

RESOURCES & ENVIRONMENT

York Public Service Commission (PSC). The people who received the PSC version cut their electricity use by about seven percent; those who received the utility's version, not at all. A 1979 U.S. Department of Energy mailing to every household in New England achieved significant results by including a plastic showerhead flow restrictor with each pamphlet. Apparently, Stern says, the flow restrictors were like a "foot in the door." Once people used them, they were more receptive to other conservation measures.

Consumers also seem to be willing to conserve as long as they feel that they are not losing control over their surroundings. In 1975, for example, the U.S. Army installed gasoline regulators in some vehicles to prevent rapid acceleration and reduce fuel consumption. The experiment backfired when resentful drivers removed about 10 percent of the devices. But Princeton University researchers found that consumers would readily accept similar equipment if it were designed so that users could temporarily override the system.

In general, Stern believes, an energy policy that equates conservation with sacrifice and loss of freedom will not work (as President Carter discovered). In direct appeals, stressing efficiency and "energy independence" is a better formula. Depending only on high fuel and electricity prices to foster conservation at home is doomed to produce disappointing results.

Why Acid Rain Still Falls

"Can We Stop Acid Rain? And Who Should Pay the Bill?" by James Krohe, Jr., in *across the board* (Feb. 1984), The Conference Board, 845 Third Ave., New York, N.Y. 10022.

Acid rain has left hundreds of lakes throughout the American Northeast and parts of Canada devoid of fish life. It threatens many others with the same fate. Yet relief may be a long time coming. How acid rain is created is no mystery; *where* it is created is another question.

Coal combustion is the chief source of acid rain. Sulfur oxides released during burning are transformed in the atmosphere into sulfates and then into sulfuric acid, which falls in raindrops, explains Krohe, an *Illinois Times* editor. Every year, coal-fired factories and power plants spew 28 million tons of sulfur oxides into the atmosphere. In 1981, the National Academy of Sciences (NAS) estimated that a 50 percent reduction in the acidity of Northeastern rain would be needed to revive the region's ailing lakes, but could not say what reductions in sulfur oxide emissions would be needed to meet that goal.

Nor can it be established for certain *whose* sulfur oxide pollution should be curbed. Midwestern industry is the obvious culprit, especially since it is heavily reliant on the high-sulfur coal that is so plentiful in Illinois, Indiana, and Ohio. But a 1983 NAS study concluded that wind and weather patterns make it difficult to pin the blame for a lake's death on any pollution source more than 350 miles away.

Scientists' uncertainty has stiffened Midwesterners' resolve to fight

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costly proposals to cut sulfur emissions. "For every lake that will die in the Northeast if acid rain is not controlled," says Krohe, "there is a Midwestern coal town which may die if it is." Already, one-quarter of Illinois's 16,000 coal miners are out of work. If Washington forces Midwestern utilities and factories to shift to low-sulfur coal (mined in the West and in Kentucky and West Virginia), Midwestern coal sales would drop by another 44 to 67 percent. An alternative is to require industrial smokestack "scrubbers" to remove sulfur oxides in existing plants (federal law already mandates them for big new ones). But a single scrubber can cost \$200 million. A reduction of eight million tons in annual sulfur oxide emissions would cost \$40 billion by 1995.

Krohe doubts that scientists or politicians will be able to agree on what to do about acid rain any time soon. In the meantime, low-cost reductions of acid rain and its effects are possible—coal "washing" to remove sulfur, energy conservation, applying acid-neutralizing lime to lakes. Writes Krohe, "It's hard to imagine an acid-rain program that won't cost anyone anything, [but] it isn't hard at all to imagine one that costs more than it needs to."

ARTS & LETTERS

What Monuments Are For

"A Meaning for Monuments" by William Hubbard, in *The Public Interest* (Winter 1984), 20th & Northampton Sts., Easton, Pa. 18042.

Before it opened on Veterans Day 1982, the modernistic Vietnam Veterans Memorial in Washington, D.C., was scorned by some critics as a "black ditch of shame." The controversy soon faded. Even so conservative an observer as newspaper columnist James J. Kilpatrick wrote upon seeing the monument, "I could not speak. I wept."

Hubbard, a UCLA architect, shared that reaction. What is so moving about the monument—a V-shaped wall of polished black granite, its top level with the ground behind it, sloping down 10 feet into the earth at its vertex—is the roster of 58,000 dead and missing U.S. servicemen carved row after row in the stone. But Hubbard says that tears are not enough. The Vietnam Memorial (like other recently erected monuments) may intensify viewers' emotions, but it does not *clarify* them. The memorial neither gives a symbolic explanation of why the soldiers died nor helps viewers gain perspective on their feelings about the Vietnam War.

Traditionally, Hubbard says, "by asking us to contemplate imaginatively the ideas they embody, monuments prod us to think through the implications of our social ideals." But since World War II, architects have increasingly followed the path blazed by modern artists, creating monuments, buildings, and other structures that are abstract and de-