



RESOURCES

RESOURCES FOR THE FUTURE

FALL 1995, NO. 121

INSIDE RFF: News and Publications

RFF board meeting / 11

Chinese environmentalists
visit RFF / 11

Gilbert White receives
Volvo prize / 11

RFF fellows
promoted / 12

New RFF board
members / 12

Research on the road / 13

Risk assessment
seminar / 14

RFF award programs / 14

RFF interns / 15

Congressional
testimony / 15

RFF on the Internet / 16

Discussion papers / 16

In memoriam:
Charles J. Hitch / 17

The RFF Gift Fund / 17

Donors / 17

IN THIS ISSUE...

Green Giving: Factors Influencing Donations to U.S. Environmental Groups

3

Jerrell Richer

Does a Democrat in the White House mean lower donations to environmental groups? Do people give more to groups that purchase habitat than ones that lobby? Richer studied giving to twenty-nine environmental organizations and found that government funding, economic conditions, political climate, and a group's focus seem to influence private contributions.

Old Timber and New Growth: An Interview with Marion Clawson

6

Marion Clawson has done so much, it's hard to see how he squeezed it into one career. After directing the Bureau of Land Management, he came to RFF and blazed a trail in the economics of recreation, public land management, and forest economics. Recently, he discoursed with Resources on "takings," the state of American forests... and a few other things.

Ecosystem Management: An Uncharted Path for Public Forests

10

Roger A. Sedjo

Since the 1960s, the U.S. Forest Service has relied on multiple-use management to balance demands for timber, recreation, and wildlife habitat. But new pressures, including the Endangered Species Act, have prompted the Forest Service to turn to ecosystem management, which seems to put the health of forests above all other considerations. Sedjo evaluates ecosystem management and suggests that it is a philosophy in need of refinement.

Cartoon Caricatures of Regulatory Reform

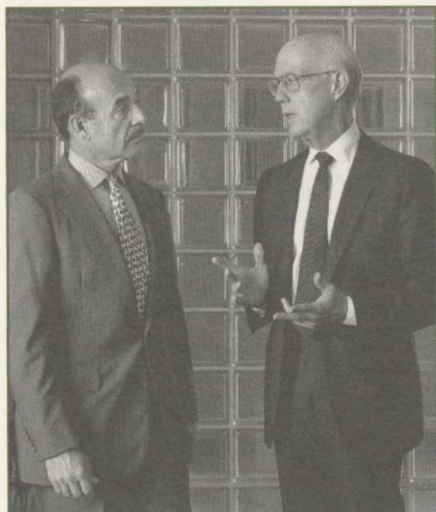
21

Paul R. Portney

In 1995, Congress and President Clinton had an excellent opportunity to make much-needed improvements in the way federal regulatory agencies issue new rules—but, says Portney, they blew it. Abetted by a news media too willing to present simplistic views of regulatory reform, each party caricatured its opponent's motives, missing a chance to advance useful debate.

New RFF President
See page 2

Fri steps down, Portney named new president of RFF



Paul R. Portney, new RFF president, and Robert W. Fri, outgoing president.

On October 13, RFF's board of directors completed a six-month, nationwide search by appointing Paul R. Portney to be RFF's new president. Portney replaces Robert W. Fri, who announced his intention to step down as president last April.

In announcing Portney's appointment, Darius W. Gaskins Jr., chair of the RFF board, said, "We are delighted with Paul's appointment. He is a proven scholar with an exceptional gift for applying sound research findings to complex public policy problems."

Portney first came to RFF in 1972. He has been serving as vice president since 1989. Before that, he served as director of the Quality of the Environment Division (1986-87) and as the first director of the Center for Risk Management (1987-89). While on leave from RFF during 1979-80, he served as the chief economist for the Council on Environmental Quality in the Executive Office of the President. He also has been a visiting lecturer at both Princeton University and University of California-Berkeley.

Portney received his B.A. in economics and mathematics from Alma College and

his Ph.D. in economics from Northwestern University. He has served on the Board on Environmental Studies and Toxicology of the National Academy of Sciences and on the National Oceanic and Atmospheric Administration's Panel on Contingent Valuation. He is currently a member of the Executive Committee of the Science Advisory Board of the U.S. Environmental Protection Agency, as well as chair of its Environmental Economics Advisory Committee. He is the author of many journal articles and books; noteworthy among these, he edited *Public Policies for Environmental Protection* and coauthored *Footing the Bill for Superfund Cleanups: Who Pays and How?*, both published by RFF.

Portney assumed the presidency immediately. "I am honored by the board's decision," he said, "and I am grateful to Bob Fri for leaving me such a healthy organization. I am thrilled about the prospect of leading RFF into the next century."

Fri had been RFF's president since 1986. His career spans government, business, and nonprofit positions. He was the first deputy administrator of the U.S. Environmental Protection Agency (1971-73) and held the same position in the Energy Research and Development Administration, the precursor to the Department of Energy (1975-77). He also served for extended periods as acting head of both agencies.

During Fri's tenure as RFF president, the Center for Risk Management was established, a strategy to recruit young researchers was put in place, and the criteria for evaluating and promoting researchers were overhauled. In addition, RFF launched a program to encourage individual giving.

Fri will remain with RFF as a senior fellow and a member of the RFF Corporation.

RESOURCES

Resources for the Future

1616 P Street, NW
Washington, DC 20036-1400
Telephone: 202-328-5000
Fax: 202-939-3460
E-mail: info@rff.org
World Wide Web: <http://www.rff.org>

Officers

President, Paul R. Portney
Vice President-Finance and
Administration, Edward F. Hand

Board of Directors


Darius W. Gaskins Jr., Chair
Paul C. Pritchard, Vice Chair
Jodie T. Allen, John C. Borum,
Anthony S. Earl, Lawrence E.
Fouraker, F. Henry Habicht, Robert H.
Haveman, Thomas C. Jorling, Donald
M. Kerr, Frederic D. Krupp, Henry R.
Linden, Thomas E. Lovejoy, James D.
Maddy, Karl-Göran Måler, Frank L.
Matthews, Mark A. Pisano, Paul R.
Portney, Robert M. Solow, Edward L.
Strohbehn Jr., Linda C. Taliaferro,
Victoria J. Tschinkel, Mason Willrich

Resources Staff

Managing editor, Richard Getrich
Senior editor, Betsy Kulamer
Associate editor, Melissa Edeburn
Contributing editor, Eric Wurzbacher
Production assistant, Amie Jackowski

Published since 1959, *Resources*® (ISSN 0048-7376) is a quarterly publication containing news of research and policy analysis regarding natural resources and the environment. The views offered in *Resources* are those of the contributors and should not be attributed to Resources for the Future, its directors, or its officers. Unless otherwise noted, articles appearing in *Resources* may be reproduced, providing appropriate credit is given and a copy of the reproduced text is sent to *Resources*.

Resources is sent to individuals and institutions without fee. To receive copies or to change an address, write to *Resources* at RFF; e-mail info@rff.org; or call 202-328-5025. The publication is also available in microform through University Microfilms International, 300 North Zeeb Road, Dept. P.R., Ann Arbor, MI 48106.

 Printed on recycled paper

Green Giving: Factors Influencing Donations to U.S. Environmental Groups

Jerrell Richer

Does the election of a Democratic president result in reduced giving to environmental organizations? Do people donate more to organizations that purchase threatened habitat than they do to groups that lobby for new legislation? If government funding for environmental organizations is cut back, will private giving increase to make up the difference?

People typically seek answers to questions like these by examining the only evidence we have, past experience. Too often we limit our search to the study of a few isolated events. Unfortunately, answers that rest on anecdotal evidence cannot be applied with much confidence in other situations. For example, total donations for environmental and wildlife causes declined somewhat in 1993 after rising for each of the previous three years—coinciding with the inauguration of President Clinton. Perhaps donors perceived less need to contribute money to advocacy groups after the election of a candidate who promised greater efforts to protect the environment. But how do we know that the drop in donations was not due instead to some other factor, such as uncertain economic conditions or changes in the fundraising efforts of the environmental organizations themselves? Sorting out these questions requires a systematic study of giving to many organizations across a span of years.

I spent much of the past year collecting and analyzing data from twenty-nine major environmental organizations for the period 1980 to 1994. I collected information on donations and on the factors thought to influence them, and I used statistical techniques to analyze

how each factor influenced giving to a typical environmental organization in a typical year, holding other factors constant. The results are informative and, in some ways, surprising.

For example, I find that government funding for activities of an environmental organization does not appear to “crowd out” individual contributions to the group. In fact, environmental groups that received greater government funding tended to attract more, not less, private support. To illustrate: each dollar of government grants to a typical environmental group was associated with roughly an additional two dollars in voluntary contributions, on average, assuming that nothing else changed. This suggests that any cut in public funding to these organizations may not be replaced by private giving, as one might expect.

Groups that receive greater federal funding tend to attract more, not less, private support. This suggests that any cut in such public funding may not be replaced by private giving.

Further, current economic conditions and the political climate also play a significant role in determining how much people give to environmental groups. For the average organization in the sample, an increase of a single percentage point in the unemployment rate brought about a reduction in annual contribu-

tions of nearly a million dollars. On the other hand, having a Republican president in office in a particular year was associated with a million-and-a-half dollar increase in contributions to the average organization.

These and other results are presented in the final section of this article. First, though, I describe the sources of the data as well as the methods I used in my analysis.

The roots of green giving: Designing the study

The purpose of the study was to examine how contributions to a typical environmental group were affected by the characteristics of the group. The data for the study came from the tax records of twenty-nine of the largest environmental organizations in the United States (see sidebar on page 4). I asked the groups to supply copies of their annual tax returns, beginning with the most recently available fiscal year and extending back as many years as possible. Their cooperation was both cheerful and essential to my project.

The completed tax returns list the organizations' revenues by source. For the purposes of the study, total donations were defined as the sum of direct and indirect public support, membership dues, and special-events revenue. Direct public support consists of contributions, gifts, grants, and bequests received directly from individuals, trusts, corporations, estates, and foundations. Indirect public support refers to contributions generated through solicitation campaigns conducted by federated fundraising agencies or similar organizations, such as the Combined Federal Campaign or the United Way. Membership dues and special-events revenue include the payment for certain services provided by the groups, such as magazine subscriptions and fundraising banquets.

I also estimated the influence on donations of various economic and political conditions, factors that are beyond the groups' control. I considered how

Environmental organizations included in the study

Center for Marine Conservation
 Chesapeake Bay Foundation
 Clean Water Action
 Clean Water Fund
 Conservation International
 Co-op America Foundation
 Defenders of Wildlife
 Ducks Unlimited
 Ducks Unlimited Foundation
 Earth Island Institute
 Environmental Defense Fund
 Friends of the Earth
 Greenpeace
 Inform
 Izaak Walton League of America
 The League of Conservation Voters
 National Audubon Society
 National Parks and Conservation Association
 National Wildlife Federation
 National Wildlife Federation Endowment
 Natural Resources Defense Council
 Pesticide Action Network
 Rails-to-Trails Conservancy
 Rocky Mountain Elk Foundation
 Sierra Club
 The Wilderness Society
 Wildlife Forever
 World Wildlife Fund
 Zero Population Growth

Note: One major organization, the Nature Conservancy, was not included in this study, because the donations it receives are significantly different in nature and scale from those for the other organizations in the sample. In addition to cash contributions, the Nature Conservancy receives large donations of land, which are difficult to assess accurately and result in reported contributions that are almost three times as great as those for the second-largest group in the sample.

each factor affects donations to the typical group using multivariate (regression) analysis. This statistical technique provides an estimate of the dollar change in donations caused by a change in each one of the factors.

First, I tested whether donors seem responsive to the "price" of making a contribution by considering the net cost, to the donor, of "purchasing" one dollar's worth of program services. This *effective price* depends on how much each organization spends on nonprogrammatic activities—such as the proportion of total expenditures devoted to fundraising and management. Also, if donations to the organization are tax deductible,

Though fundraising may reduce contributions from some donors, it may also increase contributions by publicizing the organization and its specific programs.

the effective price depends (negatively) on the marginal tax rate for personal income. So, for instance, if an organization spends fifty cents on administration and fundraising for each dollar it spends on programs, the effective price of a contribution to it would be \$1.50.

Next, I examined the influence of government grants on donations to the individual organizations. Information on this source of revenue, as well the proportion of spending used for fundraising and management, typically is made available to donors in the following year when annual reports and financial statements are released. Therefore, I used the lagged (last year's) value for this variable when estimating its effect on donations.

Though fundraising activities may reduce contributions from some donors by diverting money away from programmatic activities, they may also increase contributions by publicizing the organi-

zation and its specific programs. Total fundraising expenditures for the current year were included in the study to estimate the effectiveness of these marketing activities. Similarly, older organizations may receive more contributions due to greater name recognition or credibility, so I also examined the effect of an organization's age on the amount of donations it receives.

In my background research, I observed that environmental organizations tend to differentiate themselves considerably with respect to the activities they pursue to achieve their goals. I examined whether engaging in any one of these activities seemed to have a systematic effect on donations to those particular groups. The activities I considered included lobbying, litigation, land/habitat acquisition, and such direct actions as boycotts and demonstrations. Lobbying expenditures, as reported in the tax forms, were used to determine whether groups engage in this particular activity, while information on the other activities came from the 1992–93 edition of *Public Interest Profiles*, published by Congressional Quarterly.

Last, I used the widely publicized U.S. unemployment rate to represent economic conditions in a particular year and the party affiliation of the U.S. president to help account for the political climate.

Identifying the influences on donations: Analytical results

The results of my statistical analysis are summarized in the table (see page 5). It shows the effects of each organizational characteristic on contributions to the average group in the sample.

An increase in the effective price—the total amount a donor must give in order to get one dollar's worth of program services—has a negative though minor effect on contributions. For the average organization in the average year, a one-percent increase in price is associated with a \$50,000 drop in contributions, assuming nothing else changes. (All figures are

The influence of organizational, economic, and political variables on voluntary donations to the average environmental organization (1980-1994)

Explanatory variable	Type of influence on donations ^a
<i>Characteristics of the organization</i>	
Effective price (cents)	Negative, but minor (that is, a one-cent increase is associated with a \$50,000 decrease in donations)
Government grants received last year (dollars)	Positive, but decreasing (that is, a \$1 increase associated with a \$2.31 increase in donations) ^b
Fundraising expenditures for the current year (dollars)	Positive, but decreasing (that is, a \$1 increase in fundraising expenditures is associated with a more than \$4.00 increase in donations) ^b
Age of organization (years)	Positive, but decreasing ^b
<i>Activities of the organization</i>	
Lobbying	No effect observed
Litigation	No effect observed
Land/habitat acquisition	Positive (about \$3 million more than groups that do not acquire land or habitat)
Direct action (boycotts, demonstrations)	No effect observed
<i>Characteristics of the particular year</i>	
Unemployment rate	Negative (a 1 percent increase in the rate is associated with a 6 percent, or greater than \$800,000, drop in donations)
Republican president	Positive (an 11 percent, or \$1.5 million, increase)

Note: Before this study, the reasons for changes in donations to U.S. environmental groups were difficult to determine: answers tended to be based on isolated events and anecdotal evidence. This study used donation information from the tax records of the largest such groups and considered the impacts on donations of each of the variables specified above. The study analyzed how each factor influenced giving to a typical environmental organization in a typical year, holding other factors constant.

^aA negative effect means that contributions will drop; a positive effect means that contributions will increase. Figures are measured in terms of 1994 dollars.

^bThese factors tend to increase voluntary donations to the typical environmental organization, but their positive effects on donations diminish as each factor increases. For example, the increase in donations associated with an extra dollar's worth of government grants falls as more and more government grants are received.

measured in 1994 dollars.) This suggests that donors do give less to organizations that devote a high proportion of their funding to nonprogrammatic activities, such as administrative expenses.

On the other hand, organizations that receive more support from government agencies have tended to receive greater private support as well. Each \$1.00 increase in government grants is associated with \$2.31 in additional private contributions for the average organization in the average year. Perhaps donors consider government grants an indicator of an organization's quality and give more

to groups that have been "certified" in this sense. The positive impact of government grants on contributions, however, tends to diminish as the level of public-sector support increases. This implies an eventual limit to the effectiveness of government grants in attracting additional voluntary contributions.

Fundraising efforts seem to pay off substantially for the organizations in the sample. Each \$1.00 increase in fundraising expenditures is associated with more than \$4.00 in additional contributions for the average organization. Again, however, this large and positive effect tends to

diminish as fundraising efforts increase. Beyond some point, additional fundraising actually can reduce contributions. Similarly, an increase in an organization's age is associated with greater contributions. Since age is not controllable by an organization, however, this factor must be considered as an item of interest that is of little practical importance.

Only one of the activities by the organizations was associated with a statistically significant change in contributions. During the time period of the study, organizations that pursued land and habitat acquisition tended to receive about \$3 million more in contributions than groups that did not, other things being equal.

Far from proving a given theory, these results merely lend support to particular hypotheses about charitable giving, such as the idea that donors are more motivated to contribute to environmental groups when a Republican is in the White House.

Last, I find clear evidence that contributions in a given year depend on economic and political conditions in addition to the actions of the organizations themselves. Specifically, an increase of 1 percent in the unemployment rate was associated with a drop in annual donations to the average organization of more than \$800,000, or about 6 percent. On the other hand, holding other things constant, contributions were higher during years when the president was Republican. The increase in annual donations during those years was \$1.5 million for the typical organization, an 11 percent change.

Care should be taken when drawing implications from these results. First, the results do not prove that presidential

party affiliation, or any of the other factors examined here, has a particular impact on contributions to environmental organizations. Rather, the results presented here merely *lend support* to particular hypotheses regarding charitable giving, such as the idea that donors are more highly motivated to contribute to environmental groups when a Republican is in the White House. Further research to illuminate these issues will offer new evidence to refute or further support these hypotheses.

Second, my findings are based on donor behavior over the past decade and a half. Engaging in land and habitat acquisition appeared to increase donations substantially for environmental organizations during this period, but there is no guarantee that this pattern will continue. Similarly, the sensitivity of future donors to economic and political conditions may differ from that of the recent past.

Experience is, however, probably the best guide we have to tomorrow, and this line of research offers insights that can help inform better decisions and policies in the years to come. Environmental organizations are likely to continue to find that higher administrative costs tend to reduce donations, while additional fundraising efforts encourage them. Groups that specialize in the acquisition of habitat may inspire greater support than organizations that only lobby or litigate. Threats to environmental quality will almost certainly continue to motivate greater contributions, though the threats that donors perceive as imminent may change. Finally, past experience indicates that future cuts made to government funding of the organizations' programs may not be made up in private gifts.

Jerrell Richer, a 1994–95 Gilbert White fellow at RFF while he conducted the research summarized in this article, teaches economics at California State University–San Bernardino. His research is described in detail in RFF discussion paper 95–39, "Green Giving: An Analysis of Contributions to Major U.S. Environmental Groups."

Old Timber and New Growth: An Interview with Marion Clawson

For many people who are engaged in work having to do with this nation's forests—and for many others who have known RFF since its founding in 1952—Marion Clawson is virtually synonymous with Resources for the Future. He came to RFF in 1955, having served as director of the Bureau of Land Management for 1948–53. He is an important figure in the large community devoted to public policy regarding the national parks and outdoor recreation, other public lands, and American forestry. Throughout his career, Clawson has been an engaging public speaker and a prolific writer, penning countless articles and some forty books ("depending on how you count 'em," he says), twenty-three of them published by RFF. Clawson recently celebrated a landmark birthday, and Resources asked him to share his views on federal land management, "takings," and the state of American forests.

Congratulations on your ninetieth birthday. What's your secret?

Do you know how to get to be ninety? You have to be born a long time ago... and just hang on.

You have been studying American forests and public lands for a long time as an analyst, but you are also something of a historian.

These days, there seems to be increasing dissatisfaction, particularly in the West, with federal ownership and management of vast areas of land. Is this something new?

You have to look at what's happening now in light of the long history of public

lands. First was acquisition. Early on, there was the movement from the colonies to the union. Then, we had the Louisiana purchase, and we had a war with Mexico, which at least one critic said we provoked in order to get the land. We had a treaty with Great Britain over the Pacific Northwest. We bought Alaska from the Russians. As a result of all this, the United States government acquired an enormous amount of the world's surface.

Even before we acquired it all, we began disposing of it. Over the decades, we disposed of more than two-thirds of that land to private individuals and corporations through sale, through homesteads, through grants to war veterans, grants to railroads, grants to states. Beginning about 1890, we began reserving some land for permanent federal ownership.

The management of federal lands has gone through two eras and is in the midst of the third one. The first era I call *extensive* management—simple custodial management. Keep the fires out as much as you could. Keep trespassers out as much as you could. Demand for the land was low. That era ended about 1950 and was followed by a period of what I call *intensive* management. The government spent far more money on manpower and management. The demand for land had increased, and so had the revenues from the land. That era lasted roughly twenty-five years.

Now we're in the era I call *confrontation*—confrontation between users and the federal agencies. For one thing, users today have a great deal more knowledge than they once had. For another, I would argue that the United States is in a period of greatly increased distrust of govern-

ment—people say, “Get the government off our backs” and “They’re a bunch of liars.” This attitude may not carry over into public lands issues explicitly, but it does implicitly. Finally, the confrontation grows out of the increased demand on the lands, so there is more competition between one user and another.

Whether you are talking about the Forest Service, the National Park Service, the Bureau of Land Management, or whatever, there has always been a *relationship* between users and agencies. On the one hand, the relationship can be one of cooperation. The parties say, “You are a nice guy, I like you. You know things and we’ll talk back and forth. We can work out a plan together.”

The problem with cooperation is that an agency can become the captive of the user group. Such charges have been flung around many times. If you are a conservationist, you talk about the agency’s being captive to the ranchers. If you are a rancher, you talk about the reverse. The conservationists and ranchers talk about the mining people. Agencies are always somebody *else’s* captive.

This situation isn’t limited to public lands either. There is always the possibility that a government agency really is an arm of a private interest group.

Unfortunately, at the other extreme from cooperation, you have confrontation. Users seem to say, “Whatever those SOB’s in that agency say, it ain’t so, and we’ll oppose it.” There has always been some of that, but I think we are seeing more of it.

*Does federal ownership still make sense?
Is it time to dispose of some public lands?*

I think federal ownership is here to stay. It may change, but it’s here to stay. Some land, perhaps, may be disposed of. When I was director of the Bureau of Land Management, even then in the early 1950s, we used to say we had about half a million acres that we would like to get rid of—a little tract of land here, a little tract there.

But I think we need to examine the possibilities of changing the nature of ownership of federal lands. Long-term leases are one possibility. Here’s an example. The Boone and Crockett Club of New York bought a huge ranch in northwestern Montana. The ranch butts right up against the Lewis and Clark National Forest. Say to the club, “You take over the management of the national forest and combine it with your ranch. We’ll make it a lease, you pay us a nominal rent and comply with certain laws and regulations.” Make the leases long—like fifty years—but be sure to permit reconsideration of the situation.

Recently, a movement has been forming in parts of the West that argues that the states should regain control of the federal lands. Are you familiar with the actions of Nye County in Nevada, which seems to have decided to take back the federal lands?

I grew up in Nevada, but not in Nye County. Some would say that if the people of Nye County want it, they can have it. Nye County is a desert, not an attractive piece of real estate and not very valuable, even if it is as extensive as Vermont and New Hampshire combined.

Seriously, though, some of the claims that federal land should be turned over to the states are utter nonsense—if you don’t mind a nonlawyer giving you a legal opinion. Historically, there’s nothing new about requests to turn land back to the states. When Herbert Hoover was president, a commission on public lands proposed turning the land over to the states, but it wanted to reserve the minerals for the federal government. Of course, that’s where the money was and the states politely said no.

If federal lands were to revert to the states, would they be better managed?

There’s a long history of states managing state-owned lands. And pretty nearly all of it is bad. The state record for managing

lands is far worse than the record of federal agencies by any standard you care to name. The lands would *not* be better managed and they would not be cheaper to manage. What will happen is that local politics will play a bigger role. I suppose there is some good and some bad to that.

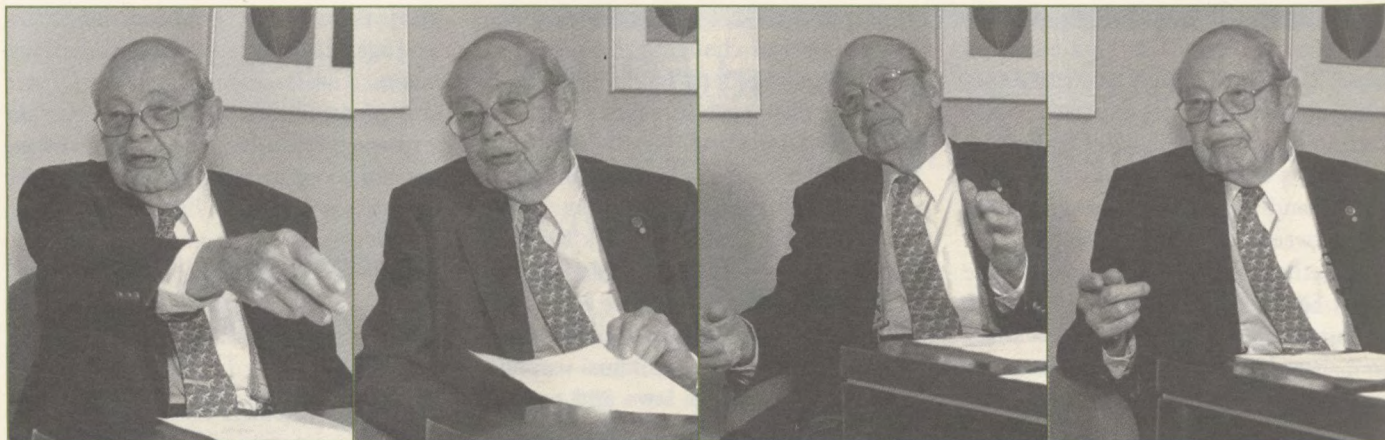
On returning federal land to the states: There’s a long history of states managing state-owned lands. And pretty nearly all of it is bad... The lands would not be better managed and they would not be cheaper to manage.

Ohio was the first state to get public land, in 1802. It was given one square mile out of every township of thirty-six square miles. This land was for public schools and the income from the land was probably enough to support the school. Then there were grants for agricultural colleges—each state got half a million acres for an ag school. Those were good things. The states also were given swamp land, and that caused a lot of fraud.

One of the classic stories of fraud is about a guy who swore that he crossed an area in a boat. Well, he did. The only thing he neglected to mention is that the boat was on a wagon being pulled across dry land by horses. A lot of the best agricultural land in the San Joaquin Valley in California passed into the state ownership under that shenanigan.

Any talk of wholesale transfer of federal lands to the states is political nonsense. I don’t think it will happen.

Recently, legislation has been introduced dealing with the “takings” issue, the problem that arises when the federal government somehow limits the use that private landowners can make of their own



property. If this legislation take effect—it has passed in the House of Representatives and is now stalled in the Senate—the federal government would be required, somehow, to compensate landowners if government action reduces the value of the land. What do you think about this kind of legislation?

I see all sorts of problems. But I also sympathize with the landowners. Again, let's look at this with the perspective of history. The first zoning of city property took place in the early years of this century. The zoning was upheld in a classic Supreme Court decision in 1926, the *Euclid* decision. That Supreme Court decision was written by the most conservative justice on a very conservative court. He didn't give a damn about the usual arguments: he thought that zoning was a way of protecting land values. He wouldn't have been persuaded by the takings argument.

Remember, the earliest zoning controls were in the interest of safety, the interest of efficiency. The idea was that a neighborhood was more valuable if you could keep nonconforming uses out of it. Now the arguments are over a different range of things. You can't drain a swamp if you take away wetlands habitat. You can't cut timber if it will threaten an endangered species. It's harder to see where the social public values are in that, as contrasted to the private landowner's values.

Even if there is a public good, why should certain private individuals have to pay for it? Private property is wonderful institution, and I hate to see it get nibbled

away. In many instances, I think that if the people who are advocating restrictions on private property were forced to pay, the level of rhetoric would decline.

On "takings": Even if there is a public good, why should certain private individuals have to pay for it? Private property is a wonderful institution, and I hate to see it get nibbled away....

What are the challenges that face the government agencies that are responsible for managing public land?

Two or three things. One is to get some analytical content into this idea of ecosystem management. The Forest Service has gone gung-ho for ecosystem management, but it has got to define what ecosystem management means and then make it operational. I'm sympathetic with the point of view that ecosystem management is more rhetoric than it is operating procedure—even its advocates admit they don't quite know what they are trying to maximize

Another challenge is that, somehow, the agencies have got to develop better ways of handling confrontation with

interests that are not hostile, just active. And, many of us feel the Forest Service has not been as imaginative and innovative and creative in the last few decades as it was in an earlier period.

How much logging is being done on federal lands these days?

To put it in the most extreme terms, the environmentalists have pretty nearly taken the federal forests and lands out of wood production. First there was the controversy over the spotted owl, and the last one was over the marbled murrelet. My guess is that there will be other issues. The basic point is that the environmentalists are opposed to harvestable growth of timber. And various excuses will be found to block it.

From a national point of view, we're not gravely handicapped if we don't harvest any wood off the national forests. There's enough privately owned forest, especially in the south, where the forests were cut out in the early decades of this century. Now the forests have grown back in many places.

But from a regional point of view, and from the point of view of particular timber processors that have relied heavily on buying national forest timber, taking federal forests out of production is a problem. For some companies, especially small operators, national forests were almost their exclusive source. If they can't buy it, they're out of business.

Other companies, such as Weyerhaeuser, have lots of timber of their own.

I hear all kinds of talk about harvesting timber in national forests, but I say it's all shadow boxing. The fact is very little timber is going to be harvested in the national forests until there is a major change in philosophy. And I doubt very much that will happen.

Could the Endangered Species Act be used to prevent timber harvests on privately owned lands?

Yes, that is certainly a possibility. Some efforts have been made in that direction already. Not very much, but they could go quite a long way. It depends on what the arguments would be and what the real objective was. If the objective is to preserve old-growth timber, well, there isn't an awful lot unharvested on private lands.

Are the forests in the United States in good shape?

Yes, on the whole the forests in this country are in good shape. It's not generally recognized, but for seventy years we've been growing more timber than we've been cutting. There's about the same amount of forested land, about half a billion acres, roughly, as there was seventy years ago.

There have been some shifts, of course. A lot of low-grade farmland, particularly in the South, has gone back into trees. New England is far more forested now than it was in an earlier time. What's dramatic is not how the area has changed, but how the growth has changed. We have lost a lot of old-growth forest and what's left isn't growing—it's storage forest.

Is the forestry industry in good shape?

On the whole, the forest industry is in good shape, too. There are exceptions—

the poor character we talked about who has been buying national forest timber and hasn't got any alternative sources, he's in bad shape. He's broke. And the community that depended on his payroll and so forth. They aren't in good shape.

On U.S. forests: What's dramatic is not how the area has changed, but how the growth has changed. We have lost a lot of old-growth forest and what's left isn't growing—it's storage forest.

Other than that, the industry faces the same challenges it has always faced, of economy and efficiency, of returns on investment, and so on. Certainly, the industry operates in a different climate of conservation than they did at one time, but we have talked about that.

Then, there have been all sorts of technological changes. Twenty years or so ago, we learned to make decent paper out of hardwood. So many areas, especially in the South, are mixed pine and hardwood stands. At one time, when we thought paper had to be made out of the pine, we cut the pine and we transformed the mixed forest into hardwood forest. This wasn't furniture grade, but low-grade hardwood. There wasn't anything you could do with it, until they found ways of making paper out of that. Now, a substantial amount of paper is made out of hardwood.

Would you care to speculate on the next technological leap for the forest products industry?

In the next hundred years—and I don't expect to be around for another hundred years—I wouldn't be surprised if we see increasing use of wood as a chemical

base. This is a nonspecialist's guess. You see, the earliest use of logs was as logs. You build a log cabin. Then you run it through the saw and made lumber out of it. Then you made plywood out of it. You ran it through a shredder and made paper out of it. Maybe the time will come when we use it for chemicals. We use smaller and smaller pieces, and we reconstitute it into larger things. You can make all sorts of big things by reconstituting small ones.

One last question. When you were born, Teddy Roosevelt was president of the United States...

I don't remember it...

...and many conservationists think of him as having been the first president, or certainly the first president in the twentieth century, to have had a strong commitment to conservation. Do you have a sense that our national commitment to conservation is waning? Or is it an enduring value?

No, I don't think our commitment to conservation is waning; I think it's a growing value. Roosevelt made a contribution, but a lot of things have happened since. I like to tell this story—I think it's true but I don't guarantee it. When Roosevelt was president, he went to Grand Canyon National Park when it was set up as a park. He went and gave quite a speech from the back of a railroad car. "We must preserve the canyon. We must preserve the canyon," he said. Some old cowpuncher who was listening to this spat out his tobacco juice and said, "I'd like to see the durn fool try to get rid of it!"

Of course, the cowpuncher was taking Roosevelt literally. What Roosevelt really meant was preventing commercial development, preserving the quality of the experience when you visit a place like the Grand Canyon. I think most Americans would strongly agree with him on that.

Ecosystem Management: An Uncharted Path for Public Forests

Roger A. Sedjo

Should public forests be managed to reduce all traces of modern human activities or to produce goods and services? Recently, the U.S. Forest Service seemed to answer that question by saying that it would like to restore the forests of the northern Rockies to presettlement conditions—that is, to the way the forests were at the start of the nineteenth century. This is indicative of the Forest Service's new philosophy of ecosystem management and reflects its shift away from multiple-use management, which has been the practice on public forestlands since the 1960s.

The impetus for both approaches is the desire to sustain forests. Concern about the rapid rate of logging on public lands following World War II led to congressional legislation that called for multiple-use management. This legislation explicitly recognized the worthiness of a range of goods or services provided by public forests—including market goods, such as timber, and nonmarket services, such as habitat for wildlife. Congress charged the Forest Service with managing forests to produce a mix of both within the context of sustainability.

In recent years, however, the leadership of the Forest Service has backed away from this goal as its attention has focused on forest ecology—the totality of relationships between forest organisms and their environment. This concern with forest ecology is embodied in the leadership's advocacy of ecosystem management. In accordance with this philosophy, the service has all but abandoned the notion of forests as primarily a vehicle for producing multiple goods (or "outputs") desired by society. Instead of practicing *multiple-use management*, which emphasizes the sustainable production of

myriad goods and services, the Forest Service has embraced *ecosystem management*, wherein the condition of forest ecosystems—the complex of forest organisms and their environment functioning as an ecological unit in nature—is considered to be the preeminent output.

Although an ecosystem-based approach has much to offer in the form of a broader, more integrated, and more comprehensive view of the forest—and thus contributes to the development of more effective management tools—its defect is

Ecosystem management ignores the social consensus implicit in a legislated objective of producing multiple forest outputs and, instead, attempts to achieve some arbitrary forest condition about which society has little say.

its disregard for certain socially approved objectives. In essence, ecosystem management aims to restore forests to some biological condition that reflects fewer human impacts, but just *what* condition is a matter of arbitrary selection. Because ecosystem management has no real legislative mandate, decisions to seek any one of many possible conditions are being made by the Forest Service rather than by society at large, which makes its wishes known through the legislation of management objectives. More to the point from the perspective of taxpayers,

these decisions are being driven almost exclusively by biological considerations, with little attention paid to economic and other concerns. In short, when identifying objectives, ecosystem management ignores the social consensus implicit in the congressionally legislated objective of producing multiple market and nonmarket forest outputs and, instead, attempts to achieve some arbitrary forest condition about which society has little say.

The comparison of ecosystem management and multiple-use management presented below highlights the pitfalls of the Forest Service's new philosophy. Despite these pitfalls, it would be unwise simply to dismiss ecosystem management. It has resulted in the development of some highly effective management tools and activities and reflects a concern for the health of ecosystems that traditional management may not sufficiently recognize. Management for multiple-use objectives should continue to be the practice on public lands, but perhaps with a view to incorporating some aspects of ecosystem-based management.

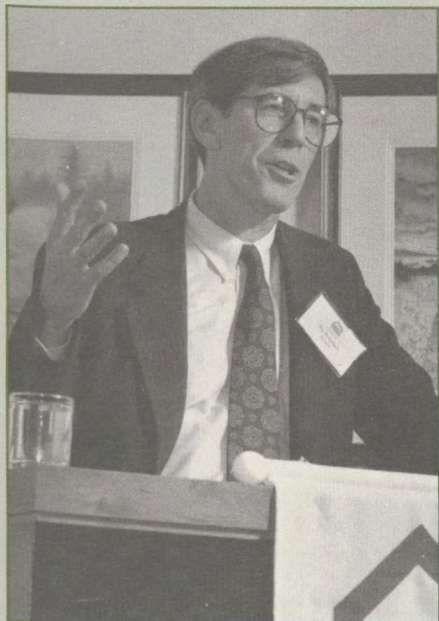
The need for clear objectives

Management of public forestlands requires the identification of clear objectives and the development of a regime (procedures and tools) that will achieve the objectives without violating the constraints imposed by the availability of resources and the acceptability of actions and outcomes.

Forest management without objectives is meaningless. In the absence of stated goals, we cannot differentiate successful forestry activities from unsuccessful ones. And in the case of public forestlands, the ability to gauge the success of management efforts takes on added significance because these efforts are being financed by taxpayer dollars. Moreover, without specifying objectives, we cannot ensure that the preferences of society are being reflected in the way that our forests are managed. These preferences

continued on page 18

INSIDE RFF NEWS AND PUBLICATIONS



Robert D. Reischauer, a senior fellow at the Brookings Institution and former director of the Congressional Budget Office, spoke on federal deficit reduction at a dinner for RFF's board of directors.

RFF board meeting

The RFF board of directors held its autumn meeting at RFF's offices on October 13. Its main order of business was to name Paul R. Portney as the new president of RFF, succeeding Robert W. Fri, who announced his intention to step down at the last board meeting in April. (See related story on page 2.) In addition three new members were elected to the board (see story on page 12).

The meeting of the full board was preceded by meetings of board committees, as well as a reception and dinner on October 12 for the RFF board, staff, and invited guests. After dinner, Marion Clawson was honored for his ninetieth birthday and his long affiliation with RFF. Robert D. Reischauer, senior fellow in economic studies at the Brookings Institution and former director of the Congressional Budget Office, delivered a talk on "Prospects for and Possible Consequences of Federal Deficit Reduction."

Delegations from China's environmental protection organizations visit RFF

Delegations from China's National Environmental Protection Agency (NEPA) and China's province-level environmental protection bureaus visited RFF in July. Fellow H. Keith Florig, one of several RFF researchers who are studying environmental issues in the People's Republic of China, coordinated the visits as part of RFF's China program.

The NEPA delegation came to Washington to study options for creating and sustaining a national investment fund to

address China's regional environmental problems. Florig and consultant Paul Weatherly arranged a series of briefings for the delegation on mechanisms that the United States and other nations have established to pay for environmental protection. Senior Fellow Kate Probst of RFF's Center for Risk Management and Fellow Dallas Burtraw of RFF's Quality of the Environment Division gave briefings, respectively, on the U.S. Superfund
continued on page 13

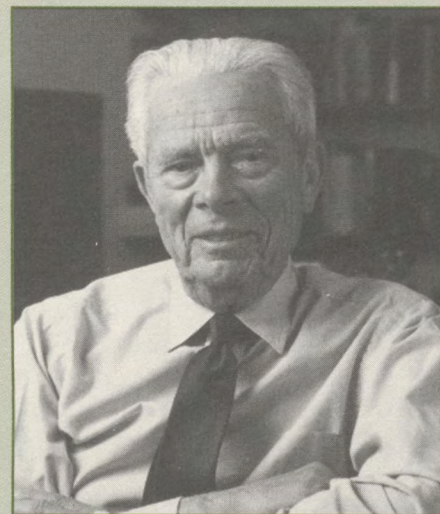
Gilbert White receives Volvo Environment Prize

Professor Gilbert F. White, former chair of the RFF board of directors, was recently awarded the prestigious Volvo Environment Prize for 1995. Best known for his research in water conservation and the environmental effects of nuclear war, White is currently a professor at the University of Colorado-Boulder.

The 84-year-old White has been studying environmental issues in many fields for over six decades. In honoring White, the Volvo Prize Committee said: "From his pioneering work during the 1930s on natural resource planning, with special attention to floodplain management, his superlative leadership in directing wide-ranging programs in natural hazards at the University of Chicago in the 1960s, right through to his important work at the University of Colorado on radioactive-waste management in the 1990s, his career has been studded with accomplishments of extraordinary significance."

White served as chairman of the RFF board from 1974 to 1979. RFF's Gilbert F. White Fellowship, named in his honor and awarded annually since 1980, supports postdoctoral research in the social or policy sciences in areas related to natural resources, energy, or the environment.

The Volvo Environment Prize was established in 1988 to promote environmental research and development and to acknowledge outstanding contributions in protecting the environment through scientific, socioeconomic, or technological innovation. The 1990 prize was awarded to two senior RFF researchers, John V. Krutilla and Allen V. Kneese, for their pioneering work in developing and applying theories of environmental economics to public policy decisions.

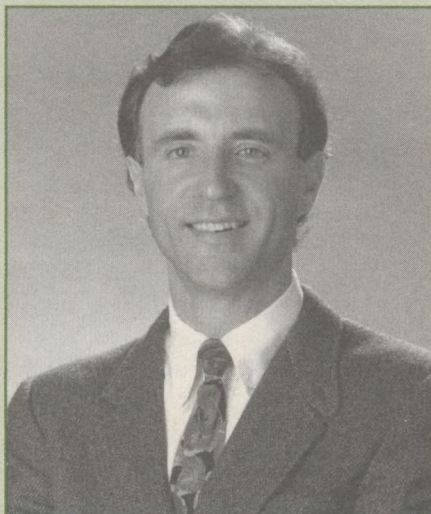


Gilbert F. White

Two RFF fellows promoted

On August 16, RFF announced the award of indefinite appointments to Dallas Burtraw and Karen L. Palmer, two fellows in the Quality of the Environment Division.

Burtraw has been at RFF since 1989. His research interests include the social costs of environmental pollution and benefit-cost and cost-effectiveness analysis of environmental regulation. Among other RFF projects, Burtraw is coauthoring a book that highlights estimates of the environmental and other social costs of electricity generation and the role these costs should play in public policy regarding electric utilities. He also is investigating the effects on electric utilities of the emission-permit trading program legislated under the 1990 Amendments to the Clean Air Act, and he is helping to evaluate and value the benefits of sulfur dioxide emission reductions as part of the National Acid Precipitation



Dallas Burtraw

Assessment Program's study of the benefits of Title IV of those amendments. In addition to his research at RFF, Burtraw serves on the editorial council of the *Journal of Environmental Economics and Management*.

Palmer also joined RFF in 1989. Her research interests include the conservation, regulation, and social costs of



Karen L. Palmer

energy; the economics of and policy issues associated with recycling and solid waste management; and technology regulation and innovation. Among other RFF projects, she is helping to develop an approach to measuring the comparative benefits of wholesale versus retail competition in the electric utility industry; coauthoring a primer on the key issues in the debate over the restructuring of that industry; and analyzing the cost-effectiveness of proposed policies to strengthen markets for recycled products. In addition to her research at RFF, Palmer serves as secretary of the Association of Environmental and Resource Economists.

RFF board of directors gets three new members

F. Henry Habicht, Thomas C. Jorling, and Mark A. Pisano were elected to RFF's board of directors at the board's meeting in October.

Habicht currently serves as senior vice president of strategic/environmental planning at Safety-Kleen Corporation. Formerly, he held positions as assistant attorney general for lands and natural resources at the U.S. Department of Justice (1983-87) and deputy administrator of the U.S. Environmental Protection Agency (1989-92). He is a member of the executive committee of the Federal Quality Institute and a member of the advisory board of the *Virginia Journal of Natural Resources*.

Jorling is currently the vice president for environmental affairs at International Paper Company. Previously, he held positions as the director of the Center for Environmental Studies at Williams College, assistant administrator for water

and hazardous material at the U.S. Environmental Protection Agency (EPA), and secretary of the Department of Environmental Conservation for New York State.

Pisano directed EPA's Water Quality Planning Division before joining the Southern California Association of Governments, the nation's largest regional planning agency, in 1976. Currently the association's executive director, Pisano also is chairman of the board of trustees for the California School of Professional Psychology; chairman of the board of directors for California Leadership; and a member of the board of directors for the Southern California Economic Partnership, LINC Housing Corporation, the National Civic League, the California Consortium for Transportation Research and Development, Southern California Leadership, and the Western Governmental Research Association.

We want to hear from you...

...about *Resources*, RFF's Internet site, or our other publications. Do you have a comment to make about an article in this issue of *Resources*? Is there something you think would be useful on our World Wide Web home page? Tell us. Write to us at: *Resources*, Resources for the Future, 1616 P Street, NW, Washington, DC, 20036-1400, or send us e-mail at: tellus@rff.org.

China

continued from page 11

program and on the use of tradable permits for control of sulfur air pollution emissions. Representatives from the U.S. Environmental Protection Agency, the U.S. Department of Commerce, the U.S. Department of Energy, and the Export-Import Bank also made presentations.

As part of a World Bank-sponsored trip to the United States, thirty senior officials from China's province-level environmental protection bureaus also attended a day-long program of briefings at RFF. These officials are responsible for managing China's pollution levy system. Before coming to Washington, the delegation attended a training session in

environmental economics and regulation at the University of Tennessee's Joint Institute for Energy and Environment (JIEE). While at RFF, the delegation listened to talks and participated in a roundtable discussion of China's environmental policies with members of the Washington-area environmental policy community. Florig and Milton Russell of JIEE arranged the day's events.

Florig noted that RFF's China program has a special role to play in helping Chinese institutions that are concerned with the environment to establish contacts in the West. "The contacts that the two Chinese delegations made at RFF," said Florig, "will help China's efforts to fund pollution reduction and to reform the country's pollution levy system."



Representatives of China's National Environmental Protection Agency visited RFF. Pictured clockwise from foreground are H. Keith Florig, Sun Chongjin, and Huang Huiling.

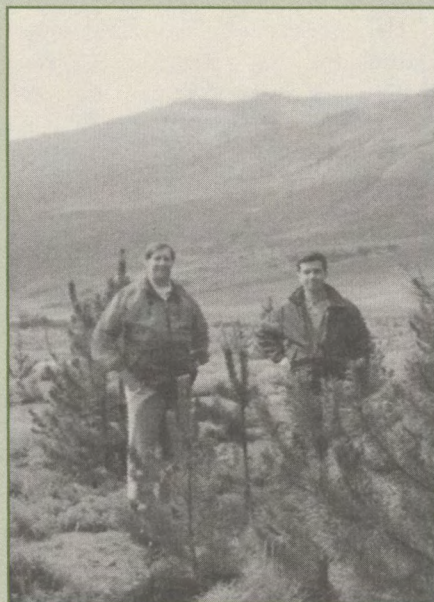
Research on the road

RFF researchers recently traveled to Argentina and Kazakhstan, where their expertise is being put to use.

During a visit to Argentina in February and March, Senior Fellow Roger A. Sedjo and Fellow Eduardo Ley of RFF's Energy and Natural Resources Division continued work on a project to help Argentina weigh its options for reducing its net emissions of greenhouse gases. The researchers spoke with senior officials of the Department of Agriculture, Grazing, and Fishing; the director of the Department of Native Forest Resources; and the director of National Parks. In the process, they gathered information that will aid in their economic analysis of ways to increase the capacity of Argentinian forests to sequester these gases. During their visit, Sedjo and Ley took field trips to the southwestern region of Buenos Aires Province and to Neuquén, a province in Patagonia, to examine plantation forests. Sedjo says that the carbon sequestration potential of such forests in Argentina is substantial.

For a week in April, Fellow James Boyd of RFF's Energy and Natural Resources Division visited Almaty, Kaz-

akhstan to help government officials as they grapple with environmental liability issues that have emerged as public enterprises are being made private. The priva-



Senior Fellow Roger Sedjo and Fellow Eduardo Ley say that plantation forests, such as the one they are visiting here, could play a large role in helping Argentina to reduce its net emissions of greenhouse gases.

tization process in Kazakhstan, as in other former communist countries, is complicated by a legacy of severe environmental degradation left by inadequate government attention to pollution. Now the government must determine who should be responsible for the cleanup of formerly state-owned industrial properties. Boyd was asked to evaluate alternative liability policies in the context of Kazakhstan's environmental problems and its regulatory and legal institutions. His analysis will help the government design a policy that will facilitate the privatization process and the cleanup of existing pollution sources, as well as lessen pollution generated in the future.

During his visit, Boyd spoke with academics and government officials about legal and environmental issues that arise during privatization. He also participated in a workshop organized by the Harvard Institute for International Development. The workshop focused on the use of economic instruments to manage environmental protection and natural resource use as Kazakhstan makes the transition to a market economy.

Photo courtesy of Hugo Iza

Center for Risk Management hosts risk assessment seminar

On July 26, RFF's Center for Risk Management hosted a seminar on the implications for regulation of performing more sophisticated risk assessments, as envisioned in pending regulatory reform legislation. At the seminar, Laura Green and Edmund Crouch of Cambridge Environmental, Inc., described two risk-assessment case studies that they performed for the Commission on Risk Assessment and Risk Management. The case studies illustrate what may be required to meet the provisions of this legislation.

At the request of the commission, James Wilson, who leads the center's risk analysis program, asked Richard Belzer of the Office of Management and Budget, Michael Callahan of the U.S. Environmental Protection Agency, Adam Finkel of the Occupational Safety and Health Administration, and Steve Lewis of Exxon Biomedical Sciences Company to review the model risk assessments and to comment on them at the seminar.

Green and Crouch said that their studies provide an example of how several legislative proposals could be interpreted and that various interpretations are possible. In deriving four kinds of estimates of individuals' cancer risk from exposure to two different chemicals, Green and Crouch reached a series of conclusions, among them that no single "best" risk estimate exists because its definition varies with the proposed mandate. They also concluded that agencies typically compute point estimates of risk that appear to be extremely conservative in comparison with the average estimates emerging from more detailed analyses that take uncertainties into account.

More generally, the researchers concluded that the uncertainties associated with environmental and human health risk assessments are bigger than most people realize, that defining the measure



RFF's Center for Risk Management recently hosted a seminar on the implications of performing more sophisticated risk assessments, as envisioned in pending regulatory reform legislation. Participants included (from the left) Richard Belzer, Michael Callahan, Steve Lewis, Adam Finkel, Laura Green, and Edmund Crouch.

of risk is essential in risk analyses, and that different measures require separate analyses. They also reported that implementation of the risk analyses that would be required under pending legislation is demanding. To do these analyses, much up-front standard material, such as generic information about variations in human exposure parameters, is needed but is currently unavailable.

The commentators expressed some concerns about various aspects of Green and Crouch's assessments, but also con-

curred with several of their conclusions. According to Wilson, the technical review of Green and Crouch's assessments reveals much to learn both in doing thorough risk analysis and in making the results comprehensible.

"Given the importance of risk analyses in managing threats to human health and the environment," Wilson said, "the Center for Risk Management hopes to play an increasingly large role in helping policymakers decide which kinds of analyses are worthwhile."

Applicants sought for RFF award programs

RFF is seeking applicants for its two award programs—the Joseph L. Fisher Dissertation Awards and the Gilbert F. White Postdoctoral Fellowship Program.

To honor the late Joseph L. Fisher, RFF president during 1959–74, RFF will award fellowships, each in the amount of \$12,000, for the 1996–97 academic year in support of doctoral dissertation research. To be eligible for these awards, students must be writing dissertations in economics or policy sciences and must have completed the preliminary examinations for the doctorate not later than February 1, 1996.

To honor Gilbert F. White, retired chairman of the RFF board, RFF will

award one or more resident fellowships for the 1996–97 academic year. The fellowships are intended for postdoctoral researchers who wish to devote a year to scholarly work in the social or policy sciences in areas related to the environment, natural resources, or energy. The fellowships are open to individuals in any discipline who will have completed their doctoral requirements by the beginning of the 1996–97 academic year. Gilbert F. White Fellows are normally in residence at RFF for eleven months.

Additional information about RFF fellowships and internships is available via RFF's World Wide Web home page. Point your browser to: <http://www.rff.org>.

Interning at RFF brings rewards

"One of the most enjoyable aspects of interning at RFF," recent intern Elizabeth Farber said, "is being surrounded by people with an enthusiasm for ideas and their potential to affect the world in a positive way." This year, Farber was one of thirteen individuals to receive summer internships, which RFF offers to undergraduate and graduate students working in the fields of economics, environmental sciences, and resource management. She and her fellow interns assisted RFF staff with projects ranging from technical studies to applied policy analyses.

The internship program at RFF is an opportunity to apply knowledge gained in the classroom to real-world problems and to work with top professionals in the field of environmental and natural resource economics and policy. Last summer's interns found their time at RFF to be rewarding both personally and professionally.

For Farber, who is pursuing a master's degree at Johns Hopkins University, the experience was an important part of graduate study. "One of the requirements for my master's degree in policy studies," she said, "is an internship that involves more than just making copies or entering data. In my work with Dick Morgenstern [a visiting scholar at RFF], I

have been exposed to the expert practice of economics and policy analysis."

Trenton Smith, who recently completed a master's degree at Stanford University, also valued the practical experience. "One of the benefits of my RFF internship," he said, "was the opportunity to contribute in a tangible way to integrating economic theory into environmental policy decisions." As a participant in an RFF project for the National Acid Precipitation Assessment Program, Smith assisted in developing software for tracking and analyzing the social costs and benefits of air pollution controls.

March Sadowitz, a law school student at Boston University, spent most of her internship analyzing the disclosures of environmental performance in the securities filings of fifty Fortune 500 companies and examining the deductibility of hazardous-waste remediation costs from corporate income tax. Sadowitz already was working on the two projects when she applied for her internship. "Kate Probst [a senior fellow in the Center for Risk Management] expressed interest in my research, and I found RFF a great place to pursue it," Sadowitz said.

Other interns remarked on RFF's collegial atmosphere. Kim Nemirow, an

undergraduate at Brown University, gathered information for RFF President Paul Portney on a Senate bill to reform environmental regulation. "I enjoyed the opportunity to learn about other RFF research projects," she said. "In addition to the regular Wednesday afternoon seminars, the staff members hold informal seminars in which they talk about their projects."

Indeed, for many of the students, the greatest benefit of an internship at RFF was exposure to the research. "Very few organizations do the type of cutting-edge environmental research that RFF does," said Thomas Votta, who just completed a master's degree at University of North Carolina-Chapel Hill. "Sharing in the work was gratifying."

Congressional testimony on nonuse value and contingent valuation

On July 11, Raymond J. Kopp, senior fellow and director of RFF's Quality of the Environment Division, presented testimony on the natural resource damage provisions of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (Superfund) and the Oil Pollution Act of 1990 before the Subcommittee on Water Resources and Environment of the House Committee on Transportation and Infrastructure.

Kopp's remarks focused on nonuse value and contingent valuation. He spoke first on why economics was used to value losses for natural resource damage assessments. He then discussed the concept of economic value and how it could be measured, as well as the concept of nonuse value and why it is relevant to the assessment of natural resource damages. He concluded his testimony with an assessment of contingent valuation as a reliable method for measuring nonuse values.

The complete text of Kopp's testimony is available via RFF's World Wide Web home page: <http://www.rff.org>.

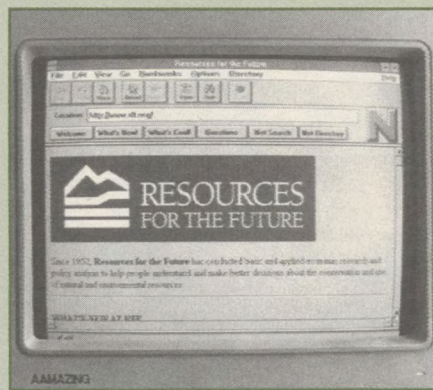


RFF President Paul R. Portney and RFF summer interns for 1995: Tracy Terry and Kim Nemirow (front row); March Sadowitz, Mary Ann Wolverton, and Elizabeth Farber (middle row); Thomas Votta, Eric Lawson, Trenton Smith, Robertson Williams, and Sue Chilton (back row). Not pictured are Ron Lile and Zou Ji.

RFF on the Internet: Electronic mailing list for the Wednesday seminar series

Now, for the first time, people interested in RFF's popular Wednesday noon seminar series—where RFF staff members and invited speakers discuss current research projects and public policy issues—can receive announcements of upcoming seminars via e-mail.

RFF's new electronic mailing list allows Internet users to subscribe electronically to the regular monthly announcements. "The beauty of the mailing list," said Ann Checkley, RFF's communications manager, "is that people can become subscribers with little effort and, once they do, get our seminar notices often within minutes of our posting them." Checkley added that the electronic mailing list makes retrieving



the notices convenient, because subscribers can cut and paste them onto their own computer calendars; they also can electronically distribute the notices to others.

Checkley reported that RFF is looking to expand its mailing list services. In the future, e-mail users will be able to subscribe electronically to other RFF materials, such as press releases, job announcements, and discussion papers. "One of our information dissemination goals," Checkley said, "is to take full advantage of the electronic capabilities of the Internet. By doing so, we get information into people's hands more efficiently and do our part for the environment by reducing our use of paper."

Internet users can subscribe to RFF's electronic seminar-announcement mailing list by sending the following one-line message to listserv@american.edu: Subscribe RFFSEM-L [your full name]. They also can access RFF seminar announcements, as well as other information about RFF, on RFF's home page on the World Wide Web by pointing their browsers to <http://www.rff.org>.

Discussion papers

RFF discussion papers convey to interested members of the research and policy communities the preliminary findings of research projects for the purpose of critical comment and evaluation. Unedited and unreviewed, they may be ordered from RFF (see box).

The following papers have recently been released.

- "The Impact of Urban Land Taxation: The Pittsburgh Experience," by Wallace E. Oates and Robert M. Schwab. (95-15)
- "Fiscal Effects of Electricity Generation: A Full Fuel Cycle Analysis," by Dallas Burtraw and Pallavi R. Shah. (95-16)
- "Path Dependence in Bilateral Emission Trading," by Dallas Burtraw, Ken Harrison, and Paul Turner. (95-17)
- "Race and Industrial Hazards: An Historical Geography of the Pittsburgh Region, 1900-1990," by Robert Hersh. (95-18)
- "Cumulative Pollution with a Backstop," by Cees Withagen and Michael A. Toman. (95-19)
- "Why Integrated Conservation and Development Projects May Achieve Neither Goal," by R. David Simpson. (95-20)
- "The Costs of Carbon Sequestration: A Revealed-Preference Approach," by Robert N. Stavins. (95-21)
- "Benefit-Cost Analysis and Nuclear Waste Site Cleanups: The Historical and Ethical Context," by Allen V. Kneese and Alan J. Krupnick. (95-22)
- "Determinants of Diarrheal Disease in Jakarta," by Anna Alberini, Gunnar S. Eskeland, Alan J. Krupnick, and Gordon McGranahan. (95-23)
- "Can Contingent Valuation Distinguish Significant from Trivial Public Goods?" by V. Kerry Smith. (95-24)
- "Do Contingent Valuation Estimates Pass a 'sope' Test? A Meta Analysis," by V. Kerry Smith and Laura Osborne. (95-25)
- "Contingent Valuation: Economics, Law, and Politics," by Raymond J. Kopp and Katherine Pease. (95-26)
- "An Income and Product Account Perspective on the Sustainability of U.S. Agriculture," by Pierre Crosson. (95-27)
- "Political Economy and the Efficiency of Compensation for Takings," by Timothy J. Brennan and James Boyd. (95-28)
- "Soil Erosion and Its On-Farm Productivity Consequences: What Do We Know?" by Pierre Crosson. (95-29)
- "Efficiency sans Allowance Trades? Evaluating the SO₂ Emission Trading Program to Date," by Dallas Burtraw. (95-30)

Ordering discussion papers

To order discussion papers, please send a written request and a check payable to Resources for the Future to:

Discussion Papers
External Affairs
Resources for the Future
1616 P Street, NW
Washington, DC 20036-1400

The price per paper covers production and postage costs and is based on delivery preference: domestic, \$6 for book rate and \$10 for first class; international, US\$8 for surface and US\$15 for air mail. Canadian and overseas payments must be in U.S. dollars payable through a U.S. bank.

Especially for RFF donors: The RFF Gift Fund... a great alternative

The RFF Gift Fund is a great alternative to setting up a private foundation. You avoid the administrative and reporting requirements of a private foundation, and you receive a bigger tax deduction while retaining flexibility in the choice of the ultimate beneficiaries of your charitable giving.

Individuals facing significant tax burdens in a particular year can make a tax-deductible contribution to the Gift Fund to cover their charitable giving for many years to come. Despite the fact that disbursements from the Gift Fund may be made in subsequent years, the tax deduction is taken in the year the fund is established.

A recent contributor to the RFF Gift Fund, RFF Board Chair Darius Gaskins

explained his reason for doing so. "The RFF Gift Fund is an excellent way to manage my charitable giving and receive an immediate tax deduction," Gaskins said.

Gifts of appreciated securities are an especially attractive way to establish an RFF Gift Fund, because they enable you to take a deduction of the market value of the securities while avoiding the capital-gains taxes you would otherwise pay. Another contributor, former RFF President Robert W. Fri, noted, "Contributing appreciated stock to the RFF Gift Fund allows me to benefit RFF as well as other charities and avoid capital-gains taxes."

There is no required distribution from your Gift Fund to the RFF general fund, though of course RFF greatly appreciates your consideration of it for a gift.

Important facts about setting up an RFF Gift Fund

- Contributions may be in cash or securities.

For more information about the RFF Gift Fund, gift annuities, gifts of appreciated securities, bequests, or other types of planned gifts, please contact RFF Vice President-Finance and Administration Ted Hand at 202-328-5029 or check the appropriate box on the enclosed reply envelope for individual contributions.

- Contributions are deductible at full fair-market value.
- The donor avoids capital gains taxes.
- Funds are placed under professional investment management.
- Contributions may be disbursed to benefit multiple charities.
- Donations are excluded from the donor's estate and avoid probate.

In memoriam: Charles J. Hitch

Former RFF president Charles J. Hitch died on September 11, 1995 at the age of 85. Hitch, a world-renowned economist who was educated at the University of Arizona, Harvard, and Oxford, served as RFF's president from 1975 to 1978. He had presided over the University of California during the tumultuous period of 1968-75.

Hitch championed the doctrine of academic freedom at Berkeley and fought to safeguard the university against sweeping budget cuts by then-Governor Ronald Reagan in the wake of student unrest during the Vietnam War. At RFF, he undertook the institution's first major reorganization, strengthened its commitment to policy studies and international research, and broadened its base of financial support.

Recent contributions from individuals

The following individuals made gifts of \$100 or more between June 10 and September 5, 1995 in support of research and education programs at Resources for the Future:

Anonymous	Kenneth R. Farrell	Gary Reed Jr.
Christopher C. Aitken	Gary A. Floyd	Jean and Jack Schanz
Glenn Blomquist	Russel H. Herman	Glenn R. Schleede
Arnold Thomas Brooks & Susan Sonnesyn Brooks	H.M. Irvin III	Sam H. Schurr
Sol Burstein	Jan W. Mares	S. Fred Singer
W.V. Bussmann	John Merrifield	Ronald Van Mynen
Emery N. Castle	Jerome W. Milliman	David L. Weimer
	Dade W. Moeller	David Weinberg
	Paul and Susan Portney	

Recent contributions from corporations and foundations

RFF received contributions from the following corporations and foundations between June 10 and September 5, 1995:

AlliedSignal Inc.	Citibank	PepsiCo, Inc.
American Petroleum Institute	CSX Corporation	Smith Richardson Foundation
Amoco Foundation, Inc.	Dominion Resources, Inc.	Sun Company, Inc.
Center for Energy & Economic Development	Georgia-Pacific Corporation	Texaco Foundation
CF Industries, Inc.	Monsanto Company	Uniroyal Chemical Company, Inc.
Champion International Corporation	Olin Corporation Charitable Trust	
Chevron Corporation	Pennsylvania Power and Light Company	

continued from page 10

should inform goals as well as define the constraints within which a management regime will operate.

But where objectives dictate the management approach under multiple-use forestry, ends merge with means under ecosystem management. Indeed, in actual practice, the objective of ecosystem management is most often simply the application of an ecosystem, or ecosystem-based, approach that is concerned first and foremost with the state of the forest itself. Thus while the Forest Service has been embracing ecosystem management as its operating philosophy for several years, no clear vision of output goals, at least as traditionally understood, has emerged. What has emerged is a preoccupation with forest condition—that is, with biological attributes, such as a forest's structure (mixture of younger and older trees) and variety of tree species—rather than with the goods and services (particularly those consumed by humans) that forests provide.

Ecosystem management versus multiple-use management

Jack Ward Thomas, chief of the Forest Service, has said that ecosystem management means sustaining forest resources, from which will flow many goods and services. But our public forests have for decades been managed to sustain multiple uses. Is ecosystem management really different from multiple-use management?

The mandate for multiple-use forestry has been expressed by law since 1960, when Congress passed the Multiple-Use Sustained Yield Act. This act acknowledges that forests generate both market goods and nonmarket goods. The objective of multiple-use management is to produce the mix of these market and nonmarket goods that maximizes the value of forests to society.

If the objective of ecosystem management is simply the management of whole ecosystems for a variety of purposes, such management might be viewed as an



Photo courtesy of the National Park Service

The Forest Service would like to return the forests of the northern Rockies (pictured here) to conditions that predate European settlement in the early 1800s. But why not aim for conditions that predate all human activity? Arbitrariness in the selection of desired forest condition is one aspect of ecosystem management that some taxpayers may find troubling.

expansion of the multiple-use approach. Under this expanded approach, the set of outputs under consideration would broaden to include the biological condition of the forest itself. In addition, the boundaries of the management unit would enlarge, because changes in forests affect the geographic area around forests. Finally, the potential uniqueness of each forest ecosystem would be recognized and new management techniques would be introduced. Conceptually, these considerations represent modest extensions of multiple-use management. The job of the public forest manager would continue to be producing the mix of outputs that would maximize the social value of the forest.

But proponents of ecosystem management are reluctant to treat such management as a mere extension of multiple-use forestry. Unlike multiple-use management, which focuses on distinct forest outputs, many of which are consumed

directly by humans, ecosystem management focuses on forest condition as the dominant forest "output." In this context, timber, recreational opportunities,

Unlike multiple-use management—which focuses on distinct forest outputs, many of which are consumed directly by humans—ecosystem management focuses on forest condition as the dominant forest "output."

and other traditional forest goods are merely by-products of managing forests to achieve one of many possible forest conditions. Production of these other

outputs is tolerable as long as it does not conflict with the primary objective of achieving one of these conditions. Thus, for example, timber harvests that improve the condition of a forest are acceptable. But while under multiple-use management such harvests could be decreased in order to increase recreational opportunities, under ecosystem management such opportunities would not be augmented if they resulted in what was perceived as an undesirable change in forest condition. Under ecosystem management, forest condition—as the preeminent forest output—is not subject to trade-offs with other forest outputs, as it is under multiple-use management.

A clear statement of the objectives of ecosystem management appears in the Forest Service's proposed regulations dated April 13, 1995. In the proposed regulations, the management objective is stated as follows: "The principal goal of managing the National Forest System is *to maintain or restore the sustainability of ecosystems...*" (italics added). By this articulation, the goal of management is very similar to the constraints of other forest management systems: sustainability. The proposed regulation goes on to suggest that the achievement of this goal will result in "...multiple benefits to present and future generations."

The implications of ecosystem management

Given ecosystem management's focus on forest condition, the first question that arises is whether a given forest's current condition should be maintained or modified to some specified extent. Once such a decision is made, the vagueness of the management objective disappears. But, as I suggest below, the selection of desired or acceptable condition is essentially arbitrary. As a result, the objective chosen today may be sadly outdated in perhaps a few years.

Although not readily apparent, arbitrariness is reflected in the Forest

Service's apparent preference for restoration, rather than maintenance, of forest condition. This restoration entails the return of forests to some state characterized by fewer human impacts—for example, the return of the forests of the northern Rockies to presettlement conditions. But why not aim for a forest condition that predates human activity?

Should European forests be returned to their pre-Roman condition, to their Medieval condition, or what? This question raises more questions: Is less human impact always preferable to more human impact? If so, why? These questions do not have scientific answers.

On a philosophical level, such arbitrariness is perhaps easier to show if we compare the selection of desired condition for European forests with that for American forests. In the United States, landscape conditions before and after European settlement are readily distinguished, and the landscape conditions before European settlement often function as a model for desired forest condition. In Europe, however, the distinction between forests before and after human settlement is virtually impossible to make, and, as a result, determining desired forest condition is more difficult. Should forests there be returned to their pre-Celtic condition before about 1500 B.C., to their pre-Roman condition, to their condition in the Middle Ages, or what? This question inevitably raises more fundamental questions—namely, whether less human impact is always preferable to more human impact, and, if so, why. These questions do not have scientific answers.

At the same time, however, and despite assertions to the contrary, the perspective of ecosystem management is almost purely biological, with no serious attention given to social values and little real attempt made to relate forest outputs to human and social needs and desires. A critical question that is not being asked is whether achieving a particular forest condition is a sensible use of public funds. It is one thing to justify taxes to produce outputs, market or nonmarket, that are consumed directly by the public, but quite another for society to use its scarce tax dollars to achieve a biological objective that may or may not be valued by the majority of the taxpaying public.

Generating benefits for everyone

Public forests were established to generate benefits for all citizens, and in the past the objectives of forest management reflected a degree of political consensus. In recent decades, these objectives have been codified in congressional legislation: the Multiple-Use Sustained Yield Act of 1960, as well as the Resources Planning Act of 1974 and the National Forest Management Act of 1976. By contrast, forest management as practiced by the Forest Service in the mid-1990s has no clear political or social mandate. Indeed, ecosystem management marks a sharp shift away from legislatively supported multiple-use forestry—which recognizes many biological, social, and economic values—focusing instead on an arbitrary forest-condition objective that, in essence, is defined by biological considerations only.

While the Forest Service's adoption of ecosystem management may be inconsistent with legislation mandating multiple-use management, it is not inconsistent with the Endangered Species Act (ESA). In fact, recent court rulings that earlier Forest Service actions were contrary to the ESA do provide a rationale for the service's shift to ecosystem management. These rulings do not, however, provide sufficient justifi-

cation for jettisoning the multiple-use objectives called for in existing legislation, at least until such time as a national consensus on new forest management objectives is codified by Congress.

The practice of ecosystem management, however, has arisen partly as a result of the difficulties inherent in multiple-use forestry. Achieving the optimal social mix of outputs is, obviously, no easy task. The selection of outputs has been complicated further by court interpretations of the ESA that constrained management decisions. In this context, the current administration and the new Forest Service chief have promoted the shift to an ecosystem management approach.

Changes in the administration or the ESA are likely to alter the way that ecosystem management is practiced, however, perhaps making the forest conditions managed for today undesirable tomorrow. And changes are likely. Administrations come and go, after all, and with them the leadership of the Forest Service. Moreover, the ESA is expected to be amended. In the absence of any kind of legislative mandate, then, ecosystem management could go by the wayside or it could constantly alter the goods that forests provide and do so without reference to public opinion.

If ecosystem management is to be practiced on public lands, the application of democratic principles suggests

that such management be made law. In the absence of new congressional directives, however, management for multiple forest outputs should continue on public lands. But ecosystem-based management should not be dismissed altogether. Its tools and activities could and probably should be used by the Forest Service to achieve the objectives of multiple-use

Forest management as being practiced by the Forest Service in the mid-1990s has no clear political or social mandate. Indeed, ecosystem management marks a sharp shift away from legislatively supported multiple-use forestry.

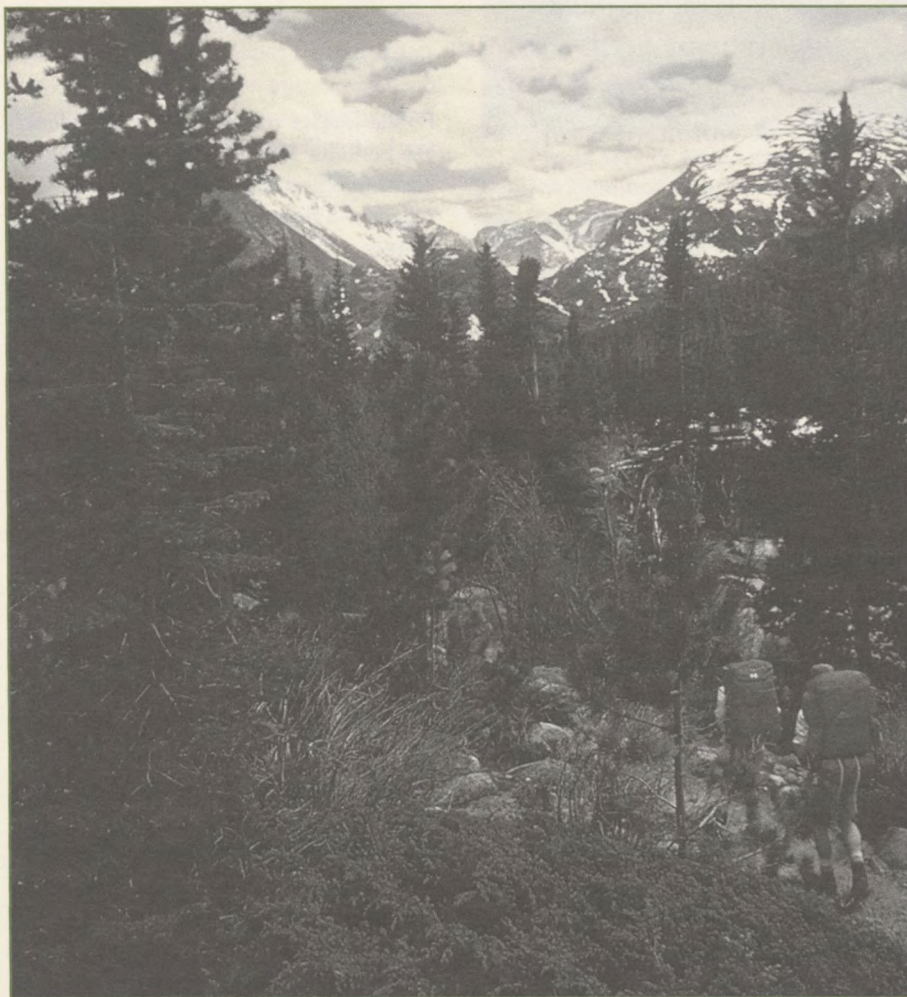


Photo courtesy of the National Park Service

Under multiple-use management, timber harvests could be decreased to increase recreational opportunities; but under ecosystem management, such recreational opportunities would not be enhanced if they resulted in an "undesirable" change in forest condition.

forestry. And if there appears to be some public support for returning forests to a specified condition of fewer human impacts, this condition could be added to the list of existing management objectives, such as producing timber and providing recreational opportunities.

The advantage of multiple-use management is that it tries to accommodate additional objectives and make trade-offs among them in order to increase social values. Such an approach, although sometimes flawed, is much more likely to benefit all members of society than ecosystem management, which makes one objective dominant and essentially impervious to trade-offs. In retrospect, we can see that multiple-use management's chief strength lies in its flexibility and in its responsiveness to changing social desires. By comparison, ecosystem management is rigid in identifying objectives and essentially arbitrary.

Roger A. Sedjo is a senior fellow in the Energy and Natural Resources Division at Resources for the Future.

Cartoon Caricatures of Regulatory Reform

Paul R. Portney

All right, readers, take out a pencil and paper and answer the following question.

Efforts by the Republican Congress in 1995 to require more use of benefit-cost analysis and quantitative risk assessment in environmental, safety, and health regulation represented:

- A. a heroic attempt to rescue the U.S. economy from a welter of suffocating and ill-considered rules concocted by unelected bureaucrats.
- B. a thinly veiled effort to undo nearly twenty-five years of environmental, safety, and health gains just to benefit fat-cat corporations.

If you find yourself longing for a third option—C, neither of the above—you must not have been following the 1995 debate over regulatory reform on the TV evening news or in the pages of most U.S. newspapers, for generally only options A and B were portrayed there. Many newspapers, in fact, showcased regulatory reform in an unusual venue—their comic pages, including the widely read "Doonesbury."

The truth, of course, lies well between these extremes. In my view, Congress and the Clinton administration missed an excellent opportunity in 1995 to make much-needed improvements in the way federal regulatory agencies issue new rules. In the best tradition of American politics, the blame should be shared bipartisanly.

The year in review

Let's start with a quick recap of the year's events, beginning with a clarification on

the subject of this article. Many proposals were put forward in both houses of Congress in 1995 under the banner of regulatory reform. In addition to legislation related to benefit-cost analysis and risk assessment, these proposals included such things as a moratorium on the issuance of new regulations; limitations on the paperwork burdens associated with regulation; restrictions on the "mandates" (regulatory costs) that the federal government could impose on lower levels of government; and, perhaps most controversially, a proposal to prohibit the federal government from imposing limitations on private landowners without compensating them for any reduction in the value of their property resulting from these limitations (so-called takings legislation).

With the exception of The Unfunded Mandates Reform Act of 1995, which deals with federal regulatory burdens imposed on state and local governments, none of these proposals had been enacted by Congress by the fall of 1995. I concentrate in this piece on the legislation dealing with benefit-cost analysis and risk assessment.

Action in the House of Representatives

With their first majority in the House in forty years, the Republicans immediately began to put into law the provisions of their Contract with America dealing with benefit-cost analysis and risk assessment (more about the Contract later). On March 3, 1995, only five weeks after being sworn in, the members of the House voted 277-141 to pass H.R. 1022 (later renumbered H.R. 9), "The Risk Assessment and Cost-Benefit Act of 1995."

This bill would require regulatory agencies to make changes in the way they assess and report information about the risks they intend to regulate. Despite claims to the contrary, the requirements in this bill pertaining to risk assessment would pose few serious obstacles to agencies in their rulemaking efforts. In fact, the U.S. Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), and the Occupational Safety and Health Administration (OSHA), among others, already have or are in the process of adopting many of the practices the House bill would require.

With a majority in the House for the first time in forty years, the Republicans immediately began to put into law their Contract with America, including provisions dealing with benefit-cost analysis and risk assessment.

The House bill would make one dramatic change, however. If it became law, regulatory agencies would have to certify that "...the incremental benefits of any strategy [regulation] chosen will be likely to justify, and be reasonably related to, the incremental costs incurred...." This would be the case even under statutes that, to this point, have been interpreted as prohibiting health or other benefits from being traded off against economic impacts. These statutes include key parts of the Clean Air Act, the Clean Water Act, the Safe Drinking Water Act, the Occupational Safety and Health Act, and the Federal Food, Drug and Cosmetic Act.

Shifting to the Senate

With passage of the House bill, attention shifted to the Senate and S. 343, led by

Majority Leader Robert Dole (R-Kansas). In one very important respect, this bill was much less revolutionary than H.R. 9. Whereas the latter would require agencies to balance benefits and costs even under statutes where that had been prohibited in the past, S. 343 would not explicitly "trump" these statutes, with the exception of the Delaney clause in the Federal Food, Drug and Cosmetic Act (which deals with health risks from food additives). As such, the scope and ultimate impact of S. 343 are less in comparison with the House bill.

In other important respects, however, S. 343's reach would extend beyond that of its House counterpart. For example, the new benefit-cost balancing requirements in H.R. 9 would apply only to new regulations written after the bill had passed. Under S. 343, however, each regulatory agency would have to establish a schedule for reviewing all *existing* major regulations in light of the new benefit-cost criteria, and the rights of individuals to petition for such reviews would be strengthened. Each agency then would have as long as eleven years

Unlike the House bill, which only applied to new regulations, under the Senate bill each regulatory agency would have to establish a schedule for reviewing all existing major regulations in light of the new benefit-cost criterion.

in which to complete these reviews and make changes in any regulations for which the benefits did not justify the costs. Also, S. 343 would enlarge the opportunities that individuals and corporations have for challenging in court the actions of regulatory agencies. Finally, it would establish a procedure through which both houses of Congress could

review and essentially nullify any new regulation to which they took exception, with the president having the right to veto any such congressional action.

Despite constant efforts throughout the summer of 1995, Senator Dole failed to secure approval of S. 343. While he had more than the fifty-one votes needed to pass the bill if it came to the floor, he lacked the three-fifths majority to close off debate. As of this writing, regulatory reform in the Senate is not dead, but it is in intensive care and on life-support.

Who won?

Critics of H.R. 9 and S. 343, of whom there are many, have been cheered by the collapse of legislation in the Senate. They are troubled by many provisions in both bills. For instance, they have argued that those benefits and costs that are quantified, and particularly those that are expressed in dollar terms, inevitably will be given greater weight in decisionmaking than "softer," unquantified effects. They worry further that when courts review important agency decisions (most major regulations are challenged in court), some of those decisions may be overturned on the grounds that, when conducting its benefit-cost analysis, the agency used the "wrong" value for a life saved, an ecosystem preserved, or an injury prevented. Finally, these critics are concerned that the additional steps, whether related to quantitative risk assessment or benefit-cost analysis, that agencies would have to take to issue a regulation would bog down the rulemaking process.

These are all quite legitimate concerns. In fact, no one knows how regulation would be changed if legislation such as that discussed here were enacted. Its impact would depend not only on how the benefit-cost requirements initially were interpreted and executed by federal regulatory agencies, but also on the deference that appeals courts give to the agencies when regulations are challenged. If the appeals courts consistently overturned agencies' decisions, legal chal-

lenges would proliferate and the regulatory process could easily bog down.

On balance, however, my guess is that these fears would not be borne out. In the last issue of *Resources*, for example, Winston Harrington and I argued strongly in favor of a *qualitative* balancing of benefits and costs in all standard-setting activities, including those involving health protection. To their credit, the architects of both H.R. 9 and S. 343 have explicitly directed that not every benefit or cost has to be quantified and expressed in dollar terms in the required analyses. Regulators should be able under such language to give these nonquantifiables appropriate weight in decisionmaking. In fact, as I read the language in both bills, it suggests to me that Congress is asking regulators to do no more than take action only when

The language in both bills suggests that Congress is asking regulators to do no more than take action only when they can answer the following question in the affirmative: All things considered, will this regulation do the country more good than harm?

they can answer the following question in the affirmative: All things considered, will this regulation do the country more good than harm? If that is how the language comes to be interpreted (a big "if," admittedly), that seems to me to be a pretty reasonable test to apply to any and all proposed regulations, and one that would allow regulators more than enough latitude to consider consequences that do not lend themselves to quantification or monetization.

The review of existing as well as new rules also seems appropriate, so long as it is restricted to major regulations. (These are defined in S. 343 as those that impose



Republicans conduct careful, deliberate review of government regulations.

Regulatory reform has been characterized—though caricatured may be a better word—as either a heroic attempt to jettison excessive regulations or a flimsy excuse to dismantle twenty-five years of safety, health, and environmental protection.

annual costs on the economy of \$100 million or more—the same definition, incidentally, used in President Clinton's Executive Order 12866, which directs agencies to analyze the costs and benefits of the regulations they issue.) According to EPA, existing environmental regulations cost the United States nearly \$150 billion annually. Exposing the most significant of these rules—and those of OSHA, FDA, and other agencies—to a qualitative benefit-cost comparison seems only prudent. On the other hand, if agencies are required to review virtually all existing rules under new criteria, they will be tied up in knots, unable to deal with any new problems that arise.

Multiplying the occasions for judicial review of agencies' decisions is especially problematic. Regulators at EPA and other agencies have been consistently handicapped by congressional micromanagement, and I see no advantage in shifting the locus of this second-guessing to the judicial branch of government. Not only are courts less equipped to deal with the many technical issues that arise in regulation, but protracted reviews will stretch out further the already glacial pace of regulation.

Although such micromanagement could happen under more expansive judicial review, my guess is that it would not. For one thing, the provisions in both the House and Senate bills can and should be sharpened to reduce the occasions for judicial oversight and action to the most significant and the most ill-advised regulatory decisions. Perhaps more importantly, appeals courts are deferential to the judgment of regulatory agency officials and probably will continue to be so. It is very unlikely that judges would suddenly begin to overturn regulators' decisions on grounds that, for example, the regulators valued an asthma attack prevented at \$100 rather than at \$55, that they used the wrong extrapolation technique in translating risks at high doses to those at lower levels, or that they failed to consider every possible alternative in formulating their regulatory strategy.

What went wrong?

If the benefit-cost legislation described above would improve the quality of federal regulation, as I believe it would, why

has it not been enacted? The blame attaches to both parties.

First, several of the proposals dealing with regulation in the Republicans' original Contract with America were quite poorly conceived. These included such requirements as the establishment of nongovernmental, scientific peer review panels that would be given the power to delay the issuance of new regulations if the panels disagreed with the underlying science, as well as the imposition of a regulatory budget that would cap the costs that agencies could impose on the economy each year. The former would have given great power to people who were neither elected nor appointed, thus lessening accountability in regulation; the latter is attractive in concept, but we are a long way from being able to put such a measure into practice. These and many other problematical features were dropped from the House and Senate regulatory reform bills as they evolved, but a number of possible supporters were understandably put off by the misguided starting point of the debate.

The Republicans undermined their own efforts late in the debate, as well. In August, the House Appropriations Committee voted to reduce the budget of EPA by 26 percent when measured against the agency's fiscal year 1995 spending. Although deficit reduction will require sacrifices by all government agencies, the grossly disproportionate size of this cut suggested an antienvironment mentality that alarmed even many Republicans.

The Appropriations Committee also tacked nearly a score of "riders" onto the appropriations bill, including several that would foolishly prohibit EPA from enforcing certain air and water pollution regulations. If Congress thinks that particular regulations are ill-advised, it can and should openly debate and change the laws that gave rise to those regulations—not use the appropriations process to make "stealth" amendments. These actions suggested to many that the goal of at least some Republicans was not regulatory reform but rather relief or even evisceration. This, too, worked

directly against the regulatory reform bill the Senate was debating.

The Democrats, too, bear responsibility for the failure of regulatory reform, including a blown opportunity to make

If Congress thinks that particular regulations are ill-advised, it can and should openly debate and change the laws that gave rise to those regulations—not use the appropriations process to make “stealth” amendments.

changes they now say they want. In 1993, the then-Democratic-controlled Senate voted 95–3 in favor of a regulatory reform bill put forward by Senator Bennett Johnston (D–Louisiana). This legislation would have made several of the changes

contained in H.R. 9 and S. 343, but without many of the provisions in those bills that the Democrats now find objectionable. Rather than actively support or even accept this legislation (and the companion legislation that comfortably passed the House of Representatives, which also was controlled by the Democrats), the Clinton administration opposed the legislation and let it die. This set the stage for the more sweeping changes now being debated.

In addition, some Democrats took what I believe was the low road in the 1995 debate. For example, both H.R. 9 and S. 343 were criticized on the grounds that they would “undo” many of the regulations put in place between 1970 and 1995, including those written under Clean Air and Clean Water acts that resulted in improved air and water quality throughout the United States. Yet neither the House nor the Senate bills under consideration would eliminate a single regulation. In fact, only the Senate bill would subject existing regulations to any review at all. Even then, it would direct regulatory officials to undo regulations only when they

could not satisfy themselves that their rules did do more good than harm. Many of the important air and water quality regulations of the early 1970s would have no difficulty whatsoever satisfying such a test.

Conclusion

With the many possible advantages of and reasonable concerns about the use of benefit-cost analysis in regulation, the congressional debate ought to be clear and focused. So, too, should the vetting of this important issue in broadcast and print media. In neither forum has this been the case. Rather, the debate has been dominated by false claims that regulation is strangling the economy or that popular safeguards will be wiped off the books by reform legislation. We deserve and should insist upon more, though the smart money is probably best wagered on more cartoon caricatures.

Paul R. Portney is president and senior fellow at Resources for the Future.



RESOURCES FOR THE FUTURE
1616 P Street, NW
Washington, DC 20036-1400

ADDRESS CORRECTION REQUESTED

<p>Nonprofit Org. U.S. Postage PAID Washington, DC Permit No. 5005</p>
--