



IDEAS IN ACTION

PACIFIC RESEARCH INSTITUTE FACT SHEET

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Index of Leading Environmental Indicators 2001

By

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What is the largest public policy success story of the last generation? The reduction in the crime rate? The decline in the welfare rolls? In fact, the area of public concern with the largest magnitude of improvement is probably the environment, according to the sixth edition of the Pacific Research Institute's *Index of Leading Environmental Indicators*.

Since "the environment" comprises so many different factors, and because there are many gaps in our data and understanding, it is difficult to determine this definitively. However, where we have consistent data we see steady improvement.

Figure 1, for example, compares the reduction in the crime rate and the welfare caseload since 1970 with the decline in air pollution. The number of days that U.S. urban areas have experienced unhealthy air has dropped significantly in recent years.

Other key findings of the sixth edition of the *Index* include:

- **Water Quality:** Lake Erie was considered "dead" in 1970, but today 98 percent of the Great Lakes' shorelines have been assessed to be fully supporting for swimming and drinking. Major gaps in the government's data, however, prevent an adequate assessment of overall water quality trends.
- **Urban Sprawl:** Despite widespread media attention and public concern about "urban sprawl," only five percent of all land in the continental U.S. is developed. Pastureland, rural land, forestland, rangeland, cropland, and federal land account for 93 percent of U.S. land today.

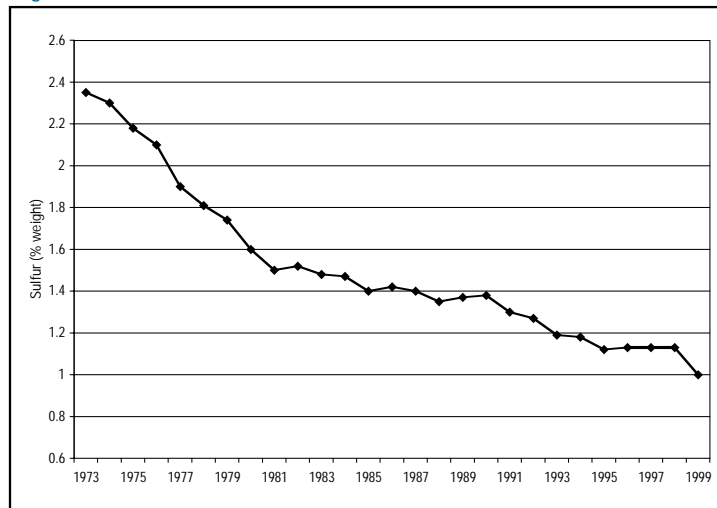
- **Toxic Emissions:** Overall, there has been a 45-percent decline in toxic emissions since 1988, and the EPA continues to report a reduction of more than 1.5 billion pounds a year.

Figure 1: Trends in Crime Rate (major crimes per 100,000 population), Percent of U.S. Households on Welfare, and Aggregate Air Pollution Emissions Compared, 1970–2000.



Sources: FBI Uniform Crime Reports; U.S. Department of Health and Human Services; Environmental Protection Agency.

Figure 2: Sulfur Content of Coal Burned at U.S. Power Plants, 1973–1999.



Sources: FERC and U.S. Geological Survey.

Energy and the Environment

The special section of the sixth edition discusses energy and the environment, a key issue because of California's electricity crisis. The main point of this discussion is that conventional fossil-fuel energy sources remain abundant and modern technology has made them cleaner than ever. Figure 2, for example, displays the declining sulfur content in coal used to generate electricity, a major factor in the reduction of sulfur dioxide emissions.

The study also reveals that alternative, so-called "renewable" energy sources pose their own environmental tradeoffs. For example, windmill generators in California alone kill 39 golden eagles annually, eight times the mortality rate of the *Exxon Valdez* oil spill in 1989.

The Environmental Future: Technology and Local Control

The study finds that positive environmental trends are likely to continue as a result of improving technology, market-based incentives, and local activism, which people tend to rate more highly than government efforts.

"For too long the commitment to environmental protection has been measured on the basis of growth of the EPA budgets, the number of enforcement actions brought, and the amount of fines levied," said Steven Hayward, author of the *Index*. "The next 30 years of environmental progress will be led by local control, cooperative dialogue, and results-oriented technological and market-based innovations, rather than cumbersome bureaucracy and decades of litigation."

Environmental data for all 50 states and more than 100 U.S. cities are available at www.pacificresearch.org



This **Ideas In Action** fact sheet is a digest of a publication entitled *Index of Leading Environmental Indicators 2001*. This study is available through the Publications Department for \$12.95 or on PRI's website at www.pacificresearch.org.

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