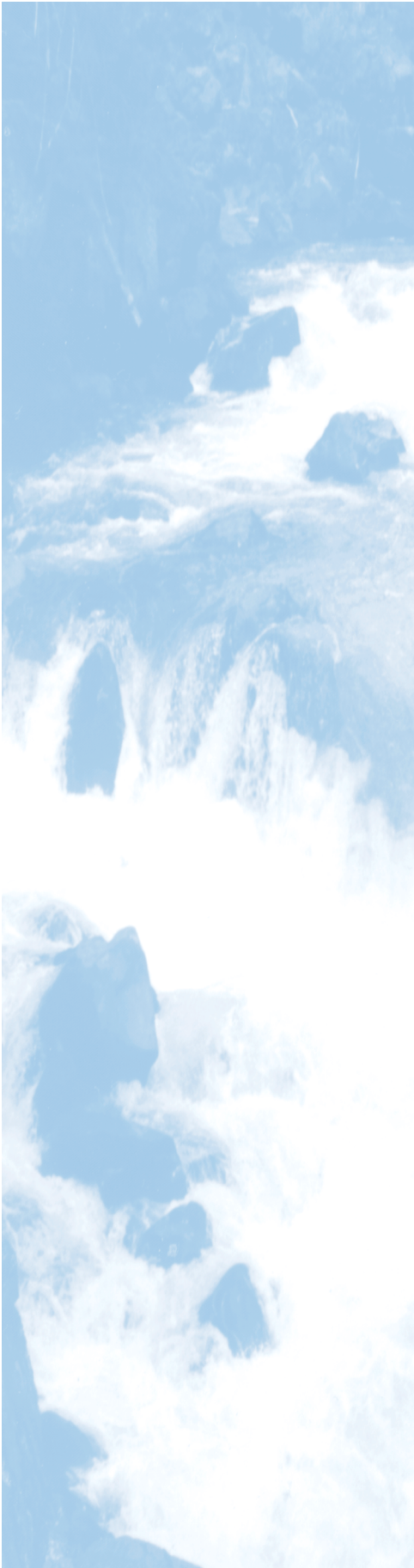
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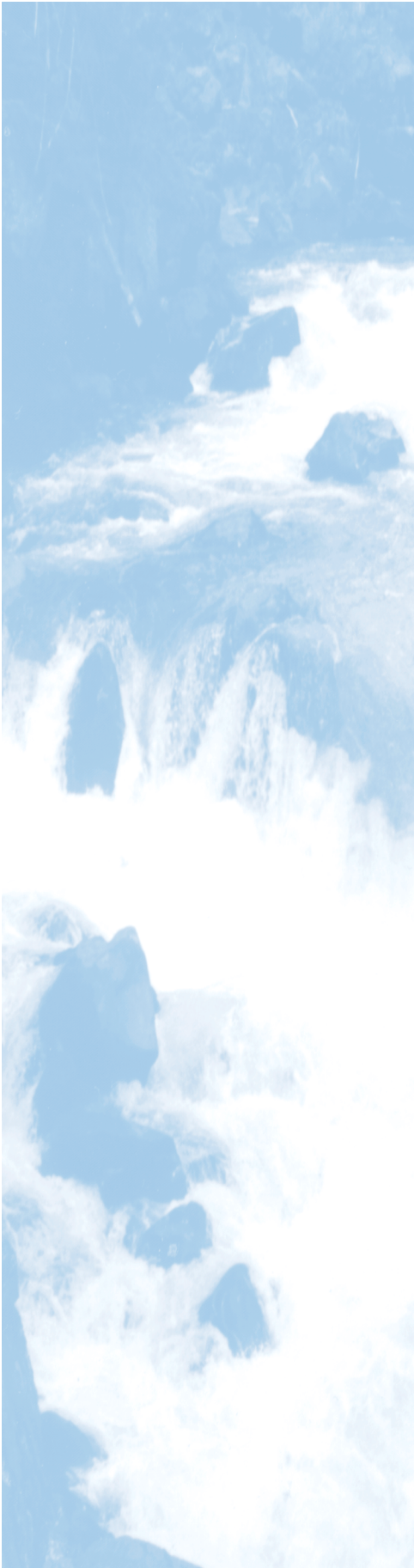




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## Foreword

Addressing water problems requires strategic approaches that recognize the interdependencies among competing demands on a finite resource. An integrated approach offers a framework in which choices can be made and reconciled, leading to effective operational actions.

The UNEP Water Policy and Strategy, with three components — assessment, management, and coordination of actions — stresses the cross-sectoral nature of water. One of the goals of the UNEP Water Policy and Strategy is to identify and promote the tools that will address the critical water issues facing humanity. Many already exist. International cooperation, especially among countries sharing water resources, has become more urgent as it can help address the transboundary nature of many water issues.

Almost half of the Earth's land surface lies within international river basins. The physical, economic and social disparities between riparian nations that share river basins make their management complex. International treaties and agreements serve to provide structure to allow nations to address these disparities within a legal framework. This structure may provide for joint management and monitoring of the resources to support sustainable development of the water resources, including management of water flow, water quality, and infrastructure development. Care must be taken to ensure that disparities do not translate into unfair inequalities.

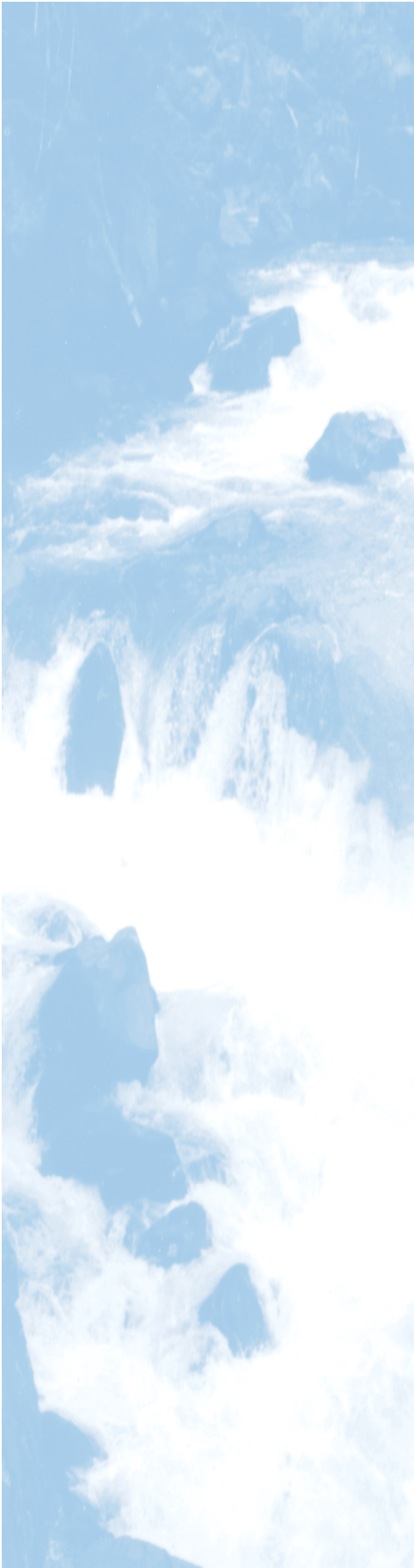
Utilizing historical documents, statistical analyses, and maps, the Atlas presents both a graphic and textual analysis and documentation of the world's international basins and their agreements. This Atlas builds upon knowledge stored in existing environmental legislative databases. The Oregon State University's Transboundary Freshwater Dispute Database provides an effective complement to FAO's legislative database, FAOLEX, and the joint UNEP, IUCN and FAO gateway to environmental law, ECOLEX. This Atlas and these open treaty databases yield a better understanding of existing treaties and treaty development through time, provide a basis for negotiating new agreements, and organize the underlying knowledge for improving environmental governance throughout the world.

Water crosses many borders: scientific, political, social, and cultural. Humans have always had trouble addressing cross-border issues, yet cooperation is essential. This study offers some information for how to move forward in a collaborative, cooperative way to develop appropriate policies for making sure that transboundary water resources issues are identified and successfully addressed in the coming years.

The water problems confronting humanity on the eve of the World Summit on Sustainable Development can be solved but we must have the will to invest in our future.

KLAUS TÖPFER  
Executive Director  
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## Preface

Water is one of the most widely shared resources on the planet, and the most vital for human survival after oxygen. It has the capacity to unite the people and states that share a source of water, and to incite conflict among them as they compete for it. The latter, reaching the point of “water wars”, has become increasingly common in the media, but the contents of this Atlas show that treaties, not wars, are the norm.

The potential for conflict over shared water resources is real, so it is important that countries reach agreement. In the process of reaching agreement, and through the agreement and the mechanisms for consultation and cooperation frequently created by such agreements, countries manage conflicting interests, and defuse the potential for conflict to escalate all the way to the water wars mentioned earlier. That states recognize the value of such agreements is borne out compellingly by the innumerable treaties, agreements and conventions made through recorded history in regard to navigation on, and boundary demarcation along or across, rivers and lakes. Since the dawn of hydropower and large-scale irrigation development in the twentieth century, however, the focus of negotiation and of treaty-making has shifted away from navigation and from boundary demarcation towards the use, development, protection and conservation of water resources. The issues requiring negotiation and agreement among states have grown more complex and intricate, but the practice of seeking a negotiated, agreed solution has remained.

Water treaties, agreements and conventions abound, but knowledge of them, and the relevant records, used to be scattered and not always easily accessible. The United Nations system has perhaps the most extensive experience and knowledge base regarding such treaties and their negotiation. For example, the UN International Law Commission (ILC) developed the Convention on the Law of the Non-Navigational Uses of International Watercourses, adopted by the UN General Assembly in May 1997. As a framework treaty, the 1997 Convention will offer binding guidance in the avoidance and resolution of conflicts when it is ratified by the required number of states. As early as 1963, the United Nations Secretariat pioneered work on the consolidation of the then-available water-related treaty record and on its dissemination. Following on from it, the Food and

Agriculture Organization of the United Nations (FAO) carried out systematic surveys of water-related treaties, which resulted in a series of publications, respectively in 1978, 1984, 1993, 1995, and 1997. In addition, the full text of contemporary (post-1980) water-related treaties is now included in FAOLEX, FAO's online legal database. UNEP's experience in the management of shared water resources is attested to by its work on the Environmentally Sound Management of International Water Resources, initiated in 1984. This led, notably, to the Zambezi Action Plan (ZACPLAN), which is a non-binding instrument adopted in 1987 by the Zambezi river basin countries.

The Atlas of International Freshwater Agreements is a welcome step in the consolidation and dissemination of information about shared waters treaties. This systematic and thorough compilation of the available historical record of the very many treaties and agreements concluded in regard to the water resources of rivers and lakes shared across international borders offers fresh, compelling testimony to water being an agent of cooperation rather than of conflict. Moreover, the thematic maps featured in the Atlas help understand why this is so, and add new perspective to that of the legal records which make up most of the Atlas.

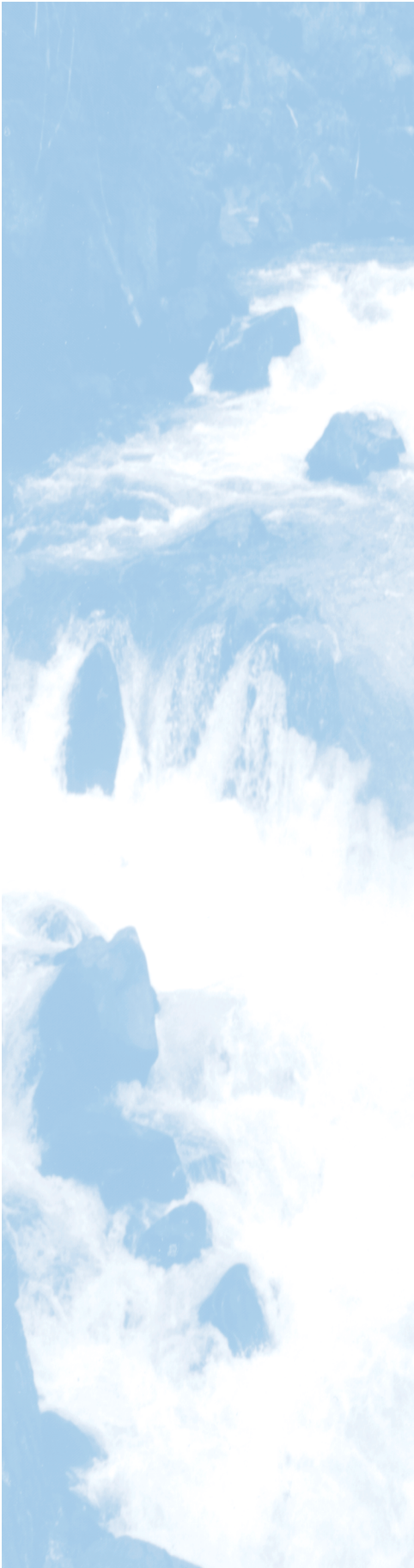
Thanks to its double feature as a reference book and an original instrument of analysis of water-related treaty-making, the Atlas will be of value not only to those who study the practice of states in this matter but also, and above all, to those who fashion such practice and articulate the negotiating positions which eventually inform it.

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For updates of this document, and for the full text of most agreements, see the Transboundary Freshwater Dispute Database website at <<http://www.transboundarywaters.orst.edu>>.

While we have done the best we can to be inclusive in this document, it should be noted that neither the authors and contributors, nor their respective institutions, make any claim as to the exhaustiveness or the authoritativeness of the information presented.

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