

The World's Water 2002-2003: The Biennial Report on Freshwater Resources

by Peter Gleick with William C.G. Burns, Elizabeth L. Chalecki, Michael Cohen, Katherine Kao Cushing, Amar S. Mann, Rachel Reyes, Gary H. Wolff, and Arlene K. Wong. Island Press, \$32.50

Reviewed by **Betsy Woodhouse, Ph.D.** –
Editor-in-Chief, *Southwest Hydrology*

The World's Water 2002-2003 is the third report in a series, and the first edition in which Gleick shares authorship with his colleagues at the Pacific Institute for Studies in Development, Environment, and Security, where he is president. Individual chapters are written by various combinations of authors within the group. The book is clearly the product of the institute, “an independent, non-profit center created in 1987 to conduct research and policy analysis in the areas of environment, sustainable development, and international security.” As such, the authors focus on water with respect to the values and needs of society.

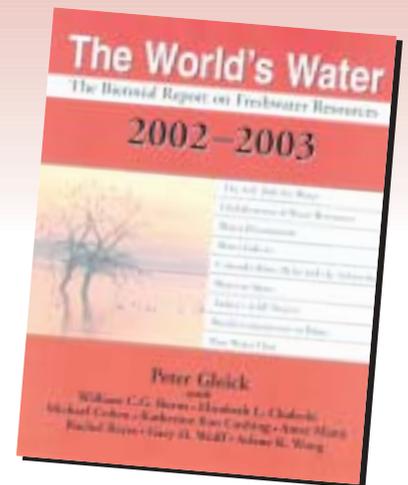
Gleick and coauthor Wolff begin by advocating the “soft path for water.” Currently, water needs typically are met through centralized infrastructure and decision-making that involves large dams and pipelines and big water departments and agencies: the “hard” path. The “soft” path might still involve centralized infrastructure, but that would be complemented “with extensive investment in decentralized facilities, efficient

technologies, and human capital.” Rather than continually look for more water, the authors suggest we improve the efficiency of what we already have, and cite a number of ways in which that could be achieved.

Individual chapters are devoted to “Globalization and International Trade of Water,” “The Privatization of Water and Water Systems” and “Measuring Water Well Being: Water Indicators and Indices.” The idea of quantifying the connection between water availability and human well-being is intriguing; can it really be done? Perhaps, carefully, and with a lot of caveats, it seems, yet the authors present a variety of approaches that have been used worldwide, and efforts that have been made are admirable.

Two chapters are devoted to specific regions of the world: The Pacific Island Developing Countries and the Colorado River Delta. The Colorado River Delta discussion addresses the impacts to the environment that have occurred as a result of large-scale water development, and legal and political challenges of managing across the international border. The authors lay out the history of damming and diverting of the Colorado, briefly discuss the hydrologic aspects of its flow, describe the complex international legal framework that governs it, and bring us to the present state of the delta, which is much reduced in area from its pre-dam extent, yet surprisingly abundant in species diversity.

A chapter is devoted to the report of the World Commission on Dams, which



investigated the sustainability of large dams. Major conclusions of the commission are presented along with their recommendations, priorities, and guidelines. The varied reactions to the report by many different organizations are also included.

“Water Briefs” is a miscellaneous collection that includes texts of Ministerial Declarations from major international water conferences; a description of the Southeastern Anatolia Project; an essay on water in Space; a fairly extensive list of water-related Web sites, some links of which are now inactive; and a chronology of worldwide water conflicts that begins in 1503 with Leonardo da Vinci and Machievelli in Florence, Italy, and ends with acts of terrorism in the Philippines in 2001.

No report is complete without data, and Gleick and his coauthors include a section containing 22 tables of worldwide water-related data, including access to water and sanitation by region, fresh water withdrawals by country and sector, number of dams by continent and country, water prices for various households, gross national or domestic product and water withdrawal histories for the United States, Hong Kong, and China, and others.

The world-scale approach that *The World's Water 2002-2003* takes in addressing water issues is thought-provoking and ambitious, perhaps especially to those of us whose daily work focuses on the local well contamination or this week's river discharge. Visit www.islandpress.com and www.pacinst.org



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