

Book Review Editor: Theodore J. Weidner, Ph.D., P.E., AIA

This month I'll cover three books discussing the environment and the challenges we face due to water

issues. Two books by the same author (one older than the other) address water issues, while the third is more general in nature.

All present some alarming facts about how we live within the environment and how the unintended consequences of our decisions-either self-serving or societal—demonstrate that more global, long term solutions are needed.

WATER FOLLIES: GROUNDWATER PUMPING AND THE FATE OF AMERICA'S FRESH WATERS

Robert Glennon, Island Press, Washington, DC, 2002, 224 pages, hardcover, \$44.78; softcover, \$18.57.

UNOUENCHABLE: AMERICA'S WATER CRISIS AND WHAT TO DO ABOUT IT

Robert Glennon, Island Press, Washington, DC, 2009, 432 pages, hardcover, \$27.95; softcover, \$19.95; and Kindle, \$9.99.

ome states have a lot of fresh water, While others are highly dependent on ground or importation from others. We typically look at the states with limited water supplies in the middle of the country and mountain west as being the only ones affected by water problems. Despite that, recent events in the southeast and in other "wet" areas prove that no area is immune to water problems. Robert Glennon, professor of law and public policy at the University of Arizona, illustrates these problems at length in both Water Follies and Unquenchable.

I grew up in Ohio, not far from Lake Erie and went to college along the Hudson River. Both locations had plenty of water. And in fact, the industrial revolu-

tion of the 1800's thrived along the Hudson due to the availability of water for transportation and power to operate the mills before the widespread use of electricity. The availability of water was not an issue because there was plenty of it due to spring rains which sometimes even caused damage due to too much water. Then I moved to the center of the nation where my sensitivity to

water issues increased because water is not quite so plentiful.

UNQUENCHABLE AND THE PATE OF AMERICA'S

Little did I realize that I should have been sensitive to water issues regardless of where I lived.

Glennon concentrates on groundwater in Water Follies: where and how it is being used and how it affects surface water. Many think of groundwater as being separate from surface water, and that wells drawing water from aquifers do not affect rivers and streams and vice versa. While not a hydrologist, Glennon demonstrates through numerous examples that pumping water from a well in a river basin, even relatively far from the river, affects the amount of water in the river. In Nebraska, we've had a long-standing disagreement with Colorado and Kansas over the use of water in the Republican River basin. The disagreement centers

on wells for the irrigation of crops in Colorado and Nebraska affecting the availability of water downstream in Nebraska and Kansas either from with river or groundwater. It's a big issue because the western half of Nebraska relies on irrigation to grow crops (as does Kansas.) The issue is not limited to drier areas as Glennon demonstrates with examples in Florida, Georgia,

> Maine, Massachusetts, and Minnesota (the land of Ten Thousand Lakes). None of these states are outwardly perceived as having water problems.

As a second volume in his chronicle of water issues, in Unquenchable Glennon opens with the value of water for entertainment, and the lengths different regions of the country will go to in order to meet the demands for water. Dry regions accustomed to paying for water will offer to pay more to address their growth

needs. Those unaccustomed to paying will resort to other tactics. In the middle, entrepreneurs package the same water and then charge prices exceeding that of gasoline (for the time being.) How crazy is that? It really won't be long before a different kind of Alaska Pipeline gets constructed to address the water demands of dry, heavily populated parts of this country.

There were times reading these books I felt that Glennon was providing too many details, taking too long to develop the scenarios, and not getting to the point. However, each chapter presents a different part of the country with water problems, and a brief history of how the problem developed. Despite that the lengthy details, I found both books compelling and informative. Reading between the lines one can see there are answers other than short-term, MBA-

like solutions. They do involve shared commitment to the solution, mostly by consumers. However, as long as the shopping public is willing to pay a significant premium for "spring" water over tap water, we will always have some water issues to resolve.

GREEN

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HEATHER ROGERS

GREEN GONE WRONG: HOW OUR ECONOMY IS UNDER-MINING THE ENVIRONMEN-TAL REVOLUTION

Heather Rogers, Simon and Schuster, New York, NY, 2010, 126 pages, hardcover, \$26.00, Kindle, \$9.95.

Tearly fifty years ago, Rachel Carson wrote Silent Spring and high-

lighted the problems facing the environment as a result of man's attempts to exert some control on nature and utilize chemicals to eliminate pests that harm crops and spread disease. It took a while, but the EPA was created, laws were written or changed, and regulations were promulgated to eliminate the consequences of short-term thinking about environment. In Green Gone Wrong, Rogers identifies a number of areas where the laws and regulations continue to do harm even though they were originally conceived as being the right thing to do.

Our environment is a wonderful and creative system. It provides for diverse life forms that support or harm our existence. While it changes over time allowing the evolution of living forms to respond to external influences such as weather, pests, and resources, the environment may not respond as we presumed it would when we made human decisions about how to preserve and maintain it.

Divided into three major parts: Food, Shelter, and Transportation, Rogers explains how current policies have been followed by business people but haven't yielded the desired results. Whether it is organic food labeling rules that actually

encourage large scale farming techniques (monocropping) that drive the true, small scale, organic farmer out of the market; lighting that requires households develop hazardous waste handling practices (mercury spill containment) previously reserved for business; or fuel

> economy rules which result in greater consumption of energy (biofuels); decisions that were made with the intent to preserve the environment now appear to be less than wise.

Rogers does not disassemble the entire environmental apparatus. There are numerous examples of good and effective practices presented. However, there

is a clear problem with decisions made by well-intentioned people—either independently or influenced by lobbyists—that don't make sense given the recorded outcomes. In the end, Rogers is pragmatic but short on solutions; these are not problems resolved by a single person. A balance of economy, ecology, and society can be incorporated in a successful business or lifestyle. Whether it works globally or not will be measured by others who are committed to a global measuring stick; who unfortunately, are not usually the decision makers.

Looking at issues not addressed by Rogers, there may be upcoming unintended consequences for us, such as the recent problem identified in San Francisco where low flow toilets are now contributing to issues with waste water transport and treatment. (3)

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