

9-1-1999

Alice Outwater, Water: A Natural History

Jennifer Lee

Follow this and additional works at: <https://digitalcommons.du.edu/wlr>



Part of the [Law Commons](#)

Custom Citation

Jennifer Lee, Book Note, Alice Outwater, Water: A Natural History, 3 U. Denv. Water L. Rev. 114 (1999).

This Book Notes is brought to you for free and open access by the University of Denver Sturm College of Law at Digital Commons @ DU. It has been accepted for inclusion in Water Law Review by an authorized editor of Digital Commons @ DU. For more information, please contact jennifer.cox@du.edu, dig-commons@du.edu.

Alice Outwater, *Water: A Natural History*

BOOK NOTES

Alice Outwater, *Water: A Natural History*, Basic Books, New York, NY (1996); 212pp; \$23.00, ISBN 0-465-03779-8.

Alice Outwater's environmental engineering work on the Boston Harbor clean up project resulted in her writing *Water: A Natural History*. She monitored chemical content from industrial pollution in Boston Harbor and found the water and sludge in the harbor mainly uncontaminated by industry. In an effort to understand why so many bodies of water around the country remain contaminated despite the Clean Water Act's enactment, Outwater wrote this book which examines how the earth cleans its own water. She calls water "the blood of land" whose natural cycle, particularly in North America, has been altered so drastically that "water is no longer able to clean itself naturally." Citing dredging and damming as "tampering" with and oversimplifying the natural process, Outwater articulates a natural history of water while suggesting how changes in the management of public lands could restore the natural process.

The first section of the book, entitled "Dismantling the Natural System," contains six chapters that highlight historical practices that contributed to the break down of the natural cleansing process for waterways. For example, Chapters One and Two outline the history of the fur trade and its elimination of the North American beavers and their dams. According to Outwater, beavers, "nature's hydrologists," play an important role in aiding water's natural cleansing by building dams. She notes "[a] land with hundreds of millions of beavers is a truly rich land, and the wetlands associated with beaver dams made the New World's water plentiful and clear as the dew." Outwater also asserts an association between rainfall and forests. She explains how the effect of deforestation of old growth forests deprives waterways of nutrients, received through rainfall "catching" those nutrients from lichen and fungi.

After Outwater establishes what she believes to represent the beginning of the break down of the natural water purification process, she covers the additional degradation of water in second section, entitled "Engineering the Waterways." Chapter Seven discusses the ways in which dams both arrest natural processes by "exert[ing] total control over the downstream river" and eliminate "natural extremes of flow, water temperature, and sediment transport." Since water travels more slowly through a dammed river, organic matter and sediment, critical to the aquatic ecosystem, get trapped in reservoirs. In the final chapters, Outwater examines the effects of modern sewer systems, industrial pollution, and the Clean Water Act on the earth's natural

cleansing process. She also discusses the Boston Harbor Clean-up project, her education in that process, and her subsequent compulsion to write this book.

This book provides a “natural history” of water that is interesting to read and invaluable to anyone—a city planner, lawyer, or concerned citizen—who works with water or is interested in the state of our water supply. Outwater suggests that “[a]fter a hundred years of taking away from our waterways” we need to give back. In the book’s final pages, Outwater suggests methods to give back and also notes improvements. Although she writes summarily here, the solutions are not her book’s focus. Instead, Outwater shows the reader the many avenues North American water took to arrive at this troubled state.

Jennifer Lee

KENNETH R. WRIGHT, ED., WATER RIGHTS OF THE EASTERN UNITED STATES, American Water Works Association, Denver, Colorado (1998); 156pp; \$47.00; ISBN 0-89867-960-5, softcover.

Water Rights of the Eastern United States focuses on the thirty-one Eastern states which base surface water allocation on the riparian doctrine. Chapters One and Two explain the necessity of water rights; the basic function of water law; and the government’s role in water rights as creator, enforcer, and regulator.

Under the riparian doctrine, water rights stem from land ownership adjacent to a water body. The owner has reasonable use of the water flowing past his land subject to other riparian owners’ rights. Chapter Three discusses the land continuity requirements and natural flow and reasonable use principles which govern how much water a landowner may use. This chapter examines various issues surrounding the riparian doctrine and how states differ in its application and definition. It also addresses riparian rights transferability and the doctrines applicable to groundwater.

Based on assumptions of water surplus and increasing water demand, many Eastern states have modified the common law riparian system with a system of regulated riparian rights. Chapter Four examines the structure and application of regulated riparian rights. Under a system of regulated riparian rights, a user may not withdraw water without a permit from the state. The chapter also examines issues arising under the conflict of a regulated riparian system application in the face of common law riparian rights.

States often try to address cooperatively transboundary water problems through interstate compacts that do not completely surrender control to the federal government. Chapter Five addresses the general law governing interstate compacts and compares the different patterns of Eastern and Western state compacts. This