

VOLUME 23 | NUMBER 4 | DECEMBER 2005

# PERC REPORTS

THE MAGAZINE OF FREE MARKET ENVIRONMENTALISM

IRRESPONSIBLE  
POLICY

Congress, Not EPA,  
Should Make the Laws

ADVERTISING FOR  
CLEAN WATER

Doing Good While Doing Well

THE SHIFTING  
ROLES OF NGOs

Moving Toward a "Superpower"

RESTORING LIFE  
TO DAMAGED LAND

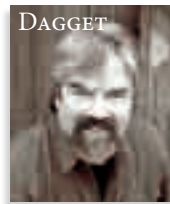
And Why Are the Tiptons Ignored?



EDITOR Jane S. Shaw  
 ASSOCIATE EDITOR Linda E. Platts  
 ART DIRECTOR Mandy-Scott Bachelier

PERC Reports has two major goals—helping people think about environmental protection in new ways and showcasing those who protect the environment through individual initiative. This issue touches on both.

In our cover story, “Restoring Life to Damaged Land,” **DAN DAGGET** writes about two entrepreneurs, Tony and Jerrie Tipton, who can coax a pile of cyanide-laced rock into producing thick grass and shrubs. In this excerpt from Dagget’s book *Gardeners of Eden*, we learn about their innovations. But the Tiptons’ story also leads Dagget to contemplate why so many people who think of themselves as environmentalists don’t seem to care about what the Tiptons are accomplishing.



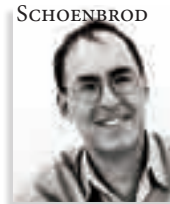
DAGGET



FERRIE

Another environmental entrepreneur, Paul Polizzotto, is featured in “Advertising for Clean Water,” by **CAROL FERRIE**. Polizzotto grew up surfing on the West Coast where he suffered ear and bronchial problems apparently caused by polluted ocean water. He has developed “Adopt-A-Waterway” to improve the quality of the water that cities discharge into rivers and oceans.

Thirty years ago, **DAVID SCHOENBROD** was in the vanguard of the environmental movement as an attorney for the Natural Resources Defense Council. Later, as a law professor at New York University Law School, he puzzled over what went wrong with environmental policy. He shares his conclusion in “Irresponsible Environmental Policy,” excerpted from his book *Saving the Environment from Washington*. Hint: The trouble is Congress.



SCHOENBROD

The “NGO swarm” of anti-free traders and so-called environmentalists who disrupted the 1999 World Trade Organization meeting in Seattle revealed to the world how powerful nongovernmental organizations had become. **BRIJESH NALINAKUMARI** and **RICHARD MACLEAN** have studied NGOs exhaustively and in a short essay based on their research they suggest that business has a lot to do to catch up with them.

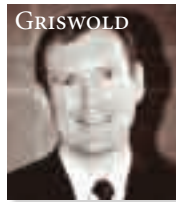


NALINAKUMARI



MACLEAN

There are many arguments against agricultural subsidies, including their environmental impacts. **DANIEL GRISWOLD** of the Cato Institute spells these out in “Wreaking Environmental Harm,” adapted from a longer paper on farm subsidies by Griswold, Stephen Slivinski, and Christopher Preble.



GRISWOLD

Even more than usual, readers will enjoy the stories in Linda Platts’ “Greener Pastures” column. You’ll find out what elephants and chili peppers have in common, and what brings McDonald’s and free-ranging pigs together. Dan Benjamin’s “Tangents” sheds new light on the precautionary principle; Terry Anderson explains the dangers of open access. And don’t miss our letters to the editor.

Finally, if you value PERC Reports and other PERC products and activities, please open your wallet or pocketbook and help us keep disseminating insights. Terry Anderson writes to you in the centerfold of this issue and includes some photos reflecting PERC’s past 25 years.

*Jane S. Shaw*

**EXECUTIVE DIRECTOR** Terry L. Anderson  
**SENIOR FELLOWS** Daniel K. Benjamin  
 David D. Haddock  
 P. J. Hill  
 Donald R. Leal  
 Gary D. Libecap  
 Robert E. McCormick  
 Roger E. Meiners  
 Andrew P. Morriss  
 Jane S. Shaw  
 Randy T. Simmons  
 Richard L. Stroup  
 Walter N. Thurman  
 Bruce Yandle

**DIRECTOR OF PROGRAMS** Monica Lane Guenther  
**DIRECTOR OF DEVELOPMENT** Laura E. Huggins  
**DIRECTOR OF RESEARCH** Donald R. Leal  
**DIRECTOR OF COMMUNICATION & EDUCATION** Jane S. Shaw  
**SENIOR RESEARCH FELLOW** Dominic Parker  
**RESEARCH FELLOWS** Alison Berry  
 Holly L. Fretwell  
 J. Bishop Grewell  
 Laura E. Huggins  
**RESEARCH ASSOCIATE** Tim Fitzgerald  
**EDITORIAL ASSOCIATE** Linda E. Platts  
**OFFICE MANAGER** Dianna L. Rienhart  
**EXECUTIVE ASSISTANT** Michelle L. Johnson  
**ADMINISTRATIVE ASSISTANT** Jean M. Modesette  
**CONFERENCE COORDINATOR** Colleen Lane  
**PROGRAM COORDINATOR** Carol Ferrie

BOARD OF DIRECTORS

Andrew S. Martzloff, Chairman <i>Bitterroot Capital Advisors, LLC</i>	David R. Atkinson <i>Atkinson &amp; Co.</i>
Thomas E. Beach <i>Beach Investment Counsel, Inc.</i>	Jean A. Briggs <i>Forbes</i>
David G. Cameron <i>Dana Ranch Co., Inc.</i>	Tyler Dann <i>Harlem Valley Investing Co., Inc.</i>
Kimberly O. Dennis <i>Searle Freedom Trust</i>	William A. Dunn <i>Dunn Capital Management, Inc.</i>
Joseph N. Ignat <i>Blackburn Capital, LLC</i>	Paul J. Ingrassia <i>Dow Jones Newswires</i>
Frank-Paul King <i>King/Strategic</i>	Dwight E. Lee <i>Gagnon Securities, LLC</i>
Paula V. Leuschen <i>West Pass Ranch</i>	E. Wayne Nordberg <i>Ingalls &amp; Snyder, LLC</i>
George F. Ohrstrom <i>The Ohrstrom Foundation, Inc.</i>	Leigh H. Perkins <i>The Orvis Company, Inc.</i>
Vernon L. Smith <i>ICES, George Mason University</i>	John F. Tomlin <i>Conservation Forestry, LLC</i>

PERC REPORTS | Volume 23 | DECEMBER 2005  
 Number 4

ISSN 1095-3779 © 2005 BY PERC

LETTERS: Address letters to PERC,  
 2048 ANALYSIS DRIVE, SUITE A, BOZEMAN, MONTANA 59718-6829  
 PHONE: 406.587.9591  
 Include daytime phone number. Letters may be edited.

BACK ISSUES: Available in PDF format on our web site at  
[www.perc.org/publications/perc\\_reports.php](http://www.perc.org/publications/perc_reports.php).

PHOTO CREDITS: Cover: Nevada scene by Galen Rowell. Pages 12-13: Leigh Perkins by Noel Sutherland; PERC group by Lynn Donaldson; Mike Pence & Elbert Bressie by Canyon Publications; fishing boat by Roy H. Hansen. Charles Russell, *Toll Collector*, courtesy Montana Historical Society; Winslow Homer, *Scene on the Back Bay Lands*, courtesy of the Museum of Fine Arts, Houston; illustrations, courtesy of Max McGraw Wildlife Foundation.

# RESTORING LIFE TO DAMAGED LAND

## AND WHY ARE THE TIPTONS IGNORED?

By Dan Dagget

*Tony and Jerrie Tipton can take land that is as close to biologically dead as land gets, and they can return it to a state of health, vitality, and diversity that most of us would call miraculous.*

© Dan Dagget



In the central Nevada desert, near the tiny almost-ghost town of Mina, lives a couple who are the most effective restorers of ecosystems I have found in more than twenty years of searching. Over the past few years I have been trying to figure out why so few people know about them.

Tony and Jerrie Tipton can take land that is as close to biologically dead as land gets, and they can return it to a state of health, vitality, and diversity that most of us would call miraculous. They can do this with land that has been rendered ecologically comatose by abuse, overuse, pollution, neglect, or whatever, and they can restore it to the point that it blooms with grasses and shrubs and is reinhabited by birds, lizards, deer, bugs, and all manner of critters. Even more impressively, they can do this in the most difficult of conditions in the high desert of Nevada where ten inches of rain in a year is a “wet spell,” and three inches is more usual.

Al Medina of the Rocky Mountain Research Station of the U.S. Forest Service went to see for himself. He told me, “If they [the Tiptons] had come to me and said they thought they could do something like this, I wouldn’t have bothered to laugh at them. I would have thought they were too crazy to laugh at. But they did it, and I’ve seen it, and it’s still there [three years after completion].”

The ecological disaster the Tiptons tackled was a three-hundred-foot-high pile of crushed rock called a heap-leach pad. This pile consisted of low-quality gold ore that had been extracted from a pit and crushed to rocks fist-size or smaller and piled on a huge sheet of sloped, foot-thick black plastic with a collection basin at the bottom. A solution containing cyanide was then sprayed on the pile to trickle down through the rocky ore and dissolve the minute amounts of gold it contained. The pile was sprayed with this solution for several years,

*The tools the Tiptons chose could hardly be simpler—native plant seeds, hay, and straw (to add organic matter to an environment that had none), a few experienced trucks, and cows. Yes, cows.*

© Dan Daggett



until the gold dwindled to amounts too small to make the operation profitable.

At that point, the company sprayed water on the pile to wash out the cyanide. This was done in order to make the pile capable of growing enough plants so that the mining company could say it had reclaimed the heap and avoid forfeiting the guarantee it had posted with the government in order to be permitted to mine the area.

But there was no soil. In fact, there were hardly any of the fine particles of rock that are the raw material for soil. And the pile had literally been sterilized by a lethal substance—cyanide. This made it even more inhospitable to plants, most of which require some organic material in the soil in order to grow.

The most serious problem was a crust of salt. In Nevada's dry climate, a portion of every drop of the highly mineralized water that had been sprayed on the pile had evaporated, leaving behind mineral salts and cov-

ering the cyanide-sterilized rock pile with a crust of salt that made it almost impossible for plants to grow.

The mining company had tried to reclaim this toxic rock pile with the best methods and machinery modern technology had to offer. Using a device called a hydroseeder, they had sprayed it with a mixture of seeds, fertilizer, and a plasticized mulch (the same sort of stuff highway departments spray onto road construction sites), and then they had irrigated it. After all this effort, the only thing that grew in any abundance was a nonnative annual weed named halogeton, which is poisonous to many creatures that might try to eat it. Because these plants are annuals, they died after one season. The desert wind blew away what was left of them, and the company was back to where it started.

When the Tiptons asked for a chance to try their technique on the pile, the mining company figured it had little to lose. The tools the Tiptons

chose could hardly be simpler—native plant seeds, hay, and straw (to add organic matter to an environment that had none), a few experienced trucks, and cows. Yes, cows.

## ***THE TIPTONS TRY THEIR HAND***

First, the Tiptons dragged a length of railroad rail over the part of the pile they intended to treat, breaking up the salt crust. The rail also knocked the sharp points off the rocks so they wouldn't make the cows footsore. Then they scattered the seed, spread the hay and straw, and released the cattle. The cows ate most of the hay and a little of the straw, and what they didn't eat they trampled into the rocks along with the seeds and the microbe-rich organic fertilizer they provided from their guts. After a few short days of this treatment, the Tiptons removed the animals and let the mixture gestate.

Six months later, a community of native plants had grown where the

Tiptons had conducted their trial. More amazing than that, the salt absorption ratio on the treated part of the pile had been reduced to 3.6, well within the limits considered necessary for plants to germinate and survive, and well below the target of 10 required for bond release. The only explanation available was that the organic waste the animals had processed and injected into the rocks had created a soil microbial community that transformed the area.

At this point you're probably wondering why you haven't heard of these two eco-restorationists. And you're probably thinking that universities, governments, the U.N. must be ringing their phone off the hook trying to sign them up to hold seminars and workshops and conduct restorations.

### *WHY DISREGARDED?*

The Tiptons should be highly respected and wealthy, but they're not. Instead they live in a run-down, purple Greyhound-style bus converted to an RV. The bus is rusting and faded. Its tires are cracked from the sun. One of the last times I saw this fading piece of kitsch it was parked in the middle of a scrap yard surrounded by various kinds of rusting mining equipment—evidence of the job the Tiptons have had to take up to make ends meet—mine salvage.

The more I became aware of this astonishing discrepancy between what is and what ought to be, the more I was convinced that it had to reveal something substantial about the way our society works, or rather the way it doesn't work, at least with regard to environmental matters.

Perhaps no one's beating a path to the Tiptons' door because no one knows about them. But Tony and Jerrie have given presentations to dozens of forums, to a Secretary of the Interior,

to congressmen, to senators, to government land managers, to college professors, to investors, and to audiences that have included leaders of environmental groups. Articles have been written about them. I included their story in a book I wrote that has sold out three printings and is on its way to selling out a fourth.

The methods they use could be too artificial or too intrusive for the environmentally concerned among us to support. But the tools they use are all natural and organic enough to be bought at your local organic-gardening store.

Perhaps these problems are already being solved by conventional means, so there's no reason to solve them with animals and hay and hard work. But they tackle challenges for which technology and conventional thinking have failed—in some cases several times—and they have succeeded, in spades.

Or perhaps the Tiptons may just be an anomaly. Maybe they truly can do what they do, but no one else can—like a high-wire walker. But that's not true either. Others, hundreds, maybe thousands, have used the same methods the Tiptons use, and while most haven't created successes of the same magnitude as the Tiptons, some have. These other successful restorationists may not live in a rusting RV like the Tiptons, but they do live in a similar state of exile and disregard.

### *ATTEMPTING TO SHARE THE MESSAGE*

When I realized what the Tiptons had achieved, I made a special point of taking this information to my environmentalist peers. I showed them the cyanide rock pile example, along with others, such as a mine tailings restoration. In many cases, the response was

positive. A member of a group who saw my slide show and then visited some of those same projects firsthand wrote back to the conference organizer: "You not only changed my mind, you changed my life."

But in presentations to people who work for or lead the groups that receive most of those billions that we spend on environmental issues I have been treated as an exile myself. When I showed those environmental leaders photos of what the methods used by the Tiptons could achieve, there was rarely a flicker of interest. It was as if I were showing pictures of dog tricks to a bunch of cat fanatics.

This was true even when the people to whom I was making my presentation were involved in "saving" or "protecting" lands where similar problems were epidemic. Though they were faced with similar problems and were able to do little if anything about them, not one ever expressed any interest in trying the method to see if it would work in their case.

I want to make it clear here that what I was showing these people was not chump change. Not only were these successes impressive solutions to serious problems, but they were solutions that were achieved in most cases by people whom we normally think of as being at odds with one another (ranchers and environmentalists, vegetarians and meat producers). That matter alone, in my opinion, should have piqued my listeners' interest. In a world filled with confrontation and conflict, it would seem that a method that solves problems by bringing people together rather than by pitting them against one another should not have been passed over lightly.

On some occasions, I would press the case. I pressed especially hard with

*This sloping hill was a heap-leach pad. The organic waste the animals had processed created a soil microbial community and transformed the area*

© Dan Dagget



one individual who I knew had seen some of these solutions in person. Before he got a job with a regional environmental group, he had even participated in a collaborative management group with people who used some of these same techniques. I asked him if there was some really tough problem his group was struggling with. “I’d like to help,” he said, “but lately I’ve become more interested in the idea of self-willed land, of what the land can become if we leave it alone. I believe that’s the only way we can truly heal the damage we’ve caused.”

### **LEAVE IT ALONE**

This is the essence of contemporary environmentalism—this assumption that the only way we can really heal the land is to protect it from impacts created by humans: to “leave it alone.” This assumption, that the only way we can

heal the land is to protect it, isn’t just the domain of activists in the environmental trenches, it is woven into the very essence of our society’s awareness of what we call “the environment.” It is so all-pervading and so ingrained that most of us don’t even think of it as an assumption. We think of it as a matter of fact, like gravity. That is why articles that deal with land issues treat the word “protecting” as having the same meaning as “healing” or “restoring.” It is why those articles never explain how protecting the land will heal it, because those two concepts are considered by so many to be identical. It is why we never hear about the ill effects of protection. There shouldn’t be any if protecting and restoring and healing are identical.

Yet this assumption has brought us to the absurdity that the actual condition of a piece of land is irrelevant to determining if it is healthy or not. If it is

“used” by humans to produce something for our benefit, crops or other products, for instance, it is considered to be unhealthy. This is true even if the “used” land is a virtual cornucopia of birds and fishes and other diversity.

#### NOTE

1. See *Beyond the Rangeland: Toward a West That Works*, by Dan Dagget (Flagstaff, AZ: Good Stewards Project, 1998).

---

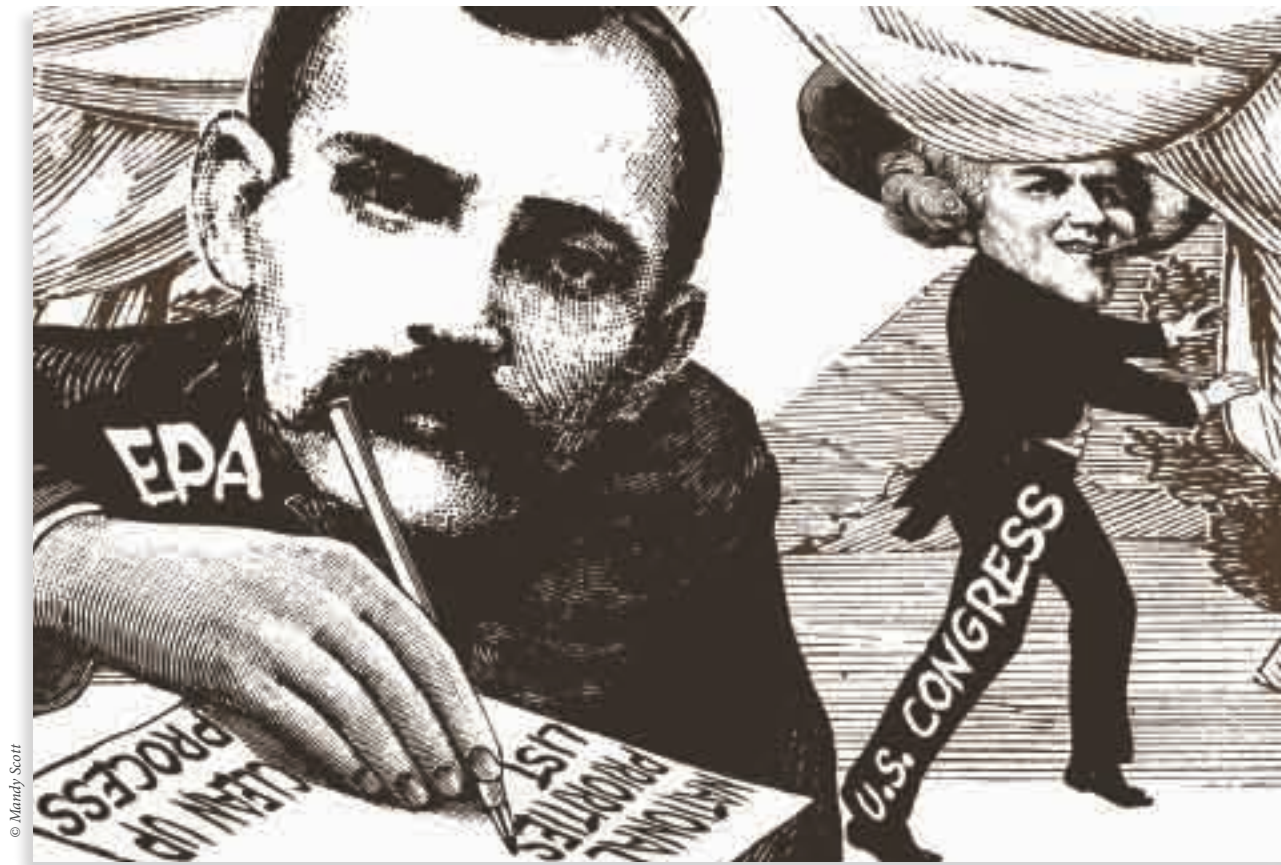
*Dan Dagget is a writer based in Santa Barbara, California. This essay is excerpted from *Gardeners of Eden: Rediscovering Our Importance to Nature*. The book is distributed by the University of Nevada Press (877.682.6657).*

# IRRESPONSIBLE ENVIRONMENTAL POLICY

## CONGRESS, NOT EPA, SHOULD MAKE THE LAWS

By David Schoenbrod

By leaving lawmaking to the EPA, Congress sashays away from responsibility. It bestows a right to environmental protection without imposing any burden on itself. Anger falls on the EPA, not the legislators.



Although Congress enacts all federal environmental *statutes*, these statutes leave the making of most federal environmental *laws*—commonly known as regulations—to the Environmental Protection Agency. The difference between Congress making laws (as the U.S. Constitution instructs it to do) and leaving that job to the EPA is a critical one.

If Congress voted on the regulations that control private conduct, such as a requirement that electric-power plants meet certain emission limits, legislators would face feedback. They would inevitably anger those voters who want a stricter, more protective law as well as those who want a weaker, less burdensome one.

By leaving lawmaking to the EPA, legislators sashay away from such responsibility. They bestow a right to protection without themselves imposing any burden. The anger falls on the EPA because it is left with the job of allocating the burdens among pollution sources. The EPA takes the blame for denying rights and imposing burdens.

Congress does sometimes impose the laws itself, but generally as a last resort. More often, it tells the EPA to set emission limits that are “reasonable” or to set air-quality standards to “protect health” with a “reasonable margin of safety,” knowing full well that these supposed standards are as elastic as a rubber band. So the EPA is left to decide how clean is clean enough and how to allocate the cleanup burden.

The scope of the EPA’s discretion is in some ways even broader today than it was in the early 1970s. Then, the pollution problems, such as raw sewage in rivers and black soot from factories, seemed obvious. Now, science can detect vanishingly small levels of pollution, hypothesize equivalently small risks, and get rid of them at costs that are as high as the risks are small. So the EPA is confronted with a wide

*In an average year the EPA now issues five “major” rules, officially defined as rules with benefits or costs greater than \$100 million. Our legislators can surely vote on five pollution-control laws per year.*

© Erich Schlegel/Dallas Morning News



range of possibilities in deciding such issues as how clean is clean enough.

The Supreme Court today squares such delegation of lawmaking power with the US Constitution by claiming that Congress is making the laws and the EPA is only implementing them, but the justices know this is a pretext. They let Congress decide whether to delegate.

### ***WHAT LEGISLATORS CLAIM***

Legislators’ excuses for leaving the lawmaking to agencies have changed over time. At the dawn of the twentieth century, it was said that Congress had not really left policy-making discretion to the experts in the agencies because the statutes had instructed the experts to use scientific methods to deduce the correct laws.

Later, Congress had a new excuse: It did not have the time to do all of the lawmaking work of these agencies. More recently, the argument is that Congress should leave making pollution laws to the EPA because the agency produces stronger laws than does Congress.

None of these excuses withstands scrutiny. Science does not dictate uniquely correct environmental laws. If Congress made environmental laws, the legislators would require EPA scientists and policy analysts to provide them with the information about health effects and control technologies that they now provide to EPA lawmakers and would also require these officials to propose statutory language. State and local legislators would seek similar help from their environmental agencies. The laws that would come from legislators would not necessarily be the same as those that would come from the EPA, but elected legislators would be accountable for the laws at the polls.

If Congress were the lawmaker, the public could be given an opportunity to comment on the agency’s proposed recommendations as it now comments on proposed agency laws. There would thus be no loss in public participation. What would be lost is agency rationalization. And good riddance, because the elaborate rationalization needed for agency laws to survive judicial review slows the EPA’s response to new science.

Lack of time is also no excuse for Congress to delegate its responsibility. In an average year the EPA now issues five “major” rules, officially defined as rules with benefits or costs greater than \$100 million (Crews 2003). Our legislators can surely take the time to vote on five pollution-control laws per year. The



EPA of course also issues many minor pollution laws, but these present no practical impediment to the legislators' taking responsibility. The number of minor laws would drop precipitously were Congress to limit federal involvement to those pollution-control issues truly requiring federal attention. The balance could be handled expeditiously, yet in a way that would leave the legislators responsible.

## CONGRESS ACTS WHEN IT WANTS TO

Supreme Court Justice Stephen Breyer pointed out in an article (written before he became a judge) that Congress could enact a statute requiring that all agencies submit laws for enactment through the legislative process (Breyer 1984). Congress never accepted Justice Breyer's idea, but we had a recent impromptu experiment with it.

In 2003, a federal district court judge held that the Federal Trade Commission lacked authority to promulgate its "Do Not Call" law, which would allow people to opt out of annoying sales calls. The next day the House and the Senate passed legislation authorizing the program.

The legislators are capable of accepting responsibility when they want to, and they can arrange to do so even for run-of-the-mill regulatory laws. Justice Breyer offered many variations on this approach. One was an expedited legislative process for agency recommendations, but with the provision that a set fraction of the legislators could require that an agency law be ejected from the expedited process and sent to committee for consideration.

Justice Breyer's idea is not an ideal solution—that will come only with a smaller federal role—but it is better than what we have now. In his scheme, power would shift from unelected agency staffers to unelected congressional staffers, but with a critical difference: Elected legislators would have to take responsibility for the laws in the end.

Delegation often leads in precisely the opposite direction. The EPA often deals with controversial issues by stalling, as it did with lead in gasoline and interstate pollution, beginning in the 1970s. Some of the largest reductions in pollution have come when legislators intervened to push pollution control at a much faster pace than the EPA had previously achieved.

Examples include emission controls on new cars in 1970 and acid rain and hazardous air pollutants in 1990. Commenting on a Senate vote on global warming that environmental groups hailed, the president of Environmental Defense, Fred Krupp, stated, "When these things come out of the back room into the sunshine, we tend

*If the legislators themselves made the laws, they would be personally responsible for the health hazards to which the public remained exposed as well as the burdens imposed on the public.*

to win." (Fialka 2003).

If the legislators made the laws, they would be personally responsible for the health hazards to which the public remained exposed *and* the burdens imposed on the public. Take for example what happened under a law Congress enacted to prohibit all carcinogens in food (the 1958 Delaney clause). When nearly twenty years later the FDA determined that saccharin was a carcinogen and had to be removed from the market, there was a public outcry. The outcry was aimed at Congress rather than the FDA because the FDA was enforcing a law that Congress had written. Critics pointed out that saccharin was at worst a very weak carcinogen and protected the lives of diabetics who cannot tolerate sugar. Credible experts predicted that the ban on saccharin would shorten more lives than it would extend. Congress responded by allowing saccharin to be sold.

## A TWO-WAY STREET

As the saccharin story illustrates, representation in our republic is supposed to be a two-way street. The Framers intended to force representatives not only to hear the demands of the people but also to explain to the people why their every demand cannot be satisfied. If legislators made the laws themselves, they would have to explain why some risks cannot be eliminated. Legislators understandably prefer to tell the EPA to make laws to get rid of all risks. The EPA cannot do this, and that is the source of public distrust.

The problem, in short, is Congress, not the EPA. Congress itself has gone through a learning process. It has made the Clean Air Act more realistic as time has gone by. Yet meanwhile it has piled new, equally impossible tasks on the EPA. The ultimate genesis of the problem is that we, the public, want a clean environment without the burdens of producing it. If it made the laws, Congress would have to tell us that it cannot be so.

## REFERENCES

- Breyer, Stephen. 1984. The Legislative Veto after Chadha. *Georgetown Law Journal* 72: 785–818.
- Crews, Clyde Wayne, Jr. 2003. *Ten Thousand Commandments: An Annual Snapshot of the Federal Regulatory State*. Washington, DC: Cato Institute.
- Fialka, John J. 2003. Senate Rejects Mandatory Curbs on Gas Emissions in 55–43 Vote. *Wall Street Journal*, October, 31.

---

*David Schoenbrod is a professor of law at New York Law School and an adjunct scholar with the Cato Institute. This article is excerpted from his book Saving Our Environment from Washington (Yale University Press, 2005). A previous article by Schoenbrod can be found in the March 1999 PERC Reports.*

# ADVERTISING FOR CLEAN WATER

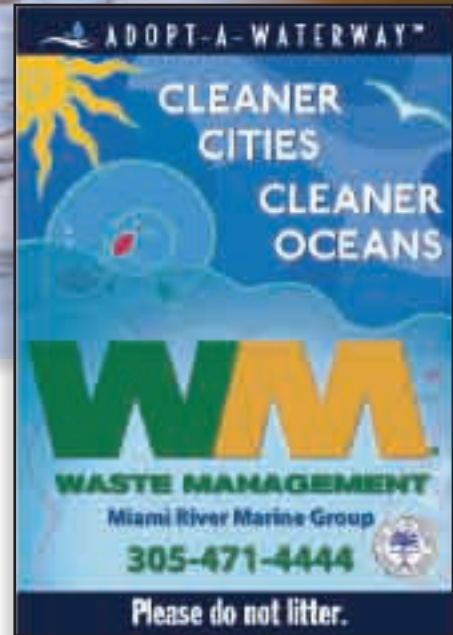
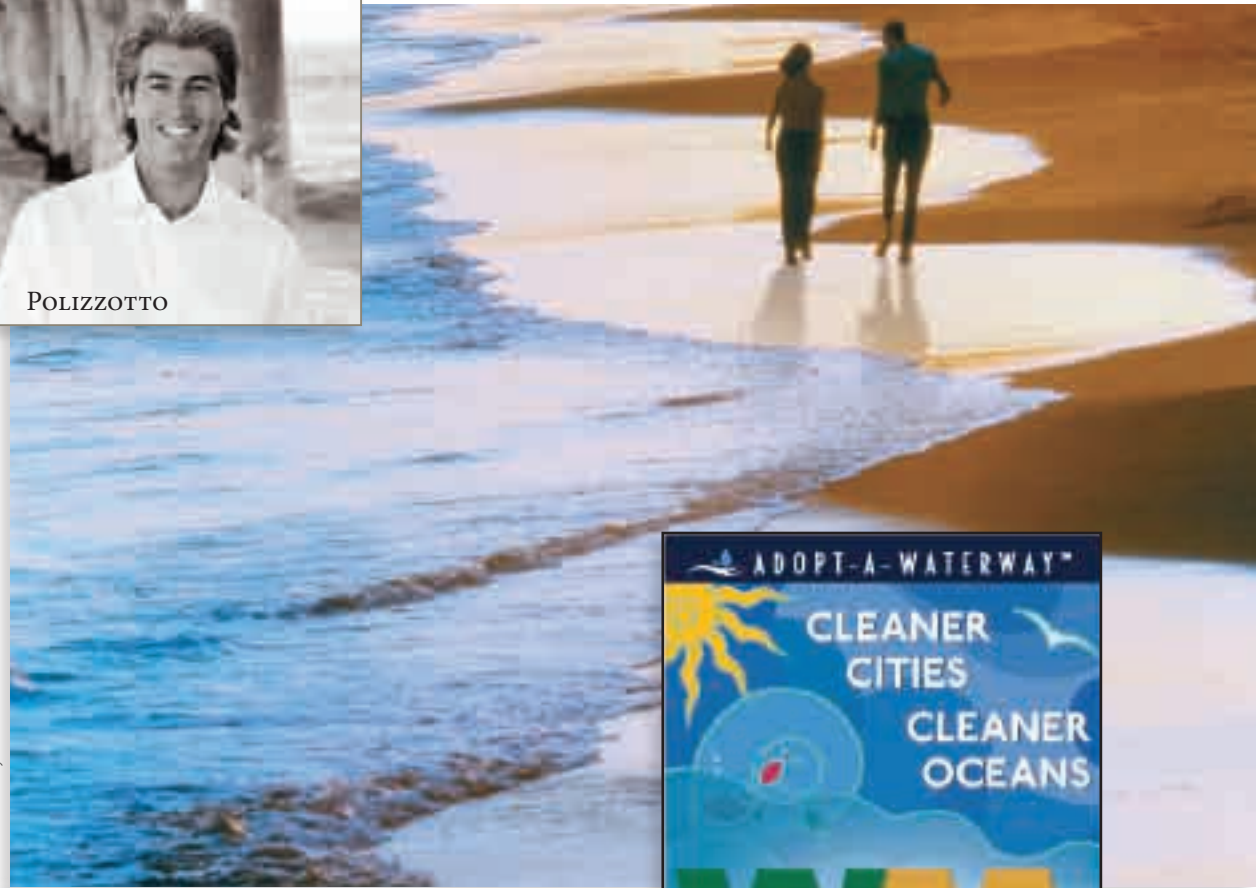
“DOING GOOD WHILE DOING WELL”

By Carol Ferrie

Modeled loosely after the Adopt-A-Highway program, Adopt-A-Waterway raises private money to help local governments inform the public about how to protect their streams and beaches.



©Robert Landay



Every year, corporations spend about \$150 billion on advertising, says Paul Polizzotto, but very little of it goes to improve quality of life. Polizzotto—surfer, businessman, and environmentalist—has figured out a way to harness some of those advertising dollars through the Adopt-A-Waterway program.

“You don’t have to take the oath of poverty to make improvements to society,” Polizzotto, 42, said from the New York City office of Environmental Communication (EC), the environmental media company he founded four years ago.

EC operates the nationwide Adopt-A-Waterway program, which provides one of those rare scenarios in environmental advocacy where everyone comes out a winner—business, government, the environment, and Polizzotto. He calls it “doing good while doing well” (which is the subtitle of the book *Enviro-Capitalists* by Terry L. Anderson and Donald R. Leal).

Modeled loosely after the Adopt-A-Highway program that cleans up littered highways, Adopt-A-Waterway raises private money to help local governments fund the cleanup of stormwater pollution as well as programs informing the public about how to mitigate the problem.

In 1998, the Environmental Protection Agency pointed to urban runoff flowing through storm drains as the leading cause of impaired water quality. The contaminants entering waterways via storm drains include litter, pesticides, fertilizers, grease, paint products, automotive fluids, animal wastes, construction debris, and household chemicals. “We are all contributors to non-point source pollution,” Polizzotto said.

To deal with this polluted runoff, the EPA requires local governments to ensure that stormwater runoff contains no

harmful levels of contaminants, but it does not provide funding for governments to comply with this mandate. This is where Adopt-A-Waterway fits in.

Polizzotto and his team solicit sponsorships from businesses and corporations that operate in the targeted area, typically coastal cities. In return, the participating businesses receive an advertising campaign that, depending on the level of sponsorship, includes road signs, television, radio, and magazine ads. Not only do the signs and advertisements promote the sponsoring business, Polizzotto said, they market the business as one that is helping to improve the environment.

Road signs used in the advertising campaign have a general message like “Cleaner Cities, Cleaner Waterways.” This, Polizzotto says, helps people to make the connection that city streets and storm drains lead directly to waterways. Business names and logos are displayed prominently on the signs, which are placed strategically along high-traffic roadways with the city’s approval.

## **LOCAL GOVERNMENT BENEFITS**

Half of the gross advertising revenue that Adopt-A-Waterway receives from corporations and local businesses is given to local governments for runoff mitigation and prevention and for public education campaigns. In Miami, for example, where Adopt-A-Waterway was implemented in 2003, Polizzotto said the city receives about \$200,000 every year for public awareness and cleanup of stormwater runoff.

The 50-percent share of revenues that the city of Long Beach, California, receives each year from its participation in the Adopt-A-Waterway program amounts to \$50,000 to \$75,000, according to Tom Leary, the city’s Stormwater Program Officer.

In a city that has operated for years with a deficit, Leary said he would never be able to fund public outreach, even though it is mandated by the EPA, without the money from Adopt-A-Waterway. The funds go directly to Leary’s office, so he decides what to do with them. A portion is awarded to local marine programs such as the Aquarium of the Pacific and Windows-On-Our-Waters, whose focus is on environmental education.

Actual stormwater cleanup technologies cost over a million dollars, Leary said, so this type of capital expenditure is not a feasible use of Long Beach’s Adopt-A-Waterway money. Although the city had hoped the program would generate more money than it has, Leary believes that changes in business conditions have hindered the program from reaching its potential. Currently there are 25 to 30 Adopt-A-Waterway signs posted on main roads throughout Long Beach. The goal is to have 89 sponsored signs.

“What if we could build brands, sell products and clean up the environment all at the same time?” is the question Polizzotto asks

the businesses that he solicits to participate in the program. Typically these three aspects of business—marketing, sales, and, environmental responsibility—are handled by separate departments within a company. Polizzotto proposes that an Adopt-A-Waterway sponsorship cover all of these bases in one package.

John Curry, East Coast public affairs director for British Petroleum, said the company’s participation in Baltimore’s Adopt-A-Waterway program was an easy choice to make since environmental education is one of BP’s top priorities. “It is well worth our investment,” Curry said.

Boeing, Comcast, Royal Caribbean Cruise Line, and the Publix supermarket chain are some of the corporations that have signed on with Adopt-A-Waterway in places such as Miami, New York, Baltimore, and several California cities. Polizzotto is expecting Detroit, Cleveland, Chicago, and the states of Massachusetts and New Jersey to soon be added to his list of government clients.

Adopt-A-Waterway represents a natural progression for Polizzotto. While practically growing up on a surfboard in California, Polizzotto became personally aware of water pollution when he and his surfing buddies suffered chronic ear and bronchial infections that were attributed to constant exposure to polluted water. His passion for the water sent him on a mission to clean it up. “I always wanted to do something to make it better,” he said.

Realizing that storm drain water was a major cause of unhealthy waterways, Polizzotto launched Zero Discharge, a method of cleaning urban and stormwater runoff before it enters storm drain systems. The company grew to 150 employees, who maintained 3,500 catch basins that were installed in the streets leading to storm drains. Stormwater was captured in the basins, transported to a purification facility, pre-treated to destroy toxins, and then discharged into the sewer system.

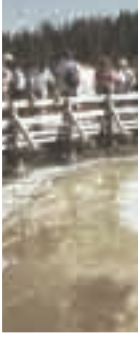
Polizzotto sold Zero Discharge four years ago when he saw another business opportunity developing. After attending stormwater committee meetings and talking to many city government officials in California, he learned that, while local governments knew what pollution prevention systems were needed to clean up their waterways, they lacked adequate funding to implement them. Polizzotto explored how this funding could be provided without hurting taxpayers, and Adopt-A-Waterway was born.

In a world where business, government, and the environment are thought to mix like oil and water, Polizzotto is proving the notion to be wrong.

---

*Carol Ferrie is a program coordinator for PERC and a free-lance writer in Bozeman, MT. Paul Polizzotto can be reached at paul@eccmedia.com.*

# CELEBRATING 25 YEARS OF FREE



# MARKET ENVIRONMENTALISM



Dear *PERC Reports* Reader:

When Chuck Leavell finished his lecture on private forestry and started pounding the keyboard with tunes he plays with the Rolling Stones, he made PERC's anniversary party a nostalgic trip for many of us, especially the children of the 60s.

Chuck's tunes also allowed those of us who had helped develop PERC to pause and think about the many friends we have made, the ideas we have generated, and the positive impact we have had on the environment. The pictures to your left recall some of those friends and suggest some of the policy areas where PERC's impact has been felt.

Since its founding in 1980, PERC has moved from being a voice in the wilderness (both literally and figuratively) to holding a prominent place on the environmental policy stage. Policies focusing on incentives—such as trust arrangements for managing public lands, individual fishing quotas, and realistic park fees—can be traced to discussions at PERC seminars and conferences.

Over the next 25 years we want to expand our influence, but we can do this only with the generous support of readers such as you.

Research and policy analysis will remain a cornerstone of PERC's agenda. Currently, we are exploring topics such as markets and climate change, trade and environmental policy, and the potential for markets to reconcile new and old demands from nature's wealth. With a growing network of scholars, we expect the flow of ideas to increase—and we must be able to support the detailed research that explores, refines, and applies these ideas.

We also need your help to educate undergraduate and graduate students, journalists, teachers, and policy makers about the tools of free market environmentalism. With former seminar participants now at the Department of Interior, the President's Council on Environmental Quality, the Naval Academy and universities such as Michigan, Yale, and Northwestern, we can legitimately boast of having an impact on both today's and tomorrow's leaders.

To go beyond the bookshelves, PERC is launching a program to put the green thumb of Adam Smith's invisible hand to work in the field. PERC's enviropreneur initiative has the mission of identifying, educating, and cultivating environmental entrepreneurs. Not only will this program bring more hands-on environmentalists into contact with markets and property rights, it will expose the entire PERC family to additional ways that markets are improving environmental quality.

We urge you to join us. Whether you support PERC's research, education, or outreach efforts, you can be assured that your investment will promote both freedom and environmental quality—values that we believe are inextricably related. Make your tax-deductible contribution to PERC today by mailing a check or credit card information in the attached envelope. Or, donate online at [www.perc.org](http://www.perc.org). Thank you for helping us pursue our mission of improving environmental quality through markets and property rights.

Sincerely,

Terry L. Anderson, Executive Director

# WREAKING ENVIRONMENTAL HARM

## ANOTHER CASE AGAINST FARM SUBSIDIES

By Daniel Griswold

*Sugar cane farms in central Florida use water from the Everglades and return it with a level of phosphorus inconsistent with the surrounding ecosystem.*



© Galen Rowell



While many farmers are conscientious stewards of the environment, the incentives of U.S. agricultural policies can lead to practices that damage the environment. Agricultural price supports and trade barriers stimulate production on marginal land, leading to overuse of pesticides, fertilizers, and other effluents.

A central if unstated purpose of U.S. farm policy is to maintain “the rural way of life,” which translates into promoting production of commodities that would not be economical under competitive, free-market conditions. This often means producing selected crops under conditions less favorable than the land and climate in other countries. As a result, trade barriers intensify production in countries that do not have a comparative advantage, necessitating more intense use of fertilizers and other inputs. Similar national priorities explain why farmers in Japan, Korea, and Switzerland on average use far more fertilizer per acre than those in Australia, New Zealand, and less developed countries where the same crops can be grown under more naturally favorable conditions (Irwin 2005).

Overuse of fertilizers and pesticides adds to runoff that pollutes rivers, lakes, and even oceans. According to the World Resources Institute, agriculture is the biggest source of nutrient and pesticide runoff into rivers and lakes in the United States (Humphreys, van Bueren, and Stoeckel 2003). According to a publication of the World Wildlife Fund, areas of the Gulf of Mexico off the U.S. coast have become “dead zones” partly because of the runoff of pesticides and nutrients from farms in the Midwest (Clay 2004).

Even where fertilizers and pesticides are not used intensively, the mere act of plowing soil eliminates forest and grass cover, leaving soil exposed for weeks at a time and vulnerable to erosion. Erosion can result in the build-up of silt in nearby rivers and downstream lakes.

A prime example of environmental damage from farm-related effluent involves sugar cane and the Florida Everglades. Federal protection of domestic sugar producers has rewarded them with a price for their product that is far above what they would receive in a free and open world market. That higher price has stimulated artificially high domestic production. One unintended result has been that cane farms in central Florida use water from the Everglades and return it with phosphorous content far above a level consistent with maintenance of the surrounding ecosystem. The high runoff has seriously reduced periphyton, such as algae, that supports bird and other animal life (Humphreys et al. 2003). Congress has allocated billions of federal tax dollars in an attempt to repair the damage caused to the Everglades by the protected sugar industry.

## WASTING WATER

Distortions caused by U.S. farm programs also lead to waste of scarce water. Worldwide, agriculture accounts for two-thirds of freshwater use, mostly for irrigation of cropland. In the United States, subsidies for agricultural water use amount to \$2 billion or more annually (Humphreys et al. 2003). Those subsidies prop up uneconomical types of farming (such as growing cotton in the Arizona desert) divert water from residential and industrial users who would be willing to pay market rates, and further damage the environment. According to one study, 25 percent of irrigated farmland in the United States suffers from excessive salinity caused by irrigation (Humphreys et al. 2003). Ending farm subsidies and protection, as well as related water subsidies, would reduce environmental damage while freeing water resources for more economically justified uses.

Farm protection also crowds out more environmentally friendly land use by artificially driving up land prices. A sizeable share of the increased income that protection and subsidies deliver to farms becomes “capitalized” in the value of the land. That is, subsidies make the land more valuable by increasing the stream of income it can produce. The higher prices for farmland raise the cost of acquiring and maintaining environmental preserves, parkland, forests, or other land-use alternatives that are more likely to preserve habitat and biodiversity (Goklany 1998).

Americans have witnessed this trade-off firsthand during the past century. Despite interventionist farmland programs, the long-term shift of economic activity away from farming to manufacturing and services has led to reclaiming of farmland for other uses, including reforestation. The number of forested acres in the northeastern United States has increased dramatically in the past century, from 59.6 million acres in 1907 to 85.5 million by 1997—primarily because of the decline in the number of farms

and farm acres in the region (Sterba 2005). By keeping marginal farmland under cultivation, however, U.S. agricultural policies have slowed the trend to reforestation.

New Zealand has experienced the same trade-off of farmland for forests and other uses. After the government dramatically reduced farm trade barriers and subsidies in the mid-1980s, including subsidized irrigation, farmland values fell sharply. While this was painful in the short run for some farmers and related businesses, the lower land values allowed marginal land to return to such uses as forestry and eco-tourism. Since the liberation of agriculture from government control in New Zealand, “the use of fertilizer has declined and there was a halt to land clearing and over-stocking [over-grazing], which had been responsible for widespread soil erosion,” write Humphreys et al. (2003).

Skeptics toward globalization raise the concern that free trade in agriculture would merely shift environmental problems from rich to poor countries, leading to deforestation elsewhere. But such worries are misplaced. Most logging and deforestation in poor countries today is driven by demand for fuel and charcoal, not farmland (Irwin 2005).

An unintended consequence of U.S. and European agricultural subsidies is that they hurt the economies of developing countries, whose output and employment are much more dependent on agriculture. Expanding trade with poor countries would help to raise incomes among the world’s rural poor. It would allow farmers and other residents to shift to more environmentally friendly forms of energy and increase the resources and technology available to better manage environmental quality.

## REFERENCES

- Clay, Jason. 2004. *World Agriculture and the Environment*. Washington, DC: Island Press.
- Goklany, Indur M. 1998. Saving Habitat and Conserving Biodiversity on a Crowded Planet. *BioScience* 48: 941–53.
- . 2002. Comparing 20<sup>th</sup> Century Trends in U.S. and Global Agricultural Water and Land Use. *Water International* 27(3): 321–29.
- Humphreys, John, Martin van Bueren, and Andrew Stoeckel. 2003. *Greening Farm Subsidies: The Next Step in Removing Perverse Farm Subsidies 2003*. Canberra, Australia: Centre for International Economics.
- Irwin, Douglas. 2005. *Free Trade under Fire* (2nd ed.). Princeton, NJ: Princeton University Press, 54–55.
- Sterba, James P. 2005. To Preserve Forests, Supporters Suggest Cutting Some Trees. *Wall Street Journal*, May 5, A1.

---

*Daniel Griswold is director of the Center for Trade Policy Studies at the Cato Institute. This article is adapted from a longer paper, Ripe for Reform: Six Good Reasons to Reduce U.S. Farm Subsidies and Trade Barriers, by Daniel Griswold, Stephen Slivinski, and Christopher Preble (Cato Institute, September 2005).*

# THE SHIFTING ROLES OF NGOS

## MOVING TOWARD A "SUPERPOWER"

by Brijesh Nalinakumari & Richard MacLean

Nongovernmental organizations (NGOs) used to be gadflies and outsiders challenging businesses and governments (think Greenpeace and Public Citizen, for example). Today, however, NGOs are moving in new directions.



© David Burrow

Nongovernmental organizations (NGOs) used to be gadflies and outsiders challenging businesses and governments (think Greenpeace and Public Citizen, for example). Today, however, NGOs are moving in new directions.

Some, for example, are acting increasingly like government agencies, issuing a new generation of de facto regulations in the form of standards, guidelines, and certifications. Others are shifting to market-based approaches and cooperating with business in order to effect change.

Until recently, it has been governments that defined corporate responsibility, while companies tracked the environmental, health, safety, and social responsibility metrics dictated by those laws and regulations (MacLean and Nalinakumari 2004). Business executives responded to these issues narrowly, viewing them as a public relations or a regulatory compliance problem.

In the future, however, NGOs increasingly will define a new generation of metrics, certify the results, rank relative performance, and set the minimum thresholds for responsible corporate behavior. This will be a world where corporations can have either limited or significant influence, depending on their business strategies.

### WHAT ARE NGOS?

Nongovernmental organizations track nearly every possible issue and operate from all parts of the world. They can be private agencies that support international development or indigenous or religious groups organized nationally or regionally. They can be citizen groups that raise awareness among the public and influence government policy. Probably their most significant characteristic is their strong grass-roots support.

Although private nongovernmental organizations existed in the nineteenth century (the World Alliance of YMCAs, founded in 1855, was the first international NGO), their numbers have grown rapidly in recent years. From 1,250 during the 1980s, they grew to more than 45,000 by the year 2000. The reasons range from the fall of Communism (which pushed the number of environmental NGOs from about 800



in 1992 to 3000 in 2001) to the communications revolution, which has enabled the experiences of one group to become a model for others.

NGOs are becoming players at the table of international negotiations. NGOs' influence on this score is best illustrated by the evolution of their interaction with the United Nations. Secretary-General Kofi Annan has predicted that NGOs will be the "new superpower" (Annan 2000). NGO speakers have addressed the United Nations General Assembly and presented testimony to the Security Council on various issues. Many United Nations bodies now consider alternate reports by NGOs along with official reports from governments.

The first significant step in this evolution was the Dumbarton Oaks Conference in 1944, which put forward a proposal for an inter-governmental organization that could coordinate and control, to some extent, the various nongovernmental organizations. This led to granting 41 NGOs consultative status in 1948. The number grew to 377 by 1968, and to 2,719 by 2005.

By the early 1980s, NGOs from both developing and industrialized nations had launched a coordinated effort to change the policies of international financial institutions like the World Bank. Fifty of the 222 projects approved by the World Bank's executive directors in financial year 1990 had NGO involvement, thirty more than in financial year 1988.

The watershed event in international negotiations was the UN Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992. Approximately 650 NGOs were in attendance, and at this conference they moved from a spectator gallery to a decision-making table where they could provide input and perspective. However, they still do not have policy decision-making authority (i.e., a vote) since this remains the responsibility of governments.

NGOs appear to be more proficient at leveraging Internet technology than governments or businesses are. NGOs use the Internet for advocacy, awareness building, consultancy, identifying resources, impact analysis, education, and so on. They are particularly adept at linking people worldwide. During the 1999 WTO conference in Seattle, about 1,500 NGOs signed an anti-WTO protest declaration set up online by Public Citizen, an advocacy group. This phenomenon of an amorphous group descending on a target is termed an "NGO swarm." An NGO swarm has "no central leadership or command structure; it is multi-headed and impossible to decapitate," write David Ronfeldt and John Arquilla (quoted in the *Economist* 1999).

## NGOs AND BUSINESS

When it comes to the NGO-corporate relationship, we have witnessed a sea-change. In the past, NGOs only challenged the system; present-day NGOs often operate as part of the system via strategic alliances with businesses. Earlier NGOs generated funds by fueling public anger or guilt; some present-day NGOs promote fund-raising

by creating partnerships to promote sustainable development.

For example, the Nature Conservancy/Home Depot Partnership in Indonesia donated \$1 million to the Nature Conservancy to combat illegal logging and promote sustainable timber harvesting. The Conservation International/McDonald's Corporation Partnership was started in 2004 in the United States to integrate conservation into the purchasing operation of the world's largest food service retailer. In 1997, the World Wildlife Fund joined with Unilever to create the Marine Stewardship Council system for regulating fishing.

Because of the proliferation of NGOs and because of the complexities of business/NGO relationships, companies need to develop new approaches in dealing with NGOs. They are too important to dismiss. Business organizations will have to respond to NGOs, at speeds that may make some executives uncomfortable. "Working the issues" through a trade association may result in a response that is too little and too late. Like recent political campaigns that have been blindsided by the rise of "bloggers," companies will be forced to play defense endlessly if they do not change their approach in dealing with NGOs.

The environmental, health, safety, and social responsibility audits conducted by companies need to take into account the issues emerging with respect to NGOs. Environmental audits are still synonymous with regulatory compliance in most companies. But this is not about government regulation; this is about issues driven by highly networked organizations. This situation requires a different way of thinking beyond the regulatory and public relations mind-set that has dominated business thinking.

For businesses, the stakes are high. Business executives dread the thought of an "NGO swarm" attacking a brand, challenging a construction permit, or boycotting a product or service. Companies can succeed if they seek ways to overcome the image of NGOs as spoilers and gadflies and recognize that NGOs increasingly are willing to work with the system to bring about positive change. Ultimately, it is up to companies to take the initiative if they want better control of the outcome.

## REFERENCES

- Annan, Kofi. 2000. Speech to the Millenium Forum. United Nations, New York, May 22. Online: [www.un.org/News/Press/docs/2000/20000522.sgs7411.doc.html](http://www.un.org/News/Press/docs/2000/20000522.sgs7411.doc.html) (cited November 1, 2005).
- Economist*. 1999. The Nongovernmental Order. December 9. Online: [www.economist.com/displaystory.cfm?story\\_id=266250](http://www.economist.com/displaystory.cfm?story_id=266250) (cited November 1, 2005)
- MacLean, Richard, and Brijesh Nalinakumari. 2004. The New Rule Makers. *Corporate Environmental Strategy* 11(8): 2-183-2-198.

---

*Brijesh Nalinakumari is a university researcher for the Center for Environmental Innovation (CEI) and a Ph.D. candidate in environmental engineering at Arizona State University. Richard MacLean is the executive director of the Center for Environmental Innovation (CEI) and a principal with MacLean, Marsh and Associates. This article is adapted from their article in Environmental Quality Management (Summer 2005).*



## CHILI POWER

African elephants are not only majestic animals, but also crop-raiding nuisances, endangering human lives and livelihoods. Conservation groups have determined that in order to protect elephants it is necessary to protect the people who are sharing the land with them. It is a complex situation that in some areas has been solved by the simple chili pepper, now considered a major tool in elephant conservation.

Elephants do not like their food hot. They find chili peppers downright unpalatable. Farmers have taken advantage of this aversion by planting buffer crops of chili peppers around their core crops of maize, sorghum, and millet. While deterrents such as electrical fencing can be prohibitively expensive, peppers are cost-effective. In the Zambezi Valley, which straddles Zimbabwe and Zambia, the chilies have been used successfully to ward off raiding groups, yet they present no threat of permanent harm to the animals.

The chili peppers are used not only as buffers, but also in spray form to drive away the marauders. Furthermore, the chili peppers have become a viable cash crop for farmers. Currently, the chilies are being used in bottled hot sauces, jams, and relishes.

In recognition of the value of the chili pepper, the Elephant Pepper Development Trust was established to help ensure elephant survival while also protecting the livelihoods of farmers in an area with a growing human population. The trust is supported by the Wildlife Conservation Society as well as other conservation groups. The World Bank awarded the group more than \$100,000 to help it develop and promote its Elephant Pepper products. The trust now operates two companies, the African Spices Company and the Chilli Pepper Company. Proceeds from the specialty foods produced by the businesses are returned to the trust to help support and expand chili growing projects among African farmers.

The trust is also working to enlarge its distribution with particular focus on marketing its hot sauces in the United States. For more information, visit [www.elephantpepper.org](http://www.elephantpepper.org).

—*Environmental News Network*

**Linda E. Platts** is PERC's editorial associate and Web site manager ([www.perc.org](http://www.perc.org)). "Greener Pastures" showcases market approaches to environmental protection and natural resource use. Send your suggestions and comments to her at [linda@perc.org](mailto:linda@perc.org).



## AT HOME IN DEBRIS

Typically in the past, rural and suburban landowners had no trouble taking care of their seasonal accumulations of brush, branches, dead leaves, and other organic debris. They piled it in the backyard and set it alight. Now, many towns and counties ban outdoor burning as the smoke can cause health problems.

The alternative is to haul the debris to the landfill and deposit it there, usually for a price. However, a growing number of landowners have taken another route. They still move the broken tree branches and hedge trimmings to the backyard, but instead of setting them on fire, they just let them sit. The piles grow higher, 12 feet, 14 feet, and then shrink for a while as the material decomposes. Although unsightly to some, the piles are home to others—birds, rabbits, racoons, salamanders, a whole panoply of wildlife.

There are even rules for setting up and managing a debris pile. They should be placed in

transition zones from one habitat to another such as at the edge of a meadow bordering a wooded area. They should not be located in a depression that collects water or cold air. They should not be near busy roads that could be hazardous to wildlife. The pile should receive partial exposure to sunlight, and new materials should be added regularly to replace the decaying organic matter.

If properly constructed and cared for, these piles can provide shelter for birds in strong winds. Those with logs and large branches at the base offer spots for snakes, lizards, and salamanders to hibernate. Burrowing animals can locate the entrances to their homes within the safety of the prickly pile.

The debris pile is probably still more acceptable in rural areas than suburbia, but the idea is spreading. Landowners are providing new wildlife habitat while saving a trip to the landfill and keeping smoke out of the air. And the piles add a sculptural element to the landscape—according to some.

—*Olympian*

## DOWN ON THE FARM

---

In a 100-acre Iowa farm field, hemmed in by electrical fencing, 2,000 pigs are contentedly doing whatever pigs do. The farmer who owns them, Paul Willis, refers to them as his “free-range” pigs. His good humor, however, does not extend to those who raise their pigs in containment buildings with the aid of steroids, hormones, and antibiotics. Willis, along with other small farmers, is fortunate to see a growing market for naturally raised pork, beef, lamb, and poultry.

And surprisingly, that market is being driven by a world-class corporate name that is not known for its health food—McDonald’s. More accurately, an offshoot of the burger giant, McDonald’s Chipotle Mexican Grill, has become the nation’s largest buyer of naturally raised pork.

The individual responsible for the menu change is Steve Ells, president of the 460-restaurant Chipotle chain and also a Paris-trained chef. Three years ago, he visited some of the farms providing his restaurants’ pork. He compared the factory farms to the likes of Willis’s farm, and says he had a revelation. Not only has he changed where he buys his pork, but Chipotle now uses naturally raised chickens, and is adding naturally raised beef.

Other players in the market are natural food store chains Wild Oats and Whole Foods Markets. Health-conscious customers are demanding more access to organic and naturally raised foods. While none of the nation’s biggest supermarket chains has added natural meats, interest is steadily increasing.

Meanwhile, small farmers across the nation are reaping the

benefits. Willis is not only happy to see his pigs routing in the fields, but his money is growing in the bank. Niman Ranch, a San Francisco-based, naturally-raised meat supplier, guarantees him a minimum price per pound, as well as a five cents per pound premium over the going price. Willis is just one of 450 farmers in the Midwest and Southeast who raise their pigs according to Niman’s specifications in order to sell to the supplier.

No one is yet suggesting that the market for natural and organic foods is exploding, but small farmers are optimistic because from their perspective the pendulum is beginning to swing back in their direction.

—*Chicago Tribune*

## YOUR PANTS ARE MADE OF WHAT?

---

What is the world coming to when Diane Von Furstenberg, Halston, and Oscar de la Renta are using materials made from wood pulp, bamboo, corn fiber, and Japanese leaves that contain anti-allergens. Clothing derived from these strange sources was assembled into “eco-outfits” and featured in the windows of Barneys New York, a high-end specialty store on the cutting-edge of style. High fashion is going eco.

The question is why. Some people do not like wearing chemically treated clothing while others object to how the materials are produced. Conventionally grown cotton uses large quantities of fertilizers and pesticides as well as being a water-intensive crop that is frequently grown in desert areas. In the case of wool, sheep are commonly tossed in a bath of pesticides to rid them of lice and parasites. The resulting sludge can pollute downstream waterways.

Despite environmental concerns, most alternative fabrics were not available in sufficient quantity or were still crudely rendered until recently. Vast improvements in their manufacture have led to many new design possibilities that intrigued the royalty of fashion designers. What is seen on the runways at Paris fashion shows is eventually reincarnated for the racks at local shops and department stores. Thus the turn to organic apparel among the rich and famous could have repercussions throughout the fashion industry.

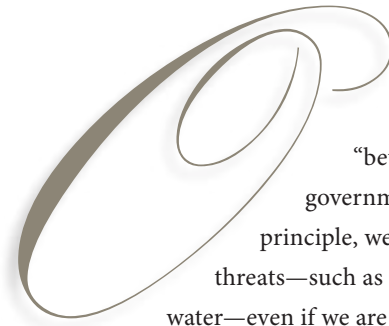
The yeoman’s work in eco-fashion is currently being done by companies such as Edun, backed by lead singer Bono of the band U2 and Of the Earth. The trend is also filtering down to such leading brands as Timberland, Nike, and Eddie Bauer. As the market expands, there is no telling who might be wearing corn and wood pulp eco-outfits in the near future.

—*E Magazine*

*ECONOMIST, n. a scoundrel whose faulty vision sees things as they really are, not as they ought to be.*  
—after Ambrose Bierce

---

**Daniel K. Benjamin** is a PERC senior fellow and professor of economics at Clemson University. This column, “Tangents—Where Research and Policy Meet,” investigates policy implications of recent academic research. He can be reached at: [wahoo@clemson.edu](mailto:wahoo@clemson.edu).



Over the last decade, the precautionary principle—“better safe than sorry”—often has been invoked to justify government regulatory action. According to advocates of this principle, we must protect ourselves from potential environmental threats—such as greenhouse gases, nuclear power, or arsenic in drinking water—even if we are not sure exactly what will be gained from doing so. Recent research by law professor Cass Sunstein (2003, 2005) argues that the precautionary principle actually offers no policy guidance and instead can be expected to produce either policy paralysis or perverse policy outcomes.

One widely accepted version of the precautionary principle asserts that “when an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically” (Global Development Research Center 2005). Thus, because nuclear power plants create potential health and safety risks, including some chance of catastrophe, there should be no construction of new plants. Similarly, fossil fuels raise the risk of global warming, so their use should be reduced.

But the conjunction of these two threats highlights a fundamental flaw in the precautionary principle: It urges us to avoid using nuclear energy to guard against nuclear holocaust even as it counsels us to use nuclear energy to guard against climate catastrophe. As Sunstein demonstrates, this sort of internal contradiction in the precautionary principle arises repeatedly when one attempts to apply it to policy making.

Now, it might be argued that the principle really counsels use of solar power or simply less use of energy altogether. But solar power requires massive battery installations that might cause environmental threats as yet unforeseen. Solar energy also uses far more non-environmental labor and capital resources than nuclear or fossil fuel. This leaves us less able to deal with other health and environmental hazards, ranging from cancer and heart disease to arsenic in our drinking water. Together, these unknowns raise the possibility that solar power might have serious adverse consequences. Thus, following the dictates of the precautionary principle, to be safe we must not take that risk.

Even the seemingly innocuous act of using less energy generates its own threats. For example, energy-efficient buildings require more insulation. The manufacture and use of insulation have uncertain, potentially dangerous environmental effects—the most notorious example is asbestos, used as insulation but later discovered to cause asbestosis and mesothelioma. Moreover, some energy-efficient buildings have higher levels of unhealthy indoor air pollution than less efficient buildings, leaving us again with the question unanswered by the precautionary principle: Which risk is the right risk?

Arsenic-laced drinking water offers another illustration of the hazards of the

*Even the seemingly innocuous act of using less energy generates its own threats. For example, energy-efficient buildings require more insulation. The manufacture and use of insulation has uncertain, potentially dangerous environmental effects—the most notorious example is asbestos, used as insulation but later discovered to cause asbestosis and mesothelioma.*

precautionary principle. The Bush administration has proposed lowering permissible levels of arsenic in public water systems from 50 parts per billion (ppb) to 10 ppb. This standard, scheduled to take effect in January 2006, may save as few as six lives per year at an annual cost of over \$200 million. Worse yet, by raising the cost of public water systems, the regulation will induce some people to rely instead on private wells; but the water from such wells often has far greater arsenic concentrations than the standard that is being replaced, a factor not accounted for by the EPA. Thus, the precautionary attitude that brought us the arsenic regulation is actually likely to kill more people than it spares.

What are we to do? Sunstein argues for a return to what he views as the “gold standard”—cost-benefit analysis. Both the advantages and the disadvantages of actions (or inaction) are weighed against one another, with the nod going to the alternative that appears to yield the greatest net benefit.

Yet many environmentalists raise two precautionary objections to cost-benefit analysis. First, they say, it fails to account for irreversible outcomes, such as the extinction of a species. Second, they argue, it fails to account for the uncertainties of making decisions when there are many unknowns. As Sunstein notes, however, such objections fail.

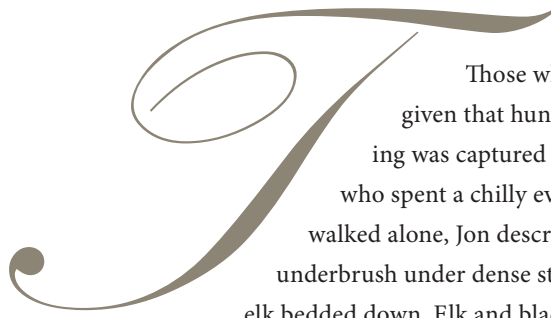
Consider the act of driving home for the holidays. Although routinely practiced, this behavior is fraught with both uncertainty and potential irreversibility. Some of those who depart on their holiday journey will die in the attempt, victims of fatal automobile accidents. None of us can be sure in advance how many people will die in this manner, much less their identities. And whoever they are, the outcome will be unquestionably irreversible. Nevertheless, the highways will be crowded, as each of us makes our own assessments, balancing the likely costs and benefits, recognizing that some things can never be known in advance.

Sunstein argues that just as we are not paralyzed by uncertainty and irreversibility, policy makers should not be either. Irreversibility simply means that some consequences are permanent; it doesn't mean that they are infinitely important. Similarly, when uncertainty is present, if we are averse to risk we should build in a margin of safety; it doesn't mean that margin should be infinitely large.

It is important to account for the duration of costs and benefits, and for all of the effects of our decisions, good and bad. But these principles are easily accommodated by cost-benefit analysis, and neither calls for the paralysis nor inconsistency implied by the precautionary principle. And so my cautionary tale is simple: Contrary to what you might have heard elsewhere, sometimes *safe is sorry*.

#### REFERENCES

- Global Development Research Center. 2005. Wingspread Statement on the Precautionary Principle. Online: [www.gdrc.org/u-gov/precaution-3.html](http://www.gdrc.org/u-gov/precaution-3.html) (cited October 24, 2005).
- Sunstein, Cass. 2003. Beyond the Precautionary Principle. *University of Pennsylvania Law Review* 151(January): 1003–58.
- . 2005. *Laws of Fear: Beyond the Precautionary Principle*. New York: Cambridge University Press.



Those who know me will not be surprised by the topic of this column, given that hunting season is in full swing. Why I have such a passion for hunting was captured beautifully by Jon Christensen, a visiting PERC journalist fellow, who spent a chilly evening with me listening to five or six big bull elk bugling. As we walked alone, Jon described how “we followed narrow trails left by the elk through the underbrush under dense stands of spruce. We passed by glades of matted grass where the elk bedded down. Elk and black bear scat littered the trail.”<sup>1</sup>

Though we were only ten miles from Bozeman, we could enjoy such a “wilderness” experience because we were on private land. Had we gone to national forest land, not only would we have heard more hunters than elk bugling, we would probably not have seen or heard as many elk. With open access to public lands, especially in rapidly growing areas, hunting pressure sends wildlife into the deepest, darkest timber or to private land, where access is limited.

There are few more vivid examples of the tragedy of the commons. If access is open to everyone for fishing and hunting, yes, we will have equal access, but it will be equal access to something of little value.

The potential for this tragedy is illustrated by the attitude of many sportsmen and sportswomen who believe that they should have access to fish and wildlife even if that access means crossing private property. This view caused an uproar in Montana in the 1980s when the state Supreme Court held that, because water belongs to the citizens, those citizens cannot be denied access to their water for recreation even if the water flows across private land. For some sportsmen, anything a landowner does that limits access to streams is the equivalent of class warfare.

That warfare is raging on the Ruby River in southwestern Montana. There, landowner Jim Kennedy, head of the Atlanta-based media company Cox Enterprises, has spent thousands of his own dollars reclaiming riparian habitat for fish and wildlife. He also fenced his property up to a bridge abutment on a county road. Open access advocates contend that the fence poses a “great hazard” to fishers and denies them their rightful access to the Ruby.

Further west along the Bitterroot River, Charles Schwab and associates made similar improvements to the Mitchell Slough, taking it from a fishless ditch to a blue-ribbon fishery. Now that it is a good fishery, access advocates believe that they should not be denied access to it.

By improving habitat, these landowners have created a nuisance for themselves and now find themselves in court battling to protect their investments. If the private property owners lose, there will be a clear message to others considering habitat improvements: Make those improvements, and you will have to share them with all.

Whether it is “hunting for habitat” or “saving our streams” (see our guidebooks at [www.perc.org](http://www.perc.org)), private ownership with limited access is crucial to good stewardship. Aldo Leopold understood this when he wrote that “conservation will ultimately boil down to rewarding the private landowner who conserves the public interest.” Open access penalizes the private landowner, discourages private investment in wildlife habitat, and creates warfare between landowners and sportsmen. Our fish and wildlife cannot afford such a rift.

NOTE

1. See his column, “The Uneasy Chair,” at [www.jonchristensen.typepad.com/uneasychair/2005/09/bugle\\_call.html](http://www.jonchristensen.typepad.com/uneasychair/2005/09/bugle_call.html).

---

*In addition to being PERC’s executive director, Terry L. Anderson is a bow-hunter. In this “On Target” column he is a straight shooter in confronting issues surrounding free market environmentalism. Contact him at [perc@perc.org](mailto:perc@perc.org).*



# LETTERS TO THE EDITOR



## *DON'T FORGET HISTORY*

I am a long-time subscriber to *PERC Reports* and enjoy reading each issue. But I object to the premise implied in “Betting on the Wealth of Nature” by David McClintick and Ross Emmett (September 2005) regarding natural resource prices and availability. The Simon-Ehrlich wager was based on metals that have long been substitutable, wracked by cartel-like supply and demand, and subject to technological supplantation. The authors use the “wager” in a disingenuous attempt, by extension, to show us that there is no need to worry about running out of natural resources.

History is replete with civilizations, some advanced, that have failed because they depleted their natural resources.

—Carl D. Peterson  
Brookfield, Connecticut

## *DON'T FORGET ENERGY*

“Betting on the Wealth of Nature” by David McClintick and Ross Emmett reminded me of a discussion I had with Julian Simon at a PERC conference in Bozeman. My bet was that prices for raw materials would go up over the long term because substitutes (and poorer ore) would require more energy to process, and that energy itself would get more expensive because convenient substitutes are tough to come by.

But the very fact that energy costs go up drives inflation, so the inflation-adjusted price for the metals is an imperfect measure. One better measure (and one that would tend to vindicate Ehrlich) is the “price” per ton of metal measured in the BTUs needed to produce it.

On the other hand, a point that the McClintick/Emmett article ignores tends to vindicate Simon: Over the past century, the percent of national income or percent of national energy demand that has gone into the five metals has probably declined drastically, precisely because substitutes have

become available. Fiber optic cable for copper is a good example, as is quartz lighting for tungsten. In both cases, a cheap, low-energy-to-produce material is replacing many uses of the metal.

The energy price effect shows up on the curve you published, too. Cheap Texas crude kicked in nicely after World War I, dropping prices of the five metals drastically. They rose and fell with demand, energy prices, etc., and are now, in the aggregate, about where they were 80 years ago.

It's time to bet on something else. My bet is that we're never going to see cheap oil again—say, under \$40 a barrel.

—Steven S. Ross  
New York, New York

## *YOU CAN'T SUBSIDIZE THE SUN*

Thomas Tanton (“Distorting the Wealth of Nature,” September) has the right idea: Subsidies are bad. But he fails to mention that it is impossible to account for the ways that we use renewable energy, and therefore that

subsidies for renewables favor some renewables over others.

As Tanton does, one can compare fossil fuels with the uses of solar energy that impersonate fossil fuels—using solar power to produce electricity. But there are many other uses of the sun: clotheslines versus dryers, windows versus electric lights, solar-powered walking or bicycling versus driving, architecture that uses passive heating and cooling versus traditional heating and cooling. These are too numerous and too subtle for bookkeepers—and I haven't even mentioned lighting and heating the outside, distilling our water, growing our food and forests, or lighting our moon! Only the marketplace notices these.

—Steve Baer  
Zomeworks Corporation

*Jane S. Shaw welcomes vigorous debate about controversial environmental topics. Send your letters to her at: PERC Reports, 2048 Analysis Drive, Suite A, Bozeman, MT 59718 or shaw@perc.org.*



## FEATURES

### 3 COVER: RESTORING LIFE TO DAMAGED LAND

In the central Nevada desert, near the tiny almost-ghost town of Mina, lives a couple who are the most effective restorers of ecosystems I have found in more than twenty years of searching. BY DAN DAGGET

### 7 IRRESPONSIBLE ENVIRONMENTAL POLICY

Although Congress enacts all federal environmental *statutes*, these statutes leave the making of most federal environmental *laws* to the Environmental Protection Agency. BY DAVID SCHOENBROD

### 10 ADVERTISING FOR CLEAN WATER

Every year, corporations spend about \$150 billion on advertising but very little of it goes to improve quality of life. Paul Polizzotto wants to change that. BY CAROL FERRIE

### 12 CELEBRATING 25 YEARS OF FREE MARKET ENVIRONMENTALISM

Chuck Leavell's tunes made PERC's 25th anniversary party a nostalgic trip for many.

### 14 WREAKING ENVIRONMENTAL HARM

While many farmers are conscientious stewards of the environment, the incentives of U.S. agricultural policies can lead to practices that damage the environment. BY DANIEL GRISWOLD

### 16 THE SHIFTING ROLES OF NGOS

Nongovernmental organizations (NGOs) used to be gadflies and outsiders challenging businesses and governments. Today, however, NGOs are moving in new directions. BY BRIJESH NALINAKUMARI AND RICHARD MACLEAN

## COLUMNS

### 18 GREENER PASTURES

The simple chili pepper has become a major conservation tool for protecting elephants in Africa. COMPILED BY LINDA E. PLATTS

### 20 TANGENTS

Over the last decade, the precautionary principle—"better safe than sorry"—often has been invoked to justify government regulatory action. Is that a good thing? BY DANIEL K. BENJAMIN

### 22 ON TARGET

Given that hunting season is in full swing, those who know me will not be surprised by the topic of this column, open access. BY TERRY L. ANDERSON

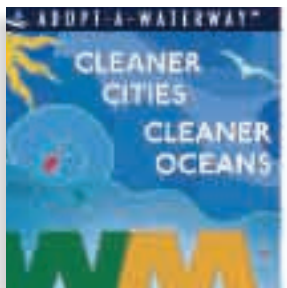
### 23 LETTERS TO THE EDITOR



PAGE 3



PAGE 7



PAGE 10



PAGE 16



PAGE 18



2048 ANALYSIS DRIVE, SUITE A  
BOZEMAN, MT 59718

Non-Profit Organization  
U.S. POSTAGE  
PAID  
Permit No. 433  
Bozeman MT  
59718