

## In Memoriam

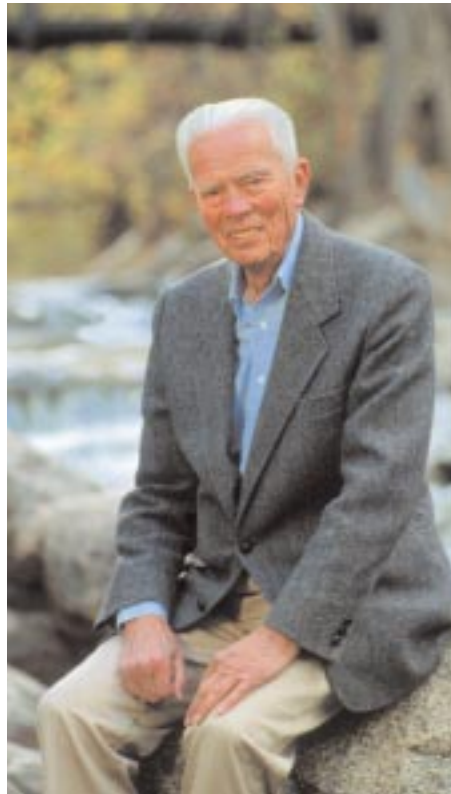
### Gilbert F. White, 1911–2006

**G**ilbert F. White, a pioneer in the field of global resource management and an influential former chair of the RFF Board, died October 5 in Boulder, Colorado, at the age of 94. He was the Gustavson Distinguished Professor Emeritus of Geography at the University of Colorado, where he had been a professor since 1970 and founded the Natural Hazards Research Center.

White's work had profound impact on environmental research, global poverty eradication, and civilization's ability to manage the effects of natural hazards, particularly floods and other weather-related phenomena.

At RFF, White was instrumental in creating a renewed vision for the mission of the institution at a crucial time in its history. "Gilbert White played the key role in ensuring RFF's very existence when it was threatened nearly 30 years ago," said former RFF President Paul R. Portney, who worked closely with White. "In addition, he contributed to RFF generously through the years. Moreover, his research on water resource management and environmental risks and hazards has had a profound influence on the work of RFF scholars through the years." White served on the RFF Board of Directors from 1968 to 1979.

White's legacy to RFF includes the Gilbert F. White Postdoctoral Fellow-



ship Program, established in 1980. This competitive award brings mid-career academicians to RFF for one-year sabbaticals to pursue independent research in resource policy. Arik Levinson of Georgetown University is the current honoree in a program that has brought promising scholars to RFF from around the world.

In 1942, White received his doctorate in geography from the University of Chicago, after he wrote a landmark dissertation entitled "Human Adjustment to Floods." In it, he asserted that devastation from natural disasters

such as floods, earthquakes, and hurricanes could be better avoided by changing human behavior. "Floods are 'acts of god,'" he wrote, "but flood losses are largely acts of man."

His work led to the creation of the National Flood Insurance Program in the United States and to better management of flood plains around the world, particularly in developing nations. When he was president of Haverford College, he observed that small-scale, local projects in Asia, Africa, and Latin America could have as great an impact on human welfare as major projects, such as dam building and other large-scale engineering efforts. His suggestion was instrumental in laying the groundwork for the U.S. Peace Corps in the 1970s.

White's world views were deeply rooted in his Quaker faith. As an alternative to military service in World War II, White joined the American Friends Service Committee and aided refugees in France. He was captured in 1943 and was a prisoner of war in Baden-Baden, Germany, until 1944, when he was allowed to return to the United States.

Contributions in honor of White may be made to: The Gilbert F. White Fellowships, Resources for the Future, 1616 P Street NW, Washington, DC 20036. ■

# Should States Be Allowed to Set Emissions Standards for Mobile Sources of Pollution?

Virginia McConnell

In response to controversy over a Clean Air Act amendment that bars states other than California from setting their own emissions standards on small-engine vehicles, Congress requested a National Academy of Sciences panel be created to review the standard-setting process. I served on the resulting committee charged with reviewing the state and federal standards for mobile-source emissions.

Beginning with the earliest attempts to reduce emissions from light-duty



vehicles in the 1960s, policymakers realized that multiple-state standards would result in efficiencies in both production and distribution of these vehicles. So in the 1970 Clean Air Act, the federal government preempted state-established emissions standards and required uniform national stan-

dards for all mobile sources. There was, however, one exception to that rule: California, because of its special air quality problems and its pioneering efforts to reduce emissions, was given authority to set its own vehicle emissions standards, as long as they were at least as protective as the federal standards. In later Clean Air Act amendments, other states were given the authority to adopt the California standards.

However, in 2003, a provision advanced by Sen. Kit Bond (R-MO) was passed that barred other states from adopting California's first-time standards on small gasoline engines. Although light-duty vehicles have been heavily regulated for years, mobile sources such as generators, leaf blowers, and lawnmowers had been virtually unregulated. The so-called Bond Amendment served to focus attention on the appropriate role for states and the federal government in setting mobile source standards as other engines and engine types are regulated.

The National Academy of Sciences committee set out to investigate the process for setting standards, including the reasons for setting stricter standards and the practices used. One finding is that California's ability to set tighter standards has played a key role in the development of mobile-source emissions controls. Emissions standards on new vehicles were "technolog-

ogy forcing," requiring the development of new strategies for control that were not currently available. This approach may spur innovation, but it has the potential to come at a high cost. But by setting a stricter standard and serving as a laboratory for development of the technology to achieve it, California lowered the total costs for the nation. Along the way, there were both successes and failures as California pursued stricter standards.

The committee also found that the responsibility for setting standards has often been shared between state and federal governments. For example, California led with the strictest standards on light-duty vehicles and more recently with small non-road engines, while EPA led in establishing standards for on-road heavy-duty diesel vehicles and off-road diesel engines, which have been adopted uniformly across the nation.

While California's ability to set different standards should be protected, the committee was less clear about whether the same should hold for other states. We found no clear evidence on the costs of distributing vehicles to many different states or the costs of enforcing different standards across state borders. Nor were the air quality benefits always made clear by states. Further confounding the issue, EPA's role in evaluating claims about benefits often comes late in the process. In addition, under current practice, the opt-in process often results in lengthy and litigious controversies over whether a state used the same fuel as California or whether temperatures were the same. For these reasons, some on the committee felt that a different approach that included a larger role for EPA in an expanded review process would be beneficial. ■

## RFF Convenes Workshop to Support RGGI

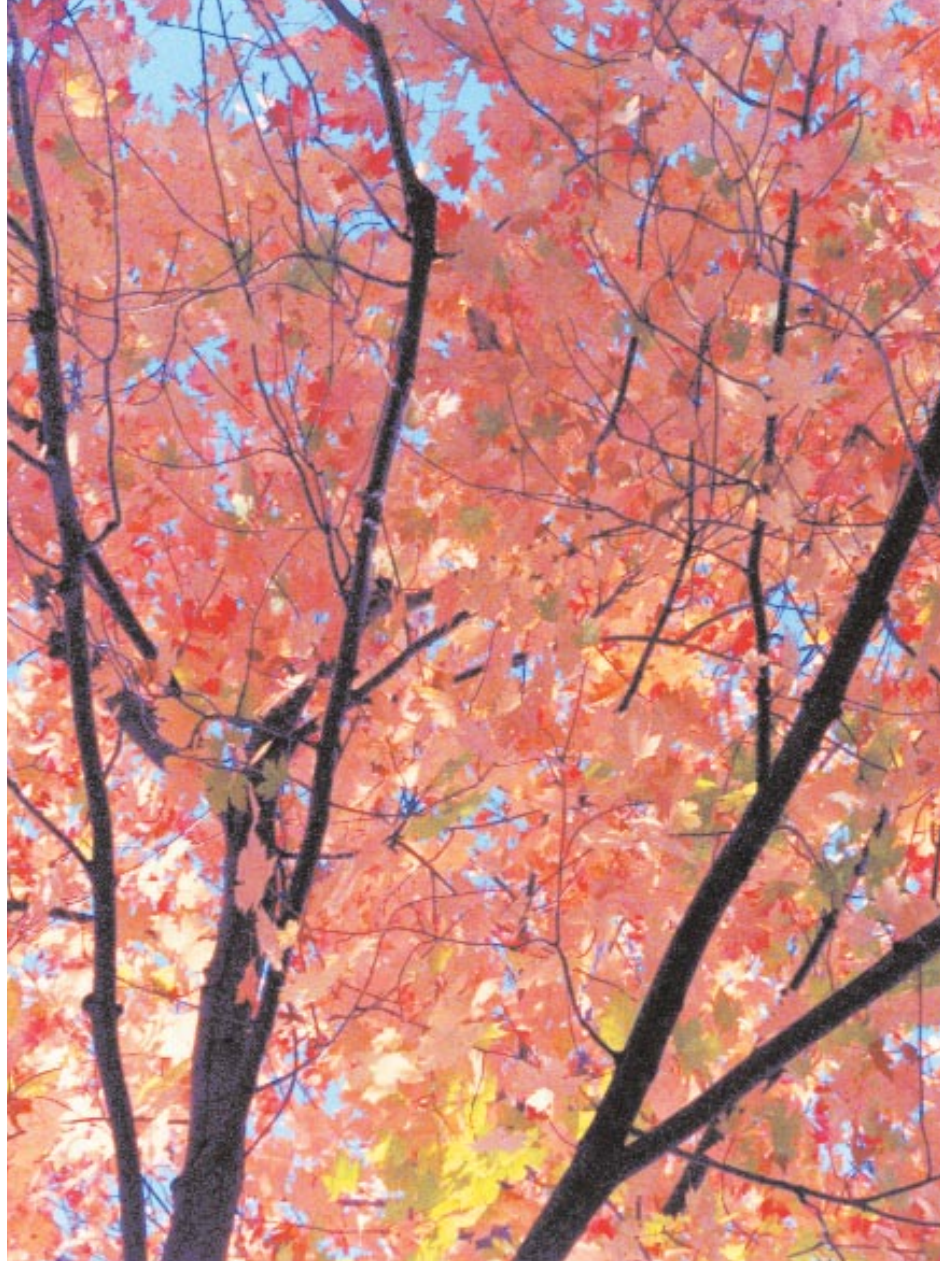
*Dallas Burtraw and Karen Palmer*

This summer, we organized a workshop that provided assistance to states looking to satisfy a key requirement in the Regional Greenhouse Gas Initiative (RGGI), an agreement to lower carbon dioxide (CO<sub>2</sub>) emissions generated by the Northeast power sector. The workshop was sponsored by RFF with financial support from the Energy Foundation, Kendall Foundation, and William and Flora Hewlett Foundation.

In December 2005, after two years of planning, the governors of seven Northeast states signed a Memorandum of Understanding outlining an agreement to implement RGGI, with Maryland joining as the eighth participating state this spring. The initiative will stabilize CO<sub>2</sub> emissions from the region's power sector between 2009 and 2014, leading to a 10 percent reduction from current levels by 2019.

A crucial feature in the program design is that at least 25 percent of each state's emissions allowances will be allocated to broadly defined public purposes. Possible ways to satisfy this requirement include direct allocation to consumers, energy-efficient firms, or non-emitting generators. Alternatively, allowances could be converted to cash through an auction and the funds dispensed for various purposes.

Exploring this second option, the workshop brought together nearly 120 stakeholders and state officials en-



gaged in RGGI and experts on various aspects of using auctions. The collective wisdom of the workshop speakers provides some important insights into how best to proceed in designing a CO<sub>2</sub> allowance auction under RGGI, should the states chose to use one. Importantly, as Joe Kruger of the National Commission on Energy Policy pointed out in a wrap-up discussion, the auction design should be aligned with the auction goals, which need to be clearly articulated.

Most speakers recommended conducting laboratory experiments to help understand how the auction works and how changes in various design elements affect its performance. Such ex-

periments pack a “dual punch,” said University of Virginia’s Charlie Holt: they provide consultants with the confidence to make recommendations that are relatively free of assumptions and policymakers with a clearer view of how the policy might work.

Evan Kwerel of the Federal Communications Commission (FCC) emphasized that collaboration between government, industry, and academics was essential in designing the FCC airwave auctions, one of the best-known examples in the United States. By fostering such collaboration in the case of RGGI, the workshop provided a crucial stepping stone in the planning process. ■