

Each year, Pacific Research Institute's *Index of Leading Environmental Indicators* reveals the good news—environmental quality has been improving continuously, and in some cases dramatically, for the past 30 years. In fact, according to government data, it is the single greatest success story in American public policy.

While the amount of data available can be overwhelming, much of it is filtered to the local level. Motivated and informed citizens acting to solve local environmental problems are the wave of the future—civic environmentalism.

So this year's *Index* serves as the definitive consumer's guide to environmental data. And PRI's website, [www.pacificresearch.org](http://www.pacificresearch.org), provides even more state and local data sources, including links to other websites and a rating of the most user-friendly sites.

The 2002 *Index* also reports on national trends:

releases since 1988 (and a reduction of 5.4 percent in 1999), a reduction of more than 1.65 billion pounds a year. The chemical industry, not surprisingly, has shown the largest decrease of all with a 60-percent reduction in releases since 1988.

**Biodiversity**

This year's *Index* has a special focus on “biodiversity” and the loss of wildlife habitat, two of the most serious environmental problems facing modern civilization. And these problems do not lend themselves to ordinary legislative or regulatory approaches. The Endangered Species Act is marginally effective, if at all, while it maximizes political conflict and economic cost.

The best estimate of the total number of species worldwide is 12.5 million, and scientists have identified and named about 1.5 million.

“THE U.S. PRIVATE SECTOR SPENDS \$100 BILLION ANNUALLY COMPLYING WITH ENVIRONMENTAL REGULATIONS”

# INDEX OF LEADING ENVIRONMENTAL INDICATORS 2002

by Steven Hayward and Julie Majeres

**Air Quality**

While polls consistently show that Americans believe air quality has grown worse and will continue to decline, the EPA's latest preliminary report on air quality for the year 2000 proves that reality can be quite the opposite of perception. Since 1970, aggregate emissions of the six “criteria” pollutants regulated under the Clean Air Acts have declined 29 percent, at the same time that the U.S. economy grew 150 percent, auto travel increased by 143 percent, and total U.S. energy consumption (the primary source of air pollution emissions) increased 45 percent. And ambient levels of pollution—the actual concentration of pollution in the air that we breathe—have fallen even more.

**Toxic Emissions**

There has been a 48.5-percent decline in toxic

Estimates of species extinction vary widely, from a prediction that 0.7 percent will go extinct in the next 50 years to the more dramatic prognosis that 10–40 percent of existing species are at risk over the next generation. In the midst of such uncertainty, policymaking is a tricky enterprise.

The best solutions can be found in private habitat conservation. There are numerous organizations and philanthropists undertaking such work worldwide. One of the foremost biodiversity experts, biologist Edward O. Wilson, gives further credence to this approach in his new book, *The Future of Life*. According to Wilson, the world's top 25 “hotspots,” found in biodiversity-rich tropical forests, compose just 1.4 percent of the world's land area but contain as much as 70 percent of the total plant and

animal species. He estimates that preserving this area could cost as little as \$30 billion.

To put this into perspective, the U.S. private sector spends \$100 billion annually complying with environmental regulations. If Wilson is right, preserving biodiversity need not be the expensive and contentious affair that typifies many environmental initiatives.

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