

equally important right to water, without which the land is worthless. Willard H. Rollings addresses the water rights of the Pueblos of New Mexico in an essay that systematically shows their restriction and the subsequent reduction of Pueblo land holdings. Under the "Native American" topic, John R. Wunder examines the end of treaty making with the Indian tribes. His approach is legalistic and important for an understanding of the evolution and abandonment of Chief Justice John Marshall's confusing designation of the tribes as "domestic dependent nations."

The essay that draws the most careful reading by an environmental historian interested in the disastrous effects of grazing on rangelands is the essay by Dan L. Flores, "Agriculture, Mountain Ecology, and the Land Ethic: Phases of the Environmental History of Utah." He admirably demonstrates the impact of a social system (Mormonism) upon the mountain ecology of Utah while showing essential understanding of that system in the context of American and Judeo-Christian history.

Contributors to this volume have tried to meet its general subject criteria, but not always successfully. The collection is a labor of tribute to a man whose career as a scholar and teacher was cut short in mid life.

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William D. Rowley



*Environmental Policy Under Reagan's Executive Order: The Role of Benefit-Cost Analysis.* Edited by V. Kerry Smith. (Chapel Hill and London: University of North Carolina Press, 1984. xii + 266 pp. Figures, tables, notes, bibliography, index. \$25.00.)

More than a decade after the Clean Air Act amendments of 1970 and the National Environmental Policy Act became law, President Ronald Reagan issued Executive Order 12291. The order requires that new major regulations, including environmental regulations and revisions, be analyzed in terms of social benefits and costs and that economic efficiency be the basis for evaluation. Regulatory objectives are required to be chosen so as to maximize the aggregate net benefits to society.

The purpose of this edited volume is to examine the effects of Executive Order 12291 on the environmental policy process. Modern benefit-cost analysis is evaluated concurrently to determine whether or not it is up to the task of improving environmental policy. A distinguishing characteristic of this book is its comprehensive policy perspective. It provides insight into the impact of benefit-cost analysis on all aspects of policy—design, process, and outcome. The volume is an outgrowth of a conference on environmental policymaking and includes contributions from experts with experience in the Office of Management and Budget (OMB), the Environmental Protection Agency (EPA), Resources for the Future, the Brookings Institution, and the academic world.

In the first chapter, V. Kerry Smith reviews the principles of benefit-cost analysis, describes the role of executive oversight, and introduces the chapters that comprise the rest of the book. He points out that the behavioral responses of economic agents can play a crucial analytical role, especially in estimating the size and distribution of benefits. He also notes that if the accumulation of further scientific evidence continues to suggest that no thresholds exist for damages from pollutants, then the role for benefit-cost analysis will continue to grow. The myth of a risk-free society, however, dies hard.

In the first of three background chapters, Richard N. L. Andrews gives the evolution of economic analysis in environmental policy from the Nixon Quality of Life reviews, the Ford Inflation Impact Statements, the Carter Regulatory Analysis, to the current Reagan Regulatory Analysis under Executive Order 12291. What is old in the current requirements is executive oversight and benefit-cost analysis. What is new, asserts Andrews, is the insistence on benefit estimation in social regulation and the potential for unprecedented oversight control by the central review office, OMB.

Arthur G. Fraas reflects on the first two years of experience at OMB and how difficult it is to consider numerous analyses with limited staff. Rather than critique benefit and cost estimates, reviews have stressed alternative approaches to standards and greater federalism. Ann Fisher outlines the EPA response to the benefit-cost requirement and the two-year development of the agency's Regulatory Impact Analysis Guidelines. She relates that EPA recognized what Fraas calls the "technology forcing" nature of the requirement and chose to push the fragile state of the art in estimating health benefits and to call for distributional analysis of regulations.

In chapter 5 (Part II), W. Norton Grubb, Dale Whittington, and Michael Humphries review thirty-seven regulatory impact analyses and assess them in terms of the generally accepted best practices of benefit-cost analysis. They find a wide quality range and that some EPA analyses are among the best. Obvious errors such as counting transfers as costs, however, can be found all too often. They are more critical of OMB for its failure to give guidance to agencies on issues such as valuing health risks than for failure to catch obvious errors.

In the first of two chapters on conceptual issues (Part III), A. Myrick Freeman III addresses the emphasis on benefit estimation. He specifies the often-neglected conditions under which off-the-shelf studies can be aggregated up to the national level or down to the regional level. For new research he illustrates that the value of research information is the reduction of uncertainty of net benefits. The value is the difference between the expected net benefits with the research and without it. Carlisle Ford Runge attempts to synthesize and rationalize a political net social risk constraint on maximization of social net benefits for cases

involving health. According to Runge, gains can be had by recognizing that net social risk can be lessened by reducing the uncertainty surrounding benefit estimates as well as by the usual means—stricter standards.

The book concludes with two chapters (Part IV), that deal with the expected net benefits in environmental policy of the requirement for benefit-cost analysis. For those (few?) who think that current environmental policy exists solely to assure efficient provision of environmental quality, Robert W. Crandall's chapter on the political economy of clean air will be an eye-opener. He uses one of my favorite attention-getters, the fact that there are no comprehensive studies that demonstrate that policy has produced air quality improvements. He points to examples of marked variations in the costs of additional abatement and the drastic discrimination against new sources and provides evidence that they can be attributed to regional politics in Congress. Because of constraints on current regulations, Crandall argues for radical surgery on the air program and argues that the OMB oversight activity will have only a marginal impact. In the concluding chapter, Paul R. Portney subjects regulatory impact analysis itself to benefit-cost analysis and observes that a reduction in incremental compliance costs of a mere 1 percent would save \$25 million per year. According to his back-of-the-envelope calculation, the benefits exceed the costs of regulatory analysis by two orders of magnitude. The improvements may be marginal, but they appear to be worth it.

Compared to related books, this volume is unique. Others deal with environmental policy, benefit-cost analysis, or regulatory reform, but none deals specifically with the use of benefit-cost analysis as a tool for regulatory reform of environmental policy. The writing style makes the book accessible to all those who participate in or follow what may be a significant phase in the evolution of policy from symbols to improvements. I highly recommend *Environmental Policy Under Reagan's Executive Order* to all those interested in environmental economics, regulation and policy.

*University of Kentucky*

Glenn Blomquist

## *Environmental History Newsletter*

### GENERAL ANNOUNCEMENTS

The IV International Congress of Ecology will meet August 10-16 in the United States for the first time in its 20-year history.

The meeting will bring to the campuses of the State University of New York College of Environmental Science and Forestry (ESF) and Syracuse University in Syracuse, New York, more than 3,000 of the world's preeminent ecologists including biologists, botanists, foresters, chemists, statisticians, landscape architects and others whose work focuses on the environment.

More than a dozen concurrent program sessions are planned for each morning and afternoon the conference is in session on topics ranging from acid deposition, desertification, the shrinking of the world's tropical forests, and toxic waste management, to the increase of carbon dioxide in the atmosphere, soil fertility, long- and short-term evolutionary constraints, and industrial stress on ecosystems.

The international Congress of Ecology is the quadrennial meeting of the International Association of Ecology (Intecol), an umbrella organization of nongovernmental scientific associations as well as international thematic groups in the field of ecology.

The Sixth International Scientific Conference of the International Federation of Organic Agriculture Movements meets on August 18-21, 1986, at the University of Santa Cruz, Santa Cruz, California.

The conference will explore research, technologies, and issues related to the development of agricultural systems which are environmentally, economically, and socially sound; it will provide information on the theory and operation of such systems; and it will facilitate international communication among agricultural scientists, advisors, farmers, policy-makers, and others interested in the future of sustainable agriculture.

For registration information, write to:

IFOAM Conference, Agroecology Program  
University of California  
Santa Cruz, CA 95064 USA