

Water Politics

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Constance Elizabeth Hunt, *Thirsty Planet: Strategies for Sustainable Water Management*, Zed Books, 2004, 256 pages

“By 2025 nearly 2 billion people will live in regions experiencing absolute water scarcity. In the face of this emerging crisis, how should the planet’s water be used and managed?” Biologist and environmentalist Constance Elizabeth Hunt addresses nearly 300 pages of text to this question. Hunt’s timely and wide-ranging book should contribute to raising awareness of this important issue.

Hunt states her thesis explicitly: “*Nature is the source of water; therefore our ability to support additional human lives on planet Earth depends upon the protection of nature and the continued operation of the water cycle*” [p. 1]. Meeting continuing demands for fresh water requires the protection of the Earth’s water cycle and the freshwater ecosystems upon which it depends.

Hunt’s discussion is in three sections. In Chapter 1, she explains the functioning of the water cycle. Chapters 2 through 6 discuss human activities which have major effects on freshwater ecosystems and the water cycle. The final three chapters discuss responses to the global water crisis.

Thirsty Planet begins with a Glossary. As a non-scientist approaching a scientific text, I imagined the glossary to be necessitated by the dense and esoteric text which was to follow. Happily, these misgivings were unfounded. Hunt’s lucid text assumes no particular scientific knowledge on the part of the reader.

The first chapter is an explanation of the Earth’s water cycle. This brief hydrology primer prepares the reader to understand the implications for freshwater ecosystems of the (ab)uses of water discussed in subsequent chapters.

In the chapter’s final section, Hunt enumerates the benefits conferred upon human and nonhuman beings by the water cycle and freshwater ecosystems, including recreation, domestic and industrial uses, waste removal, providing fish and wildlife habitat, etc. She concludes that since the services provided by the water cycle are indispensable, the value of the water cycle and the ecosystems which support it is inestimable.

In Chapters 3 through 6, Hunt discusses important human activities which affect the water cycle: food production, sanitation, flood control, and transportation, respectively. Since “agriculture consumes more water by far than any other human use” [p. 63], a global water crisis would have a severe impact on humanity’s ability to feed itself. Sanitation involves the introduction of wastes into freshwater supplies, which contributes to shortages of potable water. Many of the most frequently used methods of flood control, such as construction of dikes and levees, actually increase the likelihood of flooding or flood damage. Human beings also bring about changes in freshwater ecosystems through

transportation-related activities such as channelization, construction of locks and dams, and pollution from water craft.

How can these human activities be carried on so as to protect freshwater ecosystems and the water cycle? Hunt consistently argues for “adaptive management” strategies. The solution to problems generated by human activities is, in general, to modify the human activities rather than to engage in large-scale alterations of freshwater ecosystems. Human activities should be made compatible with the relatively undisturbed functioning of the water cycle. Hunt’s low-tech solutions often involve reviving traditional water management methods.

Chapter 7 discusses the interrelations between the water cycle and global warming. Global warming effects such as alterations in precipitation patterns and changes in sea level will significantly affect the functioning of the water cycle. Protecting the water cycle requires reversing or moderating the effects of global warming. Hunt dismisses three “pseudo-solutions” to global warming: nuclear energy, carbon sequestration, and, surprisingly, hydropower. She argues that because organic matter is decomposed in reservoirs, they often release more greenhouse gases into the atmosphere than would be released by a fossil fuel plant generating a comparable amount of electricity. She prefers less ecologically hazardous approaches such as increasing energy efficiency and investing in renewable resources.

In Chapter 8, Hunt considers restoration of freshwater ecosystems as a strategy for combating the degradation of the water cycle. Though restoration is possible, the difficulty, uncertainty, and cost of restoration make it a relatively unattractive way to maintain the water cycle.

In her final chapter, Hunt turns from empirical matters to policy questions. She considers three means for protecting the water cycle: treaties, non-binding agreements, and free trade and market forces. Treaties and nonbinding agreements may serve to raise awareness of water issues, but because they do not provide adequate means for enforcement, Hunt asserts that “most readers will conclude that the financial and trade institutions are emerging as the most effective of the global governance bodies examined” [p. 258]. She discusses the World Bank and the International Monetary Fund, as well as the General Agreement on Tariffs and Trade (GATT), the General Agreement on Tariffs and Services (GATS), and the World Trade Organization (WTO).

She prefers the free trade institutions in spite of the fact that the market provides opportunities for private interests to profit from uses of commodified water, which are harmful to the water cycle. Hunt concludes *Thirsty Planet* with this sentence: “The only way to avoid a global water crisis is for people to learn about sustainable alternatives to massive and ecologically destructive technologies, and to insist that their governments embrace these alternatives” [p. 288]. The implication seems to be that the people, empowered with knowledge about sustainable alternatives to present practices, will compel their governments to manage freshwater supplies in such a way as to avert water crises. Unfortunately, she does not present any recommendations for how citizens, once they have gained knowledge of the importance of the water cycle, can ensure that their governments will act in accordance with their wishes, particularly given that corporations and other powerful private interests may oppose protection. Nor does she discuss how citizens are to gain knowledge of the

importance of protecting the water cycle when corporations and governments may have an interest in keeping them ignorant or confused about such matters.

Protecting the water cycle requires not only knowing the best way to manage freshwater ecosystems but having the political means to implement the proper management strategies. If Hunt has considered these issues, her book scarcely broaches them. Her forté is discussion of empirical matters, and *Thirsty Planet* contains a wealth of useful information regarding the importance of the hydrological cycle. The book will serve as a valuable reference for those who are attempting to protect the water cycle, even though it provides little guidance for how best to go about achieving that goal.