

Transboundary freshwater dispute resolution

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# Transboundary freshwater dispute resolution: Theory, practice, and annotated references

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By Heather L. Beach, Jesse Hammer, J. Joseph Hewitt,  
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**United Nations  
University Press**

TOKYO • NEW YORK • PARIS

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The views expressed in this publication are those of the authors and do not necessarily reflect the views of the United Nations University.

United Nations University Press  
The United Nations University, 53-70, Jingumae 5-chome,  
Shibuya-ku, Tokyo, 150-8925, Japan  
Tel: +81-3-3499-2811 Fax: +81-3-3406-7345  
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<http://www.unu.edu>

United Nations University Office in North America  
2 United Nations Plaza, Room DC2-1462-70, New York, NY 10017, USA  
Tel: +1-212-963-6387 Fax: +1-212-371-9454  
E-mail: unuona@igc.apc.org

United Nations University Press is the publishing division of the United Nations University.

Cover design by Joyce C. Weston  
Cover photograph by Iwao Kobori

Printed in the United States of America

UNUP-1038  
ISBN 92-808-1038-3

Library of Congress Cataloging-in-Publication Data

Transboundary freshwater dispute resolution: theory, practice, and annotated references / by Heather L. Beach ... [et al.].

p. cm.

Includes bibliographical references and index.

ISBN 92-808-1038-3

1. Water-Law and legislation. 2. Transboundary pollution-Law and legislation. 3. Water rights (International law) I. Beach, Heather L.  
II. Title.

K3496.T73 2000  
341.7'6253—dc21

00-008341

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# Preface

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This work attempts to provide a comprehensive review of the relevant literature on managing conflicts stemming from the quantity and quality problems of water around the world. Current trends and projections suggest that disputes based on water scarcity escalate when the issue is not addressed effectively and in a timely manner. Proactive efforts to prevent these conflicts have been overwhelmed by pessimistic forecasting. This situation negatively affects multilateral cooperative efforts and results in attempts to pursue unilateral short-term gains and in some cases increases in military power. So far, few comprehensive and interdisciplinary analyses of such international surface water conflicts have been produced. Only fragmented findings and scattered experimental endeavours are available to the conflict resolution community.

In this report we introduce knowledge from the fields of transboundary water disputes and conflict resolution. The latter incorporates the studies of political geography, economy, and hydrology. In addition, it draws upon the expertise of specialists in the areas of formal modelling, conflict resolution, and environmental and natural resources. The data in the report include a variety of factual information about individual cases as well as bilateral and multilateral agreements and general principles.

The literature surveyed indicates that while in many areas there has been extensive research and analysis, there continues to be a need for more studies on the specific situations that lead to conflicts over water and other environmental resources. Lateral learning, an attempt to under-



stand the similarities between all conflicts over natural resources, will lend itself to future applications in predicting and preventing these conflicts.

A survey of international watersheds provides some bibliographical and general data collected from over 200 transboundary watersheds. Some countries share one or two river systems while others share quite a few. The India-Bangladesh Joint Rivers Commission counted 140 tributary systems in common. The fortunate corollary is that because water is such a scarce and vital resource, it has sometimes brought hostile co-riparians together into a cooperative mode, often with external incentives. A subset of case studies of the exhaustive list of international watersheds is examined in greater detail. A related effort is a compilation and analysis of relevant water treaties, and the rationale for the partial implementation of these treaties.

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# Acknowledgements

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This project simply would not have been possible without the initiation and leadership of Ariel Dinar of the Agriculture and Natural Resources Division of the World Bank. While the final product constitutes a team effort at its best, the project is essentially his. The authors would also like to acknowledge and thank Jerome Delli Priscoli, Sandra Postel, and James Wescoat for their valuable comments in reviewing earlier drafts of this document. We are also grateful to Lili Monk for her copy-editing expertise.