In the Literature

Reading the Environment — 1969-2019 Books Have Warned, Inspired Professionals

By Oliver A. Houck and G. Tracy Mehan III

The anniversary date of 1969 was a year particularly well known for air quality emergencies from New York to Los Angeles, Cleveland's Cuyahoga River catching on fire, and oil on the beaches of Santa Barbara, each of which produced law and policy reforms of their own — as well as the beginnings of a vast literature, from newspaper and magazine articles to a legion of books. And the pace of publishing on pollution and resource topics hasn't slowed down at all.

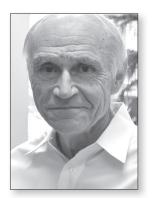
Any attempt to capture environ-

mental writing over the past 50 years requires a considerable lack of humility, given the outpouring of so many titles in this field. A recent Google search of "environmental books 1969-2019" yielded 154,000 results, no doubt an underestimate if you inquire into sub-specialties like environmental engineering, science, and economics. In the aggregate, the fact of this production provides reason alone for hope. So long as so many

people continue to think, write and read about how to reconcile human conduct with the rest of the planet, we are the better for it.

We should begin by paying tribute to those who came before, the conservation and nature writers, the pioneering scientists, explorers, wanderers, poets, and painters who were the antennae of an evolving conservation movement occurring over centuries. Bill McKibben, writer and activist, has done a great service by assembling and editing a marvelous collection, *American Earth: Environmental Writing Since Thoreau*, including over one hundred American writers. Published in 2008 by the indispensable Library of America, a nonprofit organization dedicated to preserving the nation's literary heritage, it features both classic and popular commentary on the environment. Certainly, Aldo Leopold's "land ethic" (from *A Sand County Almanac*) and the likes of George Perkins Marsh (*Man and Nature*) are featured, but also Buckminster Fuller, the poet Gary Snyder, Joni Mitchell, Marvin Gay, John McPhee, Wendell Berry, Amory Lovins, the environmental historian William Cronon, and even P. T. contribution to the world's literature." We agree.

A recent history worthy of special comment is The Making of Environmental Law (2004) by Richard J. Lazarus, a regular columnist in the Forum and expert on the Supreme Court. The book, like Caesar's Gaul, is divided into three parts: a theoretical analysis of the complexity of environmental lawmaking; a decade-by-decade narrative of its emerging architecture; and the challenges ahead. In his view, "The sheer depth and tenacity of the public's views, which are most often rooted in concerns about potential threats to human health and the dangers of exceeding ecological limits, explain why environmental law has been so persistent and inexorably expansive, and why its repeatedly proclaimed demise has proven, on each occasion, to be pre-



Houck

The authors of this anniversary reflection have given readers a taste of the literature since 2005 in their bimonthly column, nearly one hundred books and sundry other publications evaluated in essay form during that time. In 2015, ELI Press republished the cream of these think pieces in "The Best of the Books."



Mehan

Barnum's diatribe against billboards. The collection is solid and representative for anyone wanting an overview of the canon.

For McKibben, "environmental writing," in contradistinction to nature writing, "takes as its subject the collision between people and the rest of the world, and asks searching questions about that collision: Is it necessary? What are its effects? Might there be a better way?" While it often celebrates nature, it also recognizes, implicitly and explicitly, that "nature is no longer innocent or invulnerable." McKibben goes on to conclude that "environmental writing is America's most distinctive mature." While it would be interesting to hear his assessment of the current political moment, it seems undeniable that popular support for environmental protection continues to run high, and that citizen action at all levels has driven the field since Earth Day 1970. As the seminal environmental lawyer and frequent chair of the ABA/ALI Conference on Environmental Law David Sive once observed: "In no other political or social movement has litigation played such an important and dominant role. Not even close."

Lazarus proffers several approaches to linking environmental protection with the administrative state, includ-

In the Literature

ing information disclosure, public participation, clear legislation, multiple enforcement authorities and market incentives including pollution fees and cap-and-trade. While each of them has its advocates, all have proven their worth. Together, they have led the world. What Lazarus provides is a wellinformed overview, and a benchmark for changes going forward.

e should also give space to authors who, at the predawn of environmentalism and ELI's birth, were particularly responsible for lighting up the field. One cannot but honor Rachel Carson's *Silent Spring*, which not only exposed the dangers of DDT but played a lead role in much that has followed. Selling over 6 million copies and with translations in more than a dozen languages, *Silent Spring* became the universal educator on environmental threats to the planet.

As an established scientist, Carson was able to go where laymen would falter; as a writer, she used language that was fully accessible and stuck in the mind. "Why should we tolerate a diet of weak poisons?" she asked. "Who would want to live in a world which is just not quite fatal?" From her writing, public reputation (including three best-sellers), and subsequent advocacy came new laws and programs ranging from pesticide management to ecosystem management and even the National Environmental Policy Act. She was both author and activist, as is Lazarus, as is McKibben, as are many in our field. The head and the heart worked together.

Another early author and active player was Stuart Udall, whose book *The Quiet Crisis* was published shortly following Carson's. It provided a complete and delightfully anecdotal history of the federal public lands. He knew them well from his roots in Arizona, his service on the House Interior Committee for three terms, and his responsibilities at the time of this book as secretary of the interior. The most well-known of his passages include the "Myth of Super Abundance" that permeated American thinking up to that time, resources without end, and the commodity-based "Great Barbecue" that made the fortunes of John Jacob Astor, J. Gould, and others of the wealthiest men in the world.

His description of the conflict between John Muir ("God's First Temples: How Shall We Preserve Our Forests?") and Gifford Pinchot ("Let not the axe be stilled in mid-air") over public lands management captures the American soul. It is a story made poignant by their initial friendship and

mutual admiration, shattered by Pinchot's support for the Hetch Hetchy dam in Muir's Jerusalem, the Yosemite Valley. After a battle that spanned a decade, Muir lost

and died shortly thereafter, but both men left permanent legacies and remain pole stars in the field. So does *The Quiet Crisis*, an essential introduction to one-third of the United States about which many Americans knew so little, and whose administration harbors such controversy today.

Yet a third seminal writer with an emphasis on pollution and the words to explain it was Barry Commoner, a biologist and self-made economist whose The Closing Circle in 1971 presented in a highly readable way, topic by topic, the scientific, technological, and social dimensions of this new thing called "the environment." He begins: "The environment has just been rediscovered by the people who live in it." Why, he asks, "after millions of years of coexistence, have the relationships between living things and their earthly surroundings begun to collapse? How can we stop it and restore the broken links?"

He then offers his own answer. "Understanding the ecosphere comes hard because we have become accustomed to think of separate, singular events, each dependent on a unique, singular cause." Here lies "the first great fault in the life of man in the ecosphere . . . we have broken out of the circle of life, converting its endless cycles into man-made-linear events." We end up with wastes, and no exit. "Once we understand the nature of the environmental crisis," he concludes, "we can begin to manage the huge undertaking of surviving it." Like Carson he opened many eyes, and minds.

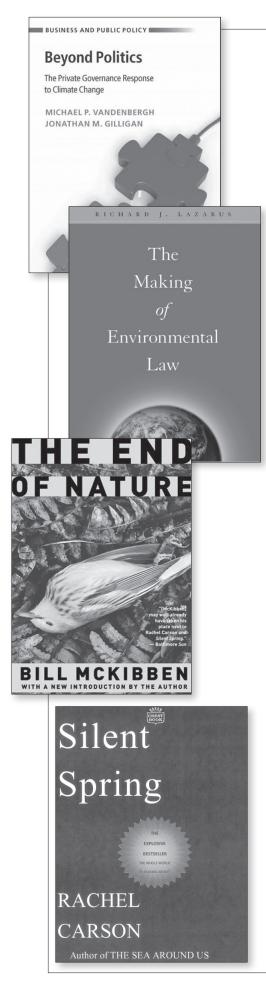
John McPhee, Pulitzer Prize-winning author, contributor to the *New Yorker*, long-time professor at Princeton and a pioneer in "creative nonfiction," has had a career running coterminous with ELI's. He has written many excel-

lent books on geology, the outdoors, nuclear energy, the American shad, the Army Corps of Engineers' attempts to "control nature," and Alaska and Alaskans. McPhee's entire

body of work is worthy of mention, but in 1971 he wrote a concise, wonderful, and insightful book on the tensions, trade-offs, and opportunities of environmentalism. Encounters With the Archdruid relates an extended dialogue between Sierra Club founder, David Brower ("To me, God and nature are synonymous") and Charles Fraser, developer of Hilton Head Island; Charles Park, an internationally known mineral engineer, Stanford professor, and avid outdoorsman; and Floyd Dominy, then commissioner of the U.S. Bureau of Reclamation, the ultimate dam builder.

"I believe in wilderness for itself alone," McPhee records Brower as saying. This kind of talk led Fraser, a practitioner of urban planning and environmental design, to say, "I call anyone a druid who prefers trees to people. A conservationist is too often a preservationist and a preservationist is a druid." Despite this name-calling and venting, the conversations between the "archdruid" and the pro-development spokesmen throughout the book are serious, robust, combative, but almost collegial in a fashion. They debate the Big Issues: nature, wilderness, the

r the Hetch m in Muir's the Yoley. After a tt spanned Muir lost No The Hetch Silent Spring deserves a special place in the canon



needs and wants of human beings, and possibilities of reconciling the diverse interests of the human and natural communities. There may be no single book that captures better the debate Americans have with themselves over the twin challenges of environmental protection and economic development.

The author Mark Reisner, formerly with NRDC's Washington office and a gifted historian, followed in this line with Cadillac Desert (1986), a critique of water use and the dam-building frenzy in the western states. The book reaches its peak with President Carter's attempt to cut back the Army Corps of Engineers program so highly favored by Congress and effective in funneling federal money to home districts. The running gun-battle over the Carter "Hit List" went on for two years, members of his own party calling it "dastardly" and "mind-boggling," and greatly impaired the president's ability to work with Congress from then on. Cadillac Desert is listed 61st on a list of the 100 best nonfiction books in English in the 20th century by a panel of the Modern Library, a division of Random House. Meanwhile, water and its wise use remain critical issues across the country.

Another book of this era with outsized impacts is E. O. Wilson's *The Diversity of Life* (1992). A Pulitzer Prize winner for yet other works, Wilson is the Frank Baird professor of science and curator in entomology at Harvard, an unimpeach-

able scientist who presents his subject with quiet eloquence. In so doing, he put it on the map. Guiding us easily through the mechanics of evolution, the interplay of genetic and

habitat diversity and their critical role in the survival of all species, he then moves to the problem: biological diversity is disappearing. While there is no way to measure the absolute rate of loss, he admits, he will offer "the most conservative estimate possible." Selecting just

Cadillac Desert exposed government waste, fraud, and abuse

one ecosystem, tropical rainforests, and one measuring stick, habitat, he concludes: "Human activity has increased extinction between 1,000 and 10,000 times" over previous background levels "by reduction in area alone. Clearly, we are in the midst of one of the great extinction spasms in geological history." Wilson's book bolstered the modern field of conservation biology. Wilson himself, like others, took his work a step beyond, speaking publicly to large audiences and intervening with House Speaker Newt Gingrich to stave off a vigorous attack on the Endangered Species Act. He is still at it today.

Meanwhile, Merchants of Doubt (2010) by Naomi Oreskes, a Harvard professor of the history of science, and Erik M. Conway, a historian of science and technology, was taking a deep dive into a phenomenon that had increasingly confounded sound environmental policy across the board. To regulated industries, doubt was now a "product." For a field dependent on science, this can be fatal. The objective here was not to rebut scientific work and conclusions, simply to create enough uncertainty to buy time, complicate, and finally bury whatever initiative was pending. It began in earnest with tobacco, where four major manufacturers created the Tobacco Industry Committee for Public Information, stifling their own findings and sponsoring opposing testimonials, front organizations, and other research, all intending, in the words of a Justice Department official, "to deceive the American pub-

lic about the health effects of smoking."

The rest would be history, but for the fact that the same tactics were wheeled into play to oppose controls on acid rain, the

growing ozone hole, global warming, even sullying the reputation of Rachel Carson, the thorn that could not be removed. Under the otherwise reasonable principle of "sound science," socalled experts of little or no credibility appeared, preaching the doctrine of uncertainty. As a leading epidemiologist, recanting his earlier skepticism about the link between tobacco and cancer later explained: "All scientific work is incomplete — whether it be observational or experimental. . . . That does not confer upon us a freedom to ignore the knowledge we already have, to postpone action demanded at a given time. Who knows, asks Robert Browning, but the world may end tonight? True, but on available evidence most of us make ready to commute on the 8:30 next day." *Merchants of Doubt* is a book for our time.

The role of economics and cost-

The End of Nature

opened America's

eyes to the growing

climate crisis

benefit analysis in environmental policy has been both inevitable and controversial. This was the message of *Cadillac Desert*. That work was predated by *Damming the*

West (1973), coauthored by Richard L. Berkman and W. Kip Viscusi as part of Ralph Nader's Study Group Report on the Bureau of Reclamation. Suffice it to say that it was not a pretty picture.

Viscusi's work (Pricing Lives, 2018) on the value of a statistical human life has won acclaim. It now leads to figures of between \$10 and \$11 million for federal assessments. It has also invited ridicule reflected in the great line attributed to Oscar Wilde of a man who knew "the price of everything and the value of nothing." Nevertheless, the valuation has been accepted by administrations of both parties and is reflected in the writings of two directors of the White House Office of Information and Regulatory Affairs, which overseas all federal rulemaking. See Risk vs. Risk by Bush Republican John Graham and Jonathan Wiener, and Valuing Life: Humanizing the Regulatory State (2014), by Obama regulatory czar Cass Sunstein. For the loyal opposition see Priceless by Professors Frank Ackerman and Lisa Heinzerling and Professor Doug Kysar's Regulating From Nowhere, both critical of discounting future life (one's grandchild is worth a fraction of your own life), income-based metrics, and the ease of political manipulation, including or excluding for example the social cost of carbon. Which brings us to our final look at literature on the most intransigent problem of our time: the alteration of the climate affecting all natural systems on earth.

This phenomenon has drawn a library of literature, within which Bill McKibben's *The End of Nature* leads the field. In its timing (1989), scope, and grace of writing it helped focus the public on this issue while many studies and media reports dropped from view. The book embraces more than climate change, lamenting the loss of natural

systems globally, but begins with global warming and never lets go.

It is grounded in facts and history. As early as 1884 a German scientist had con-

cluded that coal burning was "evaporating our mines into air." By his calculations, "heat waves in the mid-American latitudes would run into the 110s and 120s, the seas would rise many feet; crops would wither in the field." All of which is happening. The story that follows is one of new studies, adamant denials, and a long paralysis of starts and retreats, captured in more recent literature yet more detailed and confirming. What is different now is that nearly everyone knows it, even if they dare not say it, and one of their first guides was *The End of Nature*.

The ensuing decades have also spawned a wave of literature on ways to address climate change through technology, law, and in public and private initiatives. There is no single deus ex machina. Gretchen Baake's *The Grid* is a soup-to-nuts exposé of waste in energy transmission and the road to reform. The Rocky Mountain Institute's *Reinventing Fire*, endorsed by Amory Lovins, showed that, with supporting government policies, "a business-led transition could triple energy efficiency, quintuple renewables and sustain an American economy 2.6 times larger in 2050 than it was in 2010 with little or no oil, coal or nuclear energy and one-third less natural gas. The net cost was \$5 trillion less than business-as-usual — or even more valuable if a price was put on carbon emissions." A win-win for the country.

In a similar vein, Beyond Politics: The Private Governance Response to Climate Change (2017), by Professors Michael P. Vandenbergh and Jonathan M. Gilligan, observes, quoting William Ruckelshaus: "The American people are philosophically liberal but operationally conservative." In light of the current political standoff, they propose an interim strategy by private actors that could achieve "a significant fraction of the necessary reductions [in]carbon dioxide emissions equivalent to roughly 1 billion tons out of the 5.5 billion tons per year of reductions necessary over the next decade to close the Paris Gap," the shortfall in achieving temperature goals that has been identified by the authors. Another, compatible path.

What we have here, together, is a sober assessment of the climate change challenge and reasoned hope for what could be. Which is what literature should do.

So many books... and so little time. That is the bottom line for our limited review of the vast, overwhelming, but enriching cascade of environmental literature since 1969 and the founding of ELI and enactment of NEPA. The canon is rich, inter-disciplinary and, at times, both dispiriting and inspirational. At its most poetic, it contributes to the re-enchantment of the natural world.

Oliver A. Houck is the David Boies Chair in Public Interest Law at Tulane University. He can be reached at ohouck@tulane.edu, and his work is at www.oliverhouck.com.

G. Tracy Mehan III is executive director for government affairs at the American Water Works Association and an adjunct professor at Scalia Law School, George Mason University. He may be contacted at tmehan@ awwa.org.